In a Haystack:

A Video Game About Discrimination and Privilege in American Culture

by

Jesiel Lucena

A Post Mortem

Submitted to the Faculty

of the

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the

Degree of Master of Science

in

Interactive Media and Game Development

23 April 2016

APPROVED:

Alexandrina Agloro, Thesis Advisor

Brian Moriarty, Committee

Carly Kocurek, Committee

Abstract

This Post Mortem discusses the choices made during the design and development process of *In a Haystack*, a narrative based adventure video game that discusses Privilege and Discrimination in American Society. As a solo project, I created a polished interactive experience that I intend to turn into a published episodic video game series. This document goes over the methodology choices, technical and artistic difficulties, and challenges faced by in pursuit of this goal.

Acknowledgements

I owe thanks to many contributors who helped me accomplish this project, as well as my graduate degree entirely. Without their support, this project would not have come to be. I would like to start my acknowledgements by thanking the Worcester Polytechnic Institute, for offering me the great learning opportunity of becoming a Master of Science, and the IMGD community for always being so supportive.

Thanks to my thesis advisor, Professor Alexandrina Agloro, who steered me through the entire process of delivering a palpable piece of interactive experience that talks about social justice – and resonates with themes that are now deeply important to the newborn social activist inside me. I would never have become the ally I am without this help. I would also like to thank Professor Carly Kocurek, who gave me minutiose feedback on my narrative writing and game design for this project, and Professor Brian Moriarty, who offered essential feedback on how to deliver powerful narrative through game and level design.

A special thank you to Professor Jennifer deWinter, who first introduced me to experience game design, feminism, and strict academic grading. She showed me my place in the video game industry. Without Jennifer's help, I would never have woken up to the social issues that have surrounded me all along, and I would never have shaped myself as the thought-provoking person I chose to become, and who I love to be.

I would also like to thank my husband, Mike Castro, who supported me professionally and ideologically through my entire graduate program, and who vows to be with me through the good and the bad of my career that is to come. Thank you to my parents, Joana D'arc and Joserrí Lucena, for always showing me that I could go one step further. I would probably not even have made it through high school if I had not been told I am capable of more, if I had no been encouraged to dedicate to my own intellectual growth.

I dedicate this work to all the women of color who study or work with IT - who try twice as hard every day; and I extend my dedication to all the anonymous interviewees who told me their incredibly detailed stories of experiences with Privilege and Discrimination. They helped to me envision a story that is not mine, and to translate feelings that I wouldn't have imagined into a powerful gameplay experience.

Table of Contents

ABSTRACT	<u>2</u>
ACKNOWLEDGEMENTS	3
TABLE OF CONTENTS	4
<u>1.</u> OVERVIEW	<u>5</u>
1.1. INTRODUCTION	5
2. WHAT WENT RIGHT	8
2.1. ACADEMIC RESEARCH	8
2.2. INSPIRATIONAL INTERVIEWS	9
2.3. "CHALLENGES" GAME MECHANIC	10
2.4. GAME ENGINE	11
2.5. DEVELOPMENT/CONFERENCE SCHEDULE ADAPTATION	12
2.6. PRESENTATION AT THE DIFFERENT GAMES CONFERENCE 2016	13
2.7. DESIGN FOR EMPATHY	15
3. WHAT WENT WRONG	<u>16</u>
3.1. LACK OF VISUAL COHESION	16
3.2. INCOMPLETE SOUND AND MUSIC DESIGN	17
3.3. RUSHED NARRATIVE PACE	17
3.4. UNNECESSARY TOOL FOR WRITING DIALOG TREES	18
3.5. LACK OF DIVERSE ART ASSETS	19
4. WHAT I WOULD DO DIFFERENTLY IF THIS PROJECT WERE TO STARTED NOW, GIVEN THE LESSO	
LEARNED FROM THE DEVELOPMENT PROCESS	<u>23</u>
4.1. IMPROVE THE CONCEPT ART PIPELINE	23
4.2. LENGTHEN THE EPISODE	24
4.3. SELF-PRODUCE ETHNIC DIVERSITY	24
4.4. PROGRESSIVELY LEAVE SPACE FOR PLAYERS' INTERPRETATIONS	25
5. <u>CONCLUSION</u>	26
APPENDIX A - RESEARCH REFERENCE LIST	<u>27</u>
APPENDIX B - GAME DESIGN DOCUMENT	28
APPENDIX C – DIALOG TREES	5 <u>6</u>

1. Overview

This Post Mortem Document describes the process of conceptualizing, designing and developing the first episode of the video game series "In a Haystack." In this series, each episode tells the story of a character - inspired by people's real life stories about Privilege and Discrimination. ¹

1.1. Introduction

In a Haystack is envisioned as an episodic video game series that flirts with the concepts of social experiment and art installment. With no intention to educate and assess, this interactive experience aims to use a compelling narrative to introduce the player to a life perspective they would possibly not experience otherwise. It is more of a conversation-starter, a statement on the manifestations of Privilege and Discrimination in American society. Each character, puzzle and game mechanic is based upon people's real stories, gathered through an inspirational anonymous online survey virally distributed through social media. This Post Mortem discusses the creation process of the first episode of the series.

In this episode we dive into the story of Monique: a black girl who just graduated from computer science and has to face her fears of social isolation while working on her first job at Plain White Corporation, where she is the only black person and the only female programmer in the entire company. During this journey, the player will be introduced to Justin, Monique's good friend who referred her to this job, and Olivia, best friend and former programmer who abandoned the IT industry after suffering abuse in her workplace. John White, Monique's new boss, is part of the rich and powerful White family, the heir of the "Plain White" conglomerate, a group who owns TV channels, movie studios, software development studios and has all sorts of branches in the San Francisco Bay Area.

With this project, I tried to translate nuanced feelings into gameplay, to help the player empathize with a reality of Oppression they might never have been in touch with before. In order

¹ The terms Privilege, Discrimination and Oppression are capitalized throughout this document, giving them proper noun status to emphasize their existence as social phenomena. These terms are pervasively used here, and it is important to emphasize them, since they are key concepts to the development of *In a Haystack*.

to use such a modern form of media to discuss themes like racism and patriarchy in American society, it convenes to dive into the history of how those social issues came to be.

White and male dominance in Western society has been explicit for many centuries. During and after the colonial era, slavery was a very common source of workforce, especially in the Americas. Enslaved Africans were brought in ships to work under inhuman conditions in the United States and in many other European colonies, and even after slavery was declared illegal in most of the world, the laws of South African Apartheid and the persistence of constitutional segregation in America were still a shadow cast on the ways colonization and white supremacy led Western colonialism.

Throughout the 20th Century, Western communities saw strong movements for women's rights to work, vote, as well as the rise of a strong discussion about traditional gender roles and their influences on society. This process happened parallel to the fall of the lawful segregation, when racism went from a blatant issue to a subtle discussion topic. It is easy to discuss inequality when it is explicitly written, when it is part of the law, but it is way harder to understand Privilege once it becomes an invisible part of our society.

White and male Privileges are very present in our contemporary society, although they can be harder to see and to identify when they aren't part of the law, not explicitly codified. Discussing Privilege can be compared to "unpacking an invisible knapsack" (McIntosh, 1988, p. 1) and doing so requires a closer look on what people who consider themselves people of color, LGBTQ and women have to say about how they experience the nuances of being underprivileged.

This project aimed to tell the stories of people who experience Discrimination, sometimes invisibly, re-humanizing them in the eye of the player. It came to be a proof-of-concept hybrid between video game and art installation, a top-down walking simulator made in the RPG Maker MV game engine. The biggest inspirations for this project were *Actual Sunlight* (2014), an RPG Maker game that uses simple aesthetics and game mechanics to discuss nuanced feelings like depression and suicidal thoughts; *Life is Strange* (2015), a narrative based walking simulator in which you can interact with any non-playable character and almost all furniture and decoration to uncover more about the main character and the ongoing story; and *Mega Man Legends 2*

(2001), an Action RPG that deconstructs the original gameplay experience to present mini games with diverse mechanics and convey different feelings on the player.

This Post Mortem document discusses choices made during the research, concept, design and development phases of this project, whether or not they contributed to accomplishing the initial vision of this game, and even about how the game gathered repercussion throughout the conference where it was presented. There is also a discussion about how the process helped increase knowledge about Privilege, video game design and related fields of study.

2. What Went Right

This section contains a discussion about what choices steered *In a Haystack*'s design and development process into better accomplishing this project's objectives, taking into consideration the designer's vision and goals.

2.1. Academic Research

A complete list of valuable research on the development of this project can be seen in Appendix A, at the end of this document. The list of readings recommended by this project's academic advisor, Professor Alexandrina Agloro, was essential for building a basic knowledge base about Privilege and Discrimination, with articles and multimedia pieces that ranged from academic articles to blog posts about individual cases of abuse in the workplace. For example, Peggy McIntosh's paper "White Privilege: Unpacking the Invisible Knapsack" (1988) explains the basis of what is perceived as Privilege in American society. She states:

> "In my class and place, I did not see myself as a racist because I was taught to recognize racism only in individual acts of meanness by members of my group, never in invisible systems conferring unsought racial dominance on my group from birth. [...]

> The silences and denials surrounding privilege are the key political tool here. They keep the thinking about equality or equity incomplete, protecting unearned advantage and conferred dominance by making these subject taboo." (McIntosh, 1988, p. 2)

McIntosh's thoughts are particularly interesting when they expose racism and similar forms of Oppression as bigger social phenomena, that are not necessarily contained in individual acts, but also in invisible systemic norms that guide society. Privilege is manifested through society's incomplete realization of Oppression, when people feel like everything is okay because everything is okay to them, and also when there's no perceived guilty individual. The silence of the comfortable people about these phenomena is a strong demonstration of how Privilege works in our society.

Doing this research prior to the narrative writing and game design in this project was essential to steer the entire development process. From the inspirational interviews to subtle gameplay choices, the entire video game was influenced by the knowledge gathered on this first phase. Some of the articles and papers listed in the Appendix were not referenced directly either in the Project Proposal or in the Game Design Document, but in my judgment they all had immeasurable importance on the outcome of this project. This research changed my perspective as a video game designer, and as a person altogether.

2.2. Inspirational Interviews

As a cisgender gay white Brazilian computer engineer, especially after moving to the United States and experiencing many nuances of my social privileges and disadvantages, I deeply cared about being fair when reproducing other people's stories and experiences. Since the beginning of the project, it was very important to not use cultural appropriation in ways that perpetuate the societal Oppression.

After discussing these concerns with Professor Agloro, we came up with the idea of an anonymous Google Form interview system, where I could gather stories from people in situations that were different than mine. That interview was produced and distributed through snowball sampling, via social media. The first version of the form was revised into a second version, with consulting from a User Experience expert who helped me make the interview more appealing to respondents. The first version of the form received 5 responses, whilst the final version received 36 responses, making it possible for me to write a relatable and meaningful story. Both versions of the form are still available online.² After the endgame sequence, the player is given the option to send their stories using the same final version of the form that was used in the original interviewing process.

² Version 1 is available at <u>http://goo.gl/forms/N2kdbjqNCp</u>. The final version is available at <u>http://goo.gl/forms/rm8J8nIhQN</u>.

2.3. "Challenges" Game Mechanic

The game features 3 "mini-games" that deconstruct the main game mechanics, switching the gameplay from exploration/narration to challenge activity. There is one challenge in each of the acts of the narrative. The choice to include those challenges was made to slow down the pace of the narration, leaving some space for the player to meditate on the story itself. I had the intention of making the challenges difficult, given the game engine's affordances and restraints, so that the player would feel engaged and invested in gameplay. Examples of the different interface shown during mini games can be seen in Figure 1, Figure 2, and Figure 3.



Figure 1: The Crunch Time Challenge



Figure 2: The Huge Drinks Menu Challenge



Figure 3: The Clean This Mess Challenge

These challenges are also intended to convey feelings that were constantly referred to in the interviews: "unfairness and discrimination" on the Crunch Time Challenge, "loneliness and separation from friends" on the Huge Drinks Menu Challenge and "lack of time for anything other than work" on the Clean This Mess Challenge. That way, the narrative has pervasive presence in the gameplay, even during entertaining and distracting interactions. One of the passerby players at Different Games Conference 2016 who, like Monique, is the only female programmer at her workplace corroborated with my experience design intention when she said "These mini games are very important to entertain the player and give breadth to the gameplay experience, while still supporting the narrative and conveying these feelings."

2.4. Game Engine

Since this project had tight deadlines for its ambitious scope, the choice of game engine played a crucial role in making it possible to deliver a fully playable game. The chosen game engine, RPG Maker MV, was very important to support the development process in many ways. Having a robust set of tools for the development of JRPGs³, I could select the most helpful affordances to build my narrative based experience. From the programming standpoint, the event-oriented RPG

³ JRPGs, or Japanese Role Playing Games, are a specific genre of video game which focuses on storytelling and battle system as core game mechanics.

Maker scripting engine made it possible for me to focus more on the intended results rather than syntax. It also offered robust support for the generation of character art assets (except when I tried to include a broad ethnic diversity, which I further discuss on Section 3.5 of this document). The drafting and prototyping of maps was also facilitated by this engine's "What You See Is What You Get" approach to level design.

RPG Maker MV offers a built-in library of various visual and audio assets, which I used to its full extent. I found many of the essential art assets for this project on dedicated forums⁴, with a broad offering of free-to-use art assets, sound effects and plugins that extended the range of possibilities offered by the engine.

2.5. Development/Conference Schedule Adaptation

At the time of the development of this project's proposal, in November 2015, the timeline for the execution of the project was written without taking into consideration the possibility of presenting the project in upcoming conferences. Later on mid-December, when the the Game Design Document, was finished, the Different Games Conference 2016 opened a call for games, with a "playable demo deadline" set for January 15, 2016. Because of the conference deadline, I decided to skip through some of the schedule planned on the original proposal – for example skipping through the paper prototyping phase – and focusing on writing the dialog trees only for the first act of the narrative. That way I had the time to focus on programming a reasonably polished 10-to-15-minute-long demo of the game. The referenced Game Design Document can be seen here in Appendix B.

After crunching more than 100 hours of programming, I had a demo version I was satisfied with, still having 3 days of buffer to prepare a convincing application for the conference. It was with joy that, a few weeks later, *In a Haystack* was accepted in the Game Arcade at the Different Games Conference 2016 at the NYU Games Center, in April 2016. The conference then became my deadline to finish the full-length 45-minute beta version of the game.

⁴ Online message boards like RPG Maker Forums (<u>http://forums.rpgmakerweb.com/</u>) and the RPG Maker Central Forums (<u>http://www.rpgmakercentral.com/</u>) offer a range of copyright-free art assets for game makers to use.

Using the conference as my deadline was fundamental to keep me motivated throughout this entire solo project, because since I was producing this game alone, I would sometimes feel like it wasn't worth it to continue or the idea was stupid altogether. It was also very important to be able to pitch a palpable work I made myself, both at Different Games 2016 and at all the other conferences I attended this year (Game Developers Conference 2016 and Southwest Popular/American Culture Association Conference '16). Even though I was not presenting *In a Haystack*, working on a video game/art installment about Privilege was a great statement to introduce myself as a game maker and scholar. As a testament to the quality of the game, I met the owner of a company that publishes indie games at one of GDC's parties, and they are very interested in moving forward with publishing this episode of *In a Haystack*, and possibly the following episodes.

2.6. Presentation at the Different Games Conference 2016

Being able to expose *In a Haystack* to a crowd composed mostly of educated people about social issues brought essential feedback, definitely affecting the way the next episodes of the series will be developed.

A female social justice activist told me that

"The agendas pushed in this game are too 'on the nose'. Even though it is completely realistic, reading the dialogues feels like reading articles about harassment on Kotaku. There's not a lot of space for ambiguity or the player to fill gaps in this narrative."

Another female passerby was visually emotional during her gameplay and told me that

"This is too real. I also am the only female programmer in my company, and I feel harassed and brushed aside very frequently. I feel completely related and empathized with Monique. This story is powerful, well done and I really love the fact that you actually interviewed people that went through those experiences. Thank you for taking the time and effort to put this together, and please continue delivering stories."

A younger male programmer who played the full game stated,

"I like it how this narrative humanizes Monique. Even though I'm not a woman or dark-skinned, this story is very relatable because my bedroom is a mess, I am usually in crunch time at work, and I constantly try to find time to hang out with my friends. [...]

That connection helped me perceive a reality I never imagined. I was blown away by these things that happened to Monique, that felt absurd and exaggerated. I would not have believe her struggle was even possible in real life if this game was not based on true stories. It was very eye opening."

These three quotes are of great importance to harness a deeper understanding of how *In a Haystack* resonates differently among different types of players. That more educated, more engaged in social activism player felt like the narrative is too explicit and even non-artistic, which may mean that this experience is not as enjoyable to people who have had access to a broad range of information the real life scenarios that inspired this game as it is to other players. The isolated woman in IT who played this game, who felt harassment and lack of empathy before, became visually emotional as Monique's story resonated with her own real-life experiences – and that is very validating of the methodology chosen in the game design process, since the game seems to impact the demographic from whom its inspiration came from. Lastly, hearing that *In a Haystack* brought a bigger understanding of the experiences that inspired Monique's journey testifies to the intention I had to deliver real stories through video games. Especially coming from the male straight player who was not particularly engaged into any social justice causes, and who also doesn't fit in the underprivileged communities this game represents felt that he had access

to a bigger understanding of life experiences he wouldn't have believed if it was not presented to him the way it was.

2.7. Design for Empathy

From narrative writing to gameplay design, one of the most important things in my process was to deliver a relatable experience. Given the purposely heavy message this game conveys, my goal was to not only focus on the negative side of things, giving player in-game time and space empathize with Monique and her friends. I believe that the best way to share vulnerable experiences is to build a connection between the player and the characters.

For that reason, I chose to begin telling the story with a conversation between Monique, Justin and Olivia in their favorite bar. Before going to work for the first time, the player is introduced to Monique's concerns about being isolated in the workplace. To introduce the player to Monique's personal space, which is a very important step of the empathy building process, the player even needs to take Monique to shower and prepare breakfast before they are able move on and "go to work" for the first time.

Those subtle choices of pace are pervasive to the entire gameplay. *In a Haystack* intends to show the contrasts between leisure and work, harassment and friendly support, personal and public spaces, in order to engage people in protecting and supporting Monique, so that players are exposed to the humanity of the real people that inspired Monique's character creation.

3. What Went Wrong

This section of the document discusses what choices and/or unfortunate facts, during the design and development process, did not help the project's objectives to be fulfilled.

3.1. Lack of Visual Cohesion

In order to include cutscenes in the game, I asked for help from Brazilian artist Aeverton Dantas. Even though he successfully delivered all the cutscenes that we intended to include in the game, I feel like the chosen art style can be misleading for some players. An example of that issue can be seen in Figure 4.



Figure 4: The lack of cohesion between cutscene art and in-game art assets.

The chosen style for the cutscenes was inspired by watercolor doodle art. I have had some feedback from players who think that top-down RPGs are usually accompanied by art that more closely resemble either Japanese Manga or western cartoons. For that reason, there seems to be a disconnection between the in-game character tilesets and the characters' representations on cutscenes. The disconnection reported by these players is an issue when it breaks the narrative immersion by adding a distraction, also making the video game feel less polished. It would be better to either use Manga style throughout the entire game, or stick watercolor and make the

pixel art more closely resemble this art style. Cohesion is an important tool to give the player more affordances for continued immersion.

3.2. Incomplete Sound and Music Design

Given the short deadlines of the game, I decided not to produce original music for this game. Instead, I tried including copyright-free songs from libraries that are available at the dedicated RPG Maker forums. Unfortunately, most of the songs I found were too Fantasy-driven, generally more appropriate for medieval JRPGs. For that reason, aside from finding an appropriate theme song for Monique's bedroom and for the Elevators in the game, I decided to use many real-life environmental sound effects (e.g. workplace noises, traffic, siren, vibrating phone) on most of the game's maps and cutscenes. Even though that choice served the purpose of delivering a game with sound design from beginning to end, I feel unsatisfied because the use of original songs could strongly emphasize and explore nuances of many important playable and non-playable moments of the game.

3.3. Rushed Narrative Pace

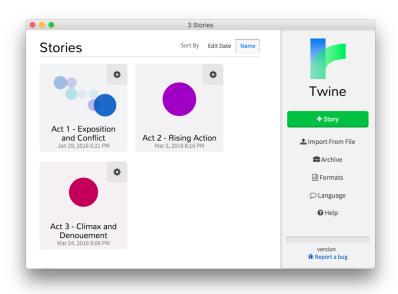
Even though during this project I always intended to produce 30-to-45-minute long episodes, the premise for Monique's story needed this first episode to depict the passage of months. For that reason, this first episode of *In a Haystack* features one three-month-long time skip to convey the idea that Monique is not a beginner at work anymore, and another three-month-long skip to stress the fact that Justin and Monique have not seen Olivia in a long time. Both are strongly important to the narrative, and would not be easily replaced by different wording on dialog trees.

I feel like skipping through such a long period in such a short episode makes it feel like the narrative was rushed, even making some of the characters' reactions and relationships seem exaggerated and mildly unrealistic, even though they are, in fact, based on true stories.

This could be improved by using some visual tricks, like using seasons and weather to give hints of time passing. The use of holidays that are popular in the game setup (like Christmas or Easter) through decoration in the maps can also help diminish this feeling of exaggerated narrative.

3.4. Unnecessary Tool for Writing Dialog Trees

The tool I chose to write the dialog trees of the game, Twine, was recommended by multiple writers I contacted for advice. It offers an intuitive visual representation of the story and its possible ramifications via diagrams and cards. At the time I began this project, it seemed ideal to go for that type of approach, since a game usually involves branching and narrowing of a narrative tree. The interface for Twine can be seen in Figure 5.



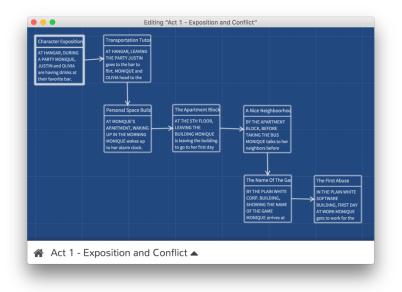


Figure 5: a) Twine's story selector and b) Twine's Story Diagram.

After I started writing the dialog trees, I noticed my story was essentially linear, and that Twine's representation via diagram does not add a lot to the ease of understanding of this type of story. I then figured that Twine ended up working basically as a linear text editor, and it would just have been better to use a text editor like Microsoft Word or Apple Pages to write the core of this story. Other optional dialog trees, like those triggered when interacting with objects, furniture and NPCs, were mostly written directly into the game engine, given the ease of use of RPG Maker's dialog editor and the immediate visual feedback on changing the levels' maps. An example of how Acts 2 and 3, written more linearly, looked like in the diagram editor can be seen in Figure 6.

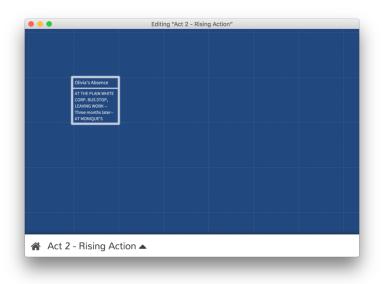


Figure 6: Twine's Story Diagram, showing only one block of story representing Act 2.

3.5. Lack of Diverse Art Assets

One of the biggest obstacles I found when programming this type of inclusive game is the lack of diverse character art assets offered for RPG Maker. Giving Monique a realistic skin color and complexion was a challenge, given the fact that the engine's built-in character generator currently only offers one realistic tone of black skin. Including characters with ethnic backgrounds other than white-skin European-looking people was impressively hard. Summarizing, the engine offers 7 realistic tones of white skin, 1 tone that looks Hispanic, 1 tone of realistic black skin, 1 tone of skin that seems South Asian, and 7 tones of not-human-like skin tones ranging from green

to violet, which are more usable in fantasy games. The curly hairstyle that Monique wears was part of a package of tilesets that I found after searching for a long time, in which the author included a collection of non-straight hairstyles, including dreadlocks, baby-hair, shaved, and a few other hairstyles based on people of colors' complexions.



Figure 7: RPG Maker MV's Character Tileset Generator Tool

The experience I had with trying to design these characters also repeated itself for other minorities as well. The character generator conforms to the traditional gender-roles, having the "Male" and "Female" sexes as the only options, even though you can cross-use some of the assets if you so choose to. I could not find, either on the built-in character generator or in any other RPG Maker forum, any character in a wheelchair, which unfortunately made me exclude from the narrative one of the characters I intended to write.

I also could not make any character that looks older than 30 years old, for the same reasons mentioned, even though John White, one of the main characters, was supposed to look like he's in his 40s. One disturbing thing I found about this tool is that you can choose to give your character a "neutral" skin color by hitting the "default" option, but the perceived "neutral" is white skin, blue eyes and blond hair, which is even more confusing when added the fact that the vast majority of the employees working on RPG Maker are Japanese people with Asian complexions. Jennifer deWinter, a researcher who lived in Japan to research Nintendo's internal culture and write a book on Shigeru Miamoto's career, explains this by saying Japanese culture, heavily influenced by the Western culture, usually reproduces the ideology that the "lack of racial features" can be represented by using white skin and complexion assets like blond hair and smaller noses that closely resemble Western beauty standards (deWinter, 2015).



Figure 8: A "racially neutral" character generated using RPG Maker MV

Unfortunately, even if I had chosen a different video game engine I would still encounter the same issues I listed. The lack of diverse art assets for video games is a persistent issue in the whole video game industry. Animated and rigged 3D models for female characters are hard to find. Shaders are usually programmed to correctly illuminate white-skinned characters. To be honest, it would have been a lot easier (but certainly not as powerful) to make a game about discrimination between young able white people, elves and extra-terrestrials than to make a racially diverse and contemporary video game to talk about Privilege.

It is interesting to notice that, as a video game designer, even with the intention to include diversity, the tools given to me usually manifest evidence of a white supremacist and patriarchal society. For that reason, it is difficult to use those tools to overturn the tropes that society reproduces frequently. On a metaphoric level, Audre Lorde compares this to the issues faced by enslaved people on fighting against slavery using the tools offered by their own slave masters. She states:

> "The master's tools will never dismantle the master's house. They may allow us temporarily to beat him at his own game, but they will never enable us to bring about genuine change." (Lorde, 1984, p. 3)

In that sense, it is expected that I won't be able to use the game engines and art assets that are offered to me, when trying to dismantle the racist, sexist, ageist, ableist, classist tropes that the video game industry constantly reproduces. To change this situation, as a game maker, I will have to push the boundaries of the available game engines, use them in new ways, produce my own art assets, write my own plugins, design my own game mechanic paradigms, and finally come up with my own set tools. That also means that I will have to overcome a greater range of obstacles to discuss Privilege and Discrimination in gamer culture than if I chose to simply deliver the highly marketable video games like Mascot Puzzle/Platformers or First Person Shooters.

4. What I Would Do Differently If This Project Were to Started Now, Given The Lessons Learned From the Development Process⁵

This section of the document lists which choices I would make differently if I had the opportunity to start development of this video game, given the knowledge I gathered during the process of developing the project. Since this game intends to become a series of episodes, this chapter of the post mortem is crucial to the success and evolutions of the next installments of *In a Haystack*.

4.1. Improve the Concept Art Pipeline

The concept art of this game was a joint effort between me and the aforementioned Brazilian artist Aeverton Dantas, whose work is strongly inspired by doodle art and watercoloring. Given our time constraints and the small (nonexistent) budget for this project, we could not develop a fully featured storyboarding phase together. For that reason, I feel like the end result was a game in which the cutscenes and the in-game art assets are disconnected, breaking part of the magic of the story, especially when dialog happens during cutscenes.

For a future project, I would stress the importance of conceptualizing the art right after the outlining of the narrative and creation of characters, and before any art assets are inserted in the development. To keep the pace of the project and respect the deadlines, game mechanics can be programmed with placeholder art assets. This method is inspired by the way Jonathan Blow programmed *Braid* (2008) focused on game mechanics, just to add astounding art afterwards. An example of how Braid looked like before and after the addition of art assets can be seen in Figure 9.

⁵ Note that the choice to give this section a long title is, on itself, a satire on how this part of traditional Post Mortem documents is broad, hard to name and often seems redundant.

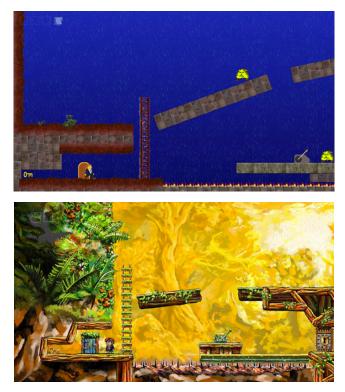


Figure 9: Braid, a) before and b) after concept art was added

4.2. Lengthen the Episode

To convey the passing of time in a narrative, a 45-minute episode feels too rushed. Most of the players who playtested the game at Different Games 2016 felt like the time skips weren't noticeable enough. I propose two ways in which I can strengthen the feeling of time passing: the use of seasonal holiday art assets, and lengthening the episode to 60 minutes long, by adding filler narrative. The same way that having mini games gave time for the players to process the game, I expect that combining those two techniques will stress the passing of time and help the player to connect with the narrative.

4.3. Self-Produce Ethnic Diversity

The biggest issue about developing an inclusive game about racial minorities is not being able to visually represent the people I want to talk about. For this first episode, I could still manage to talk about race and gender, but it would have been impossible to talk about ableism or ageism

(in case I had chosen to tell a different story) without proper visual representation of older and/or disabled characters. Unfortunately, as stated on section 3.5 of this document, neither the RPG Maker asset stores nor the community forums were able to fulfill those needs at the moment the game was being developed, and this problem is constant through other game engines and communities.

To solve this, I propose to include an artist with expertise on the production of pixel-art to design exclusive content for *In a Haystack* during the development of the episodes. That way the dependency on "standard" art asset sources would be reduced, and the project can fairly discuss a broader range of social issues related to Privilege in more realistic and impactful ways.

4.4. Progressively Leave Space for Players' Interpretations

During the playtest sessions of *In a Haystack*, I noticed that two types of player emerged: the "learning" ones and the "previously-educated" ones. The "learning" players would feel very satisfied with the narrative and its pace, because they ended up knowing more about real life stories that were not exposed to them before. The "previously-educated" players could relate to the narrative and understood the sources where the story came from, but there was little space for the player to add their own interpretation and experiences to the story.

I expect that possible recurrent players of this series will progressively get more educated about Discrimination and Privilege, ideally becoming better educated allies as the episodes progress. For that reason, I foresee that it would be interesting to progressively add space for artistic ambiguity and the player's interpretation on the episodes' narratives, to accompany the players as they evolve. Making an analogy, the Harry Potter books, by J.K. Rowling, are written for adolescents that become young adults as the series progresses. I propose that In a Haystack will evolve its artistic expression, delivering more subtle feelings and nuances of the characters' stories, as the series' fanbase evolve their knowledge on social issues.

5. Conclusion

Working on this project was a very intense experience. From my explanatory research, I learned a lot about the manifestations of Privilege in American culture, as well as nuances of situations that I had never experienced. From the form interviews, I was exposed to many real life experiences that seemed unbelievable and unacceptable, and I could empathize with stories of people in many different situations from mine. Writing narrative and dialog trees is something that I had never tried doing before. To fill that gap, I independently studied writing for games and theater, and I now understand a lot more about narrative structure than I ever would have without this learning opportunity.

During the development of the game, I learned about the affordances and tools offered by different game engines, and I had the chance to professionally design levels, and implement game mechanics that used and pushed the chosen video game engine to its full extent. I also stumbled upon a common obstacle in video game development: the lack of social diversity in art assets for video games. That exposed me to a deeply systematic and real issue that is prevalent to the video game industry, which is still a very white, male, young, cisgender industry, especially when compared to other branches of entertainment industries, which is a phenomenon reflects itself culturally into game engines and commercial video games.

Finally, showing Monique's fictional-but-not-made-up story to people that face the situations I tried to expose was powerful and impactful. Hearing the only female programmer say "Thank you, and please tell more stories" made me satisfied and excited to continue these efforts of social activism. This project will probably next move into a polishing/publishing phase. At the time of writing this post mortem, the game has not been published yet. For me, the repercussions of this video game are an intricate part of how successful this artistic interactive experience can be considered. As an ally, I feel like my duty is to carry on using my skills as a talented programmer and video game designer to deliver thought-provoking messages to people who wouldn't possibly be exposed to them otherwise.

Appendix A

Research Reference List

Au, W. (2003, October 28). New World Notes: WHITE LIKE ME. Retrieved October 10, 2015, from http://nwn.blogs.com/nwn/2003/10/white_like_me.html.

Bond, S., & Cash, T. (2006). Black Beauty: Skin Color and Body Images Among African-American College Women. Journal of Applied Social Psychology, 22(11), 874–88.

Glenn, E. N. (2009). Shades of Difference: Why Skin Color Matters. Stanford, CA: Stanford University Press.

Herring, C. (2004). Skin deep: Race and complexion in the color blind era. In V. Keith, H. D. Horton, & C. Herring (Eds.), Skin deep: How race and complexion matter in the "color-blind" era (pp. 1-21). Urbana, IL: University of Illinois Press.

Rondilla, J. L., & Spickard, P. R. (2007). Is lighter better?: Skin-tone discrimination among Asian Americans. Lanham, MD: Rowman & Littlefield.

Zimmerman, A. 2012. Documenting DREAMs: New Media, Undocumented Youth and the Immigrant Rights Movement. Working Paper Accessed at http://ypp.dmlcentral.net/sites/all/files/publications/Documenting%20DREAMs%20-%20Working%20Paper-MAPP%20-%20June%206%202012.pdf.

deWinter, Jennifer. (2015). Shigeru Miyamoto: Super Mario Bros., Donkey Kong, The Legend of Zelda. New York, NY. Bloomsbury Publishing USA.

Gunraj, A., Ruiz, S., & York, A. (2011). Power to the people: Anti-oppressive game design. In K. Schrier & D. Gibson (Eds.), Ethics and game design: Models, techniques and frameworks. New York: Information Science Reference.

Lorde, A. (1983). The master's tools will never dismantle the master's house. In C. Moraga & G. Anzaldúa (Eds.), This bridge called my back: Writings by radical women of color (pp. 98–101). New York: Kitchen Table Women of Color Press.

Munoz, J. E. (1999). Disidentifications: Queers of color and the performance of politics. University of Minnesota Press.

McIntosh, Peggy. "White Privilege: Unpacking the Invisible Knapsack." (excerpt from Working Paper #189, "White Privilege and Male Privilege: A Personal Account of Coming To See Correspondence Through Work in Women's Studies" (1988), Wellesley College Center for Research on Women, Wellesley, Massachusetts).

University of Michigan. "Privilege Walk Activity". Retrieved October 22, 2015, from <u>https://ginsberg.umich.edu/content/privilege-walk-activity</u>.

Appendix B Game Design Document

In a Haystack: Episode One

Video Game Design Document

January, 2015

TABLE OF CONTENTS

<u>1.</u>	OVERVIEW	
1.1.		30
1.2.	PLAYER EXPERIENCE	
<u>2.</u>	NARRATIVE	
2.1.	INSPIRATIONAL INTERVIEWS	
2.2.	Setting	
2.3.	CHARACTERS	32
2.3.1	1. Monique Davis	
2.3.2	2. Olivia Martin	
2.3.3	3. JUSTIN BAKER	
2.3.4	4. Јони White	
2.3.5	5. Cayla Friendly	
2.3.6	5. Аміт	
2.3.7	7. Luke	
2.4.	PLACES	
2.4.1	1. Номе	34
2.4.2	2. Work	34
2.4.3	3. Club	35
2.5.	NARRATIVE STRUCTURE	35
2.5.1	1. Act 1 – Exposition and Conflict	
2.5.2	2. Act 2 – Rising Action	
2.5.3	3. Аст 3 – Сымах	36
2.5.4	4. DENOUEMENT	
2.6.	DIALOG TREES	37
<u>3.</u>	GAME MECHANICS	29
3.1.	CORE MECHANICS	
3.1.1		
3.1.2		
3.1.3		
3.2.		
	1. Спилсн Тіме	
3.2.2		
3.2.3	3. Clean The House	41
<u>4.</u>	GAME MAPS	43
4.1.	Номе	43
4.1.1	1. Monique's Apartment	43
4.1.2	2. Apartment Floor	43
4.1.3	3. Elevator	43
4.1.4	4. Apartment Block's Bus Station	
4.2.	Work	44
4.2.1	1. Plain White Software Office	

	.2. ELEVATOR	
4.2.3	.3. Plain White Corp. Bus Station	45
4.3.	CLUB	
4.3.1	.1. DANCE FLOOR	46
4.3.2	2. CLUB'S BUS STATION	47
<u>5.</u>	CONCEPT ART	48
5.1.	INSPIRATION	
5.2.	Εχεουτίον	51
<u>6.</u>	PRIORITIZED DEVELOPMENT	52
<u>6.</u> 6.1.		
_	. Act 1 – Exposition and Conflict (Game Demo)	52
6.1. 6.2.	. Act 1 – Exposition and Conflict (Game Demo)	52
6.1. 6.2. 6.3.	. Act 1 – Exposition and Conflict (Game Demo) Act 2 – Rising Action	52 53 55
6.1. 6.2. 6.3.	ACT 1 – EXPOSITION AND CONFLICT (GAME DEMO) ACT 2 – RISING ACTION ACT 3 – CLIMAX MISCELLANEOUS SUGGESTED GAME ENGINE	52 53 55 56 56
6.1. 6.2. 6.3. <u>7.</u>	ACT 1 – EXPOSITION AND CONFLICT (GAME DEMO) ACT 2 – RISING ACTION ACT 3 – CLIMAX MISCELLANEOUS SUGGESTED GAME ENGINE	52 53 55

1. Overview

This Game Design Document will describe the first episode of the video game series "In a Haystack". In this series, each episode tells the story of a character - inspired by people's real life stories about privilege and discrimination.

1.1. Introduction

White and Male dominance in Western society has been explicit for many centuries. During and after the colonial era, slavery was a very common source of workforce, especially in the Americas. Enslaved Africans were brought in ships to work under inhuman conditions in the United States and in many other European colonies, and even after slavery was declared illegal in most of the world, the laws of South African Apartheid and the persistence of constitutional segregation in America were still a shadow cast on the ways colonization and white supremacy led Western colonialism. Throughout the 20th Century, Western communities saw strong movements for women's rights to work, vote, as well as the rise of a strong discussion about traditional gender roles and their influences on society, along with the fall of the lawful

segregation, when racism went from a blatant issue to a subtle discussion topic. It is easy to discuss inequality when it is explicitly written, when it is part of the law, but it is way harder to understand Privilege⁶ once it becomes an invisible part of our society.

White, male, heterosexual and cisgender Privileges are very present in our contemporary society, although it is harder to see and to identify when they aren't part of the law, not written down. Discussing Privilege can be compared to "unpacking an invisible knapsack" and doing so requires a closer look on what people who consider themselves colored, LGBTQ and women have to say about how they experience the nuances of being underprivileged.

This project aims to bring discussions about Privilege to light by telling the stories of people who are in underprivileged positions, re-humanizing them to the eye of the player. It will be a proof-of-concept hybrid between video game and art installation, a top-down walking simulator inspired by *Actual Sunlight* (2014).

1.2. Player Experience

This episode intends to give the player the feeling of psychological torment that arises from not knowing exactly where is the line that separates suffering racism and sexism in the workplace from just thinking of yourself as professionally unappreciated, inefficient.

⁶ The term Privilege is capitalized here, giving it a proper noun to emphasize its existence as a social phenomenon.

2. Narrative

This section contains the explanation of the setting of the game, traits of the main and supporting characters, game's maps, and chosen narrative structure. The dialog trees for the main scenes of the game can be found on Appendix A. The dialog trees are not final, and can be changed to better fit the chosen game engine.

2.1. Inspirational Interviews

To accurately represent characters of social groups that I am not a part of, the first part of narrative design was to start the development of this entire project by collecting information from real people. This was be done over the internet, using an online, anonymous Google Form. The interviews were developed with the intent to not intimidate the people being interviewed, while gathering personal sentiments about their life background, and focusing on one specific moment when they felt a disadvantage as compared to someone else because of their race, economic class, culture, sexual orientation and gender identity.

The process of reaching out to interview subjects will be done using social networks and social media (e.g. Facebook and Twitter) using snowball sampling, a technique in which each reached person is expected to pass it on to more people to extend the number of subjects, therefore increasing the diversity in the interview database and enriching the character creation process.

2.2. Setting

The game happens in San Francisco, CA, in between moments when Monique and her friends go to their favorite club in the vivid nightlife of the city, Monique's calm but messy apartment, and the Plain White Corp. Tower, more specifically the Plain White Software office.

2.3. Characters

In this section, the most important characters of the narrative will be listed.

2.3.1. Monique Davis

The protagonist of this story. A recently graduated woman of color who just got a job in an IT company. At the age of 22, she slowly becomes aware of racism and sexism - things she didn't notice during college. She went to a very good university, due to her privileged position during her primary education. Despite still having her own student loans to pay, she had all the support from her parents (financial and familiar) to thrive in her academic life.

2.3.2. Olivia Martin

Monique's best friend, met at a Computer Science Conference - A 35 years old white woman who dropped out of the video game industry 1 year ago. Even as a manager, she felt exhausted of working in a place she was isolated and her opinions were not heard. She is now managing a restaurant downtown. She is engaged to Tommy, a guy that usually does not show up to hang out with Olivia's friends.

2.3.3. Justin Baker

Monique's best friend from work - A gay white guy. He's the soul of the office, always making everybody laugh. At the age of 25, he is pretty comfortable with the salary he makes: he can buy all the video games he wants. He usually guides Monique through her duties at Plain White Software.

2.3.4. John White

The villain. 42-year-old successful white man who fully believes in meritocracy. He is the manager of the software division of Plain White Co., and he went to the same school as Monique - reason why he hired her. He always had great opportunities, always leaving a job for a better one. He feels angry about the times someone from a minority was hired in his place. He thinks affirmative action is bullshit. He is part of the wealthy White family, who owns the Plain White Company conglomerate.

2.3.5. Cayla Friendly

39-year-old woman, she is the receptionist and only other female worker at Plain White Software. For being in this Privileged position (the reception), she usually knows everything that's going on at the office.

2.3.6. Amit

Straight Indian-American male software developer at Plain White Software. Around 25 years old, he is a technology enthusiast who love sci-fi. Very efficient on his job, usually outshines his coworkers on the duty.

2.3.7. Luke

Straight white male software developer at Plain White Software. Around 25 years old, he is a technology enthusiast who love sci-fi.

2.4. Places

This section contains a list of the places in which the narrative happens.

2.4.1. Home

Monique's apartment is a place of comfort. The player should feel build a connection of empathy for her in this environment. Monique lives in a very nice apartment block in San Francisco, which is one of the Privileges she enjoys. Olivia lives in the same building, and they often stumble upon each other.

2.4.2. Work

The Plain White Corp. Tower is one of the biggest buildings in San Francisco. It is owned by the ridiculously wealthy White family. The Software Development branch, Plain White Software, is where Monique finds her first job opportunity after graduation. The office will be a very important place in the narrative. Here is where Monique suffers most of the racist and sexist abuses in this story.

2.4.3. Club

Monique's favorite hangout place is The Hangar, a gay bar/club in the heart of San Francisco. She comes here very often with her best friends to socialize and release.

2.5. Narrative Structure

This section will list the main events that happen in each of the acts and maps of the game. The intention here is to be succinct, since the dialog trees are actually part of the Appendix C.

2.5.1. Act 1 – Exposition and Conflict

At Hangar

Cutscene – Monique, Justin and Olivia talk while having drinks.

Playable – Monique and Olivia go home.

At Home

Playable – Interact with the furniture and cooking breakfast.

At Work

Cutscene – The game cover. By the Plain White Corp. building.

Playable - First abuse. Crunch time challenge.

2.5.2. Act 2 – Rising Action

At Work

Cut – Three months later.

Not shown – John has been abusive towards Monique and she confronted him. Olivia hasn't showed up lately.

At Home

Playable – By the building, Justin calls you and talks about maybe getting together later at the club to catch up. Monique meets Olivia bruised leaving her apartment, and they agree on going

out later, but Olivia is being dismissive. Monique is harassed by John on Social Media, because she confronted him before.

Cutscene – Meditation by the mirror, putting on make up to go to Hangar.

At Hangar

Playable – Getting drinks puzzle. Olivia doesn't show up. Monique gets scary texts from Olivia. They leave to the Apartment Block.

At Home

Playable – Getting to the apartment block with urgency text messages.

Cutscene – Justin and Monique scream by Olivia's door and save her.

2.5.3. Act 3 – Climax

At Home

Playable – Three months later. Olivia moved in with Monique. Clean the house puzzle. Interview with John White. Gets support from Olivia – who also talks about video game and IT industries.
Cutscene – Meditation in the Bus. Monique asks herself if this job is worth it.

At Work

Playable – Cayla is harassed and fired. Monique has the chance to speak up. She talks to Cayla and they find a class lawsuit against Mr White on Google.

Cliffhanger – "Do you want to join the class lawsuit?" (sending the denouement to the next episode)

2.5.4. Denouement

At Hangar

Playable – Monique brings 3 drinks. They're all together this time. Justin, Olivia and Monique talk about John White being transferred and a new nice boss came.

Cutscene – They all laugh and agree everything got better, one way or another.

2.6. Dialog Trees

The dialog trees for this videogame are presented on the Appendix A of this Game Design Document. They are not final, and can be changed to better conform to the chosen game engine. Optional dialog can also be added during the development of the maps, as long as it matches the intended experience of the game.

3. Game Mechanics

This section lists the core mechanics intended for this game, as well as mini games that happen throughout the story.

3.1. Core Mechanics

In this section, the core game mechanics in this video game are discussed.

3.1.1. Top-down RPG

The game should be presented as a top-down view narrative based RPG, as shown in Figure 10. This game mechanic was chosen for being a very simple and classic video game perspective, with which a broader number of people feel familiarized. It has also been used very successfully on video games with strong narratives and longer dialog trees.



Figure 10: A sample top-down RPG

3.1.2. Traveling

The traveling between different areas of the city (Work, Home and Club) happens by interacting with the bus stops on the outside parts of the buildings. This choice was made because public transportation has been an interesting "meditation moment" in the author's own experiences.

The intention is to leave some space for reflection about the things that happened in each of the scenes.

3.1.3. Conceal, Talk or Contact HR

The only way to fail in this game is actually to be too assertive about your feelings towards the abuses Monique suffers in the work environment. Concealing your feelings will do you no harm, but talking about them can make your colleagues and your boss feel like you are a "paranoid agitator" in the company, which leads you to choose to "let it go" or "contact HR". Contacting HR about your abuses will take you to a choice between accepting or not a Non-Disparagement Agreement, but either accepting or not, the "Game Over" screen will be shown.

This mechanic was chosen to show that, usually, the oppressed and abused person in the work environment is the one punished when these matters are brought up to public. It is very common to read stories about people who lost their jobs by bringing up their stories of abuse in the work environment, because the "boss" figure is usually protected by the corporations.

3.2. Mini Games

In this section there is a list of the mini games presented to the player. The mini game moments break the original core game mechanics for a limited period of time to present a different gameplay.

3.2.1. Crunch Time

This mini game happens in the work environment. It is supposed to metaphorize the competitiveness and Privilege relations in the work environment. The player has to repeatedly and quickly press a button to simulate the "coding" process, filling a "productivity" bar. The other developers' AI should have a rate of growth on their productivity bars that is varied and competitive. The choice of these rates should be done on playtesting sections, to make the game defying for the player.



Once each developer gets to 100% on their productivity bar, they go through a "debugging" section, which lasts a short period of time. The other developers then have their bars lowered to anywhere between 90% and 100%, and Monique has her bar always lowered to 50%. Everyone has to, again, pass through the developing phase to finish the mini game.

If the player finishes the mini game in 1^{st} place, Monique is praised by the team. If 2^{nd} or 3^{rd} place, Monique has her programming skills mildly questioned by the boss, and the player is asked if they want to try again. If 4^{th} place, Monique is called out or not being a good-enough hiring choice, and the player is asked if they want to try again. Either positive or negative, all the comments made by the other characters should highlight the fact that Monique is a girl.

3.2.2. Get Drinks

This mini game is a form of escape from the game's heavy plot. The player is asked by Justin to buy his and Olivia's favorite drinks in the bar. It is mostly a memory game.



Figure 11: Example of a shop dialog on Pokémon, a famous JRPG

The player has to interact with the bar tender and "order" the 3 drinks Justin asked them to buy, on a dialog tree similar to the JRPG's traditional shop dialogues, except for the fact there is no monetary unit in this video game. If Monique buys the right drinks, Justin praises her. If not, Justin says she's too distracted lately, and the player is asked if they want to try again. Olivia is not at the bar on the moment this mini game is presented.



3.2.3. Clean The House

This mini game is placed in the game to build some empathy between the player and Monique's lack of spare time, as well as to break and pace the plot. Monique's apartment has been a mess lately because she's spending too much time at work.



The player basically has to find all the scattered clothes on the apartment floor and take them back to the laundry basket in 30 seconds. If the player manages to do it, Monique gets satisfied about her space. If not, Monique expresses her sadness about not having any time to clean her apartment, and the player is offered the choice to try this mini game again.

4. Game Maps

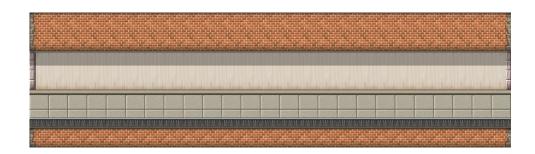
For the production of the maps, I decided to use RPG Maker MV's map prototyping capabilities, since the engine itself offers a point 'n click interface that permits a very easy prototyping. This decision will will possibly speed up the development of the game later, as well.

4.1. Home

4.1.1. Monique's Apartment



4.1.2. Apartment Floor



4.1.3. Elevator

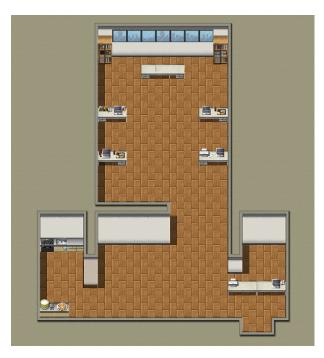
****			1.1.1.1.1.1	a second day	Contractor of
	1000				
	10				10
	-Ste				-Ste-
	18				33
		rrri	- E E E	eeeee	

4.1.4. Apartment Block's Bus Station

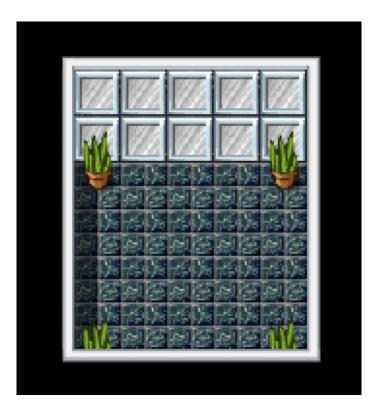


4.2. Work

4.2.1. Plain White Software Office



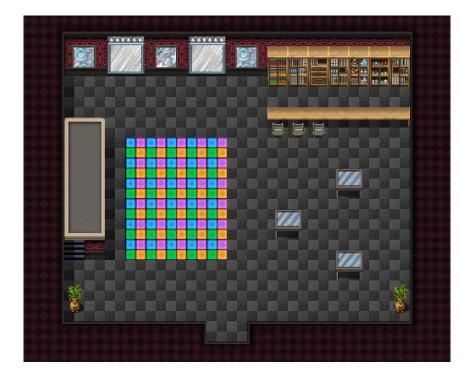
4.2.2. Elevator



4.2.3. Plain White Corp. Bus Station



- 4.3. Club
- 4.3.1. Dance floor



4.3.2. Club's Bus Station



5. Concept Art

This section will discuss inspirations for the concept art and the production of the art assets for this game.

5.1. Inspiration

The game tries to match the RPG video game genre, which is usually chosen to depict fantasy and medieval stories, with modern days. A game that did this very well and served as inspiration is *The World Ends With You* (Nintendo DS), as shown in Figure 12 and Figure 13.



Figure 12: Concept art for The World Ends With You (Nintendo DS)



Figure 13: In-game image of the Shibuya area in The World Ends With You.

Another game that can serve as inspiration for the visual design of this game is Actual Sunlight (PC), a video game made on RPG Maker that is set on modern days. The cutscenes in this game are also a good example of how to save some budget and produce good thought-provoking moments in a game. Figure 13 and Figure 14 show some of this game's art.



Figure 14: Work environment in Actual Sunlight



Figure 15: Thought-provoking cutscene in Actual Sunlight

5.2. Execution

With help from the Brazilian artist Aeverton Dantas, some concept arts for cutscenes were produced. They can be seen in Figure 16 and Figure 17.



Figure 16: Monique, Olivia and Justin having fun in the club on the game's first cutscene.



Figure 17: Title Screen of the game, when Monique first sees the Plain White Corp. building.

6. Prioritized Development

In this section of the design document, I will list a suggested timeline of development, listing what is the priority of each part of the process. The earliest act of this narrative has higher priority than the last. The sub-priorities of each part are defined in the tables.

6.1. Act 1 – Exposition and Conflict (Game Demo)

Since this act of the game is also supposed to be the Demo of the game, it is the MVP of this document. Without a playable first act, this game design document and its intended experience are not fulfilled.

ltem	Description	Priority
Opening Cutscene	Opening scene with conversation between Justin, Olivia and Monique. Can be replaced by regular gameplay cutscene.	MEDIUM
Playable Club	First moments of the game, where the player is taught how to move, interact and travel between places.	HIGH
Playable Home	Moment of release, where the player get's to empathize for Monique's personal space.	HIGH
Playable Work	Moment where the player is introduced to the place where the climax of the game happens.	HIGH
Title Cutscene	Cutscene where the title of the game is presented to the player. It is important because it shows the contrast between Monique and the big corporation she now works for.	MEDIUM
Crunch Time Challenge	The first mini-game, in the work environment. It is important, because it brings the feeling of injustice on the workplace this game intends to convey.	HIGH

6.2. Act 2 – Rising Action

ltem	Description	Priority
Playable Work	This scene leads to Mr. White abusing Monique verbally, which is an important fact that leads the game to the climax.	HIGH
Abuse Cutscene	This cutscene shows Mr. White abusing Monique verbally. Can be replaced by a gameplay cutscene	MEDIUM
Playable Home	This scene leads Monique's internal struggle with the criticism she gets at work. It also shows further abuses from Mr. White through social media.	HIGH
By-The-Mirror Cutscene	This cutscene conveys the feeling that Monique is having an internal struggle about the criticism and abuses she gets from John White.	HIGH
Playable Club	This scene introduces the sub-conflict with Olivia, which can be eliminated from the game in case of a short deadline.	LOW
Playable Apartment Block	This scene concludes the sub-conflict with Olivia.	LOW

6.3. Act 3 – Climax

ltem	Description	Priority
Playable Home	This scene shows Mr. White abusing Monique verbally, which is an important fact that leads the game to the climax.	HIGH
Meditation Cutscene	This cutscene shows Monique as having a deepened struggle about what she's suffering at work. Can be replaced by a black screen with text-only thoughts by Monique.	LOW
Playable Work	This scene shows Monique and Cayla uniting. It is one of the most important points of the plot.	HIGH

7. Miscellaneous

This section includes decisions that pass the boundaries of this game design document, but that are important for the development, distribution and future episodes of this game series.

7.1. Suggested Game Engine

I suggest the use of RPG Maker MV to implement this game. This engine evolved a lot throughout the last years, and now it exports executables for Windows and Mac OS X, as well as an HTML5 version that can be converted into iOS and Android apps.

It is also a very good game engine for the development of storytelling video games, and has been successfully used by other video game designers to deliver low-budget games with similar intended experiences to "In a Haystack".

7.2. Planned Marketing and Distribution

The distribution of this episode should happen for free, on a web domain. This should help a future Kickstarter campaign to successfully fund the rest of Season 1 and a Steam Greenlight campaign, simultaneously.

7.3. Connection Between Episodes

The characters of each episode should be possibly met in other episodes. There should be a connection between the episodes, and the cliffhanger of one episode can be solved on the next episode, through interaction with the other characters.

Appendix C

Dialog Trees

The dialog trees in this game were designed using Twine, an engine that permits the use of conditionals and variables. The dialogs might be changed to better fit the chosen game engine.

Act 1 - Exposition and Conflict

AT HANGAR, DURING A PARTY

MONIQUE, JUSTIN and OLIVIA are having drinks at their favorite bar.

******MONIQUE******: Thank you for referring me to that job, Justin.

JUSTIN: Of course, hon!

MONIQUE: I was really afraid I wasn't going to find work after graduation. Also, I can't complain I'm living AND working in San Francisco.

JUSTIN: It's my pleasure, fluff.

I basically recruited you so we can talk about TV shows and the Grammy's. HAHAH!

MONIQUE: I really need to keep this job for an year, at least. Those student loans aren't going to pay themselves!

OLIVIA: Oh, you youngsters! Being a pretty single lady programmer sure was fun. But engagement is soooo rewarding!

JUSTIN: Oh, please! You're still young and fab, Olivia.

MONIQUE: WAIT!!!

Don't look now Justin, but there's a cute guy checking you out from the bar.

JUSTIN: YAASSSSS!

You two will have to excuse me. I've got MY single lady duties to do.

MONIQUE: Good luck, Jus! Tomorrow is gonna be the big day, I better not be hungover! We should get going...

[[Leave the club->Transportation Tutorial]]

AT HANGAR, LEAVING THE PARTY

JUSTIN goes to the bar to flirt. MONIQUE and OLIVIA head to the bus stop.

- Use the directional keys to walk -

- Press 'Enter' to interact with objects -

******OLIVIA******: Let's take the bus home.

- INTERACT with the BUS STOP to travel between locations -

AT THE APARTMENT BLOCK, NIGHT

OLIVIA and MONIQUE make their way to the apartment block they live in.

******OLIVIA******: Chatting in the bus is definitely the best part about you having found an apartment on my apartment block.

[[Go inside the building->Personal Space Building]]

AT MONIQUE'S APARTMENT, WAKING UP IN THE MORNING

MONIQUE wakes up to her alarm clock. She needs to get ready to go to work.

MONIQUE: ...
OH.
MY.
GOD!
I'm almost late. Quick, Monique! Shower, eat and GO!

- Use the bathroom to shower -

MONIQUE: Almost ready to go. Now some quick breakfast.

- Use the kitchen appliances to get some breakfass. Hurry. You're almost late. -

//FRIDGE, MICROWAVE OR OVEN//:

(if: \$breakfast is "done")[I'm full. Let's run to work!]

(else:)[What's for breakfast?

* (link:"Milk and Cereal")[(set: \$breakfast to "done")(goto: "Personal Space Building")]

* (link:"Oatmeal")[(set: \$breakfast to "done")(goto: "Personal Space Building")]

* (link:"Eggs and Bacon")[(set: \$breakfast to "done")(goto: "Personal Space Building")]
]

MONIQUE: I should go now.

[[Leave the Apartment->The Apartment Block]]

AT THE 5TH FLOOR, LEAVING THE BUILDING

MONIQUE is leaving the building to go to her first day at work.

//Olivia's Door//: Olivias apartment...

AT THE ELEVATOR

//Elevator//:

* 5th floor

* [[Ground->A Nice Neighboorhood]]

BY THE APARTMENT BLOCK, BEFORE TAKING THE BUS

MONIQUE talks to her neighbors before going to work

******NEIGHBOOR 1******: This is such a nice neighborhood. I love the building.

NEIGHBOOR 2: Do you live in this condo? Holy cow, I wish I lived here!

NEIGHBOOR 3: Oh well... It feels like this bus takes longer every day.

triggers the bus

[[Take the bus->The Name Of The Game]]

BY THE PLAIN WHITE CORP. BUILDING, SHOWING THE NAME OF THE GAME

MONIQUE arrives at work for the first time and realizes how big the corporation is in contrast to how little she is.

PERSON 1: The Plain White Conglomerate is so powerful... Some people say even the president himself has to report to them.

PERSON 2: The White Tower is one of the tallest buildings in town. And I heard it's all owned by a single family! How crazy is that?

PERSON 3: (dialog) Plain White Corp. has branches in TV, Radio, Movies, Games, Software... They're a huge company!
PERSON 4: That new dating app Plain White Software just released is great!
PERSON 3: Yeah, I love the reality TV shows on PWBC! I'm here just to get an autograph by as many celebrities as I can.

[[Take the Elevator to Work->The First Abuse]]

IN THE PLAIN WHITE SOFTWARE BUILDING, FIRST DAY AT WORK

MONIQUE gets to work for the first time.

Cayla: Oh, you must be Monique, right?I'm Cayla! Welcome to our office!We definitely need a little feminine touch! It's very nice to meet you.

Justin: Hey Monique! I'm so glad you're here.

Luke: Hey, I'm Luke. Justin has been talking about you all the time. Don't mind my friend Amit. He's a little... workaholic.

Amit: Hi... Nice to meet you...

•••

I'm a little...

...busy...

code code code

John: Welcome to Plain White Software. You're part of the team now. **Monique**: Thank you. I better get to work now.

-- One month later - CRUNCH TIME PUZZLE --

- INTERACT with your computer REPEATEDLY to code -

- Hurry up! You need to prove you're worth this job -

(if: \$reaction is "ignore")[**Monique**: Okay, I guess I better keep on working. It must be just my imagination.

]

(elseif: \$reaction is "ask")[**Monique**: Hey John... I noticed my code always has more bug reports than my coworkers's. Why so?

John: Ok, since you brought it up... Keep in mind this company is a meritocracy. No one is treated differently for their race or gender or any of this stuff. Look at Allen, he's indian, and we love him. Men, women, blacks: everybody is equal here.

Monique: (Wait, what? Did I bring race or gender into discussion?)

* (link:"Just let it go")[(set: \$reaction to "ignore")(goto: "The First Abuse")]

* (link:"Talk to Human Resources about John's weird comment")[(set: \$reaction to "hr")(goto: "The First Abuse")]

]

(elseif: \$reaction is "hr")[

- Human Resources heard your complaint, but they didn't want to cause agitation in the company. They bring up the Non-Disparagement Clause on your contract, which says you can't talk to anyone about this, since it'll harm the company's image. They offer you some money to leave the company with your mouth shut.

(if: \$end is "accept")[

- Unfortunately, accepting the deal was not enough to pay for your first year of student loans. You needed to ask for your parents' and friends' help to pay the rent. GAME OVER.

(elseif: \$end is "refuse")[

- Unfortunately, bringing the matter up to court costed you more money than you could afford. You don't have enough money to pay your first year of student loans. You are blacklisted in most of the companies of San Francisco, and have to ask for your friends' help. GAME OVER.

(else:)

1

1

* (link:"Accept HR's offer")[(set: \$end to "accept")(goto: "The First Abuse")]

* (link:"Refuse to stay silent")[(set: \$end to "refuse")(goto: "The First Abuse")]

]

(else:)[(Why is my code debugged more thoroughly than the other guys' code?)

* (link:"Just ignore it and go on")[(set: \$reaction to "ignore")(goto: "The First Abuse")]

* (link:"Question John")[(set: \$reaction to "ask")(goto: "The First Abuse")]

]

ACT 2 – RISING ACTION

AT THE PLAIN WHITE CORP. BUS STOP, LEAVING WORK

--Three months later--

AT MONIQUE'S APARTMENT BUILDING

MONIQUE gets a phone call from JUSTIN. He wants to hang out at the Hangar with OLIVIA and MONIQUE.

--Phone rings--

JUSTIN: Hi, hon!

MONIQUE: Hey, Justin, what's up?!

JUSTIN: Just leaving work and planning the night! Wouldn't it be cool if we went out tonight? Just you, me and Olivia, like we used to so a couple months ago.

******MONIQUE******: That sounds great! I really miss Olivia. I haven't seen her in months. I think her boyfriend doesn't like when she hangs out with me!

JUSTIN: Wow, really? That sucks for him. Because you're gonna knock on her door for me and tell her to come shake that ass with us tonight. Will you? PLEAZZZ??

MONIQUE: Sure thing. See you at the club.

JUSTIN: YAAASSS! That's what I'm talking about. I'll talk to you later, hon.

MONIQUE: Bye, Felicia!

AT MONIQUE'S APARTMENT FLOOR

MONIQUE knocks on OLIVIA's door. Olivia opens the door trying to hide some bruises on her face. MONIQUE invites her to go out later and OLIVIA accepts, but she's very dismissive. They also talk about the abuses MONIQUE suffers from MR. WHITE.

OLIVIA: H... Hey, Monique!

MONIQUE: It's been a long time, huh? Are you alright?

OLIVIA: Yeah... Sorry I haven't really hung out with you guys lately. I've been kinda busy... And... Nevermind. How's work?

MONIQUE: Mr. White has been kind of grumpy towards me a couple times. And he makes sexist comments all the time. The other guys don't notice, except for the receptionist, Cayla. She seems a little annoyed. I think if I ask about it now I'll be ostracized. I don't want everyone at work to refer to me like "Look at the paranoid feminist!!", so I'm trying to go with it.

******OLIVIA******: Oh wow. That sounds about right. I've been there, I've done that. Good luck.

MONIQUE: Are you alright wrong, Liv? We haven't really been talking lately. You sound a little worried.

******OLIVIA******: I don't know. Thomas has been acting a litle stressed lately. There's ups and downs. Sometimes more downs than ups. I think that's how life is in general.

MONIQUE: I'm sorry to hear that. But hey! Justin just called me and he wants to hang out with us tonight. And we could talk about your fiancé sitting by the bar. Like the old times. What do you think?

OLIVIA: Mmmmm... I don't know... I'll ask him and see if I can.

****MONIQUE****: Pleeeaazzz???

OLIVIA: Mmmmm... Okay, then! Just like the old times. But I'll try to come back early.

MONIQUE: Nice! See you soon!

AT MONIQUE'S APARTMENT

MR. WHITE is abusive towards MONIQUE on her social media, as a response to her confrontational responses to his racism and sexism earlier this week. MONIQUE has a meditation moment by the mirror, thinking about her career.

--On MONIQUE's Computer--

JOHN WHITE: Hey Monique. I saw you talking to Cayla earlier. Don't think your acts go by unnoticed. That's all I'm gonna tell you.

MONIQUE: Oh... Sorry, but... is there anything wrong with me talking to her?

JOHN WHITE: I see what you are planning. You two are plotting to threaten me.

MONIQUE: I really don't understand where this is coming from.

JOHN WHITE: You two better behave and not bring your silly issues to the office. You aren't gonna get any privileges out of this. Women are always so entitled.

MONIQUE: Oh wow... I got to go now.

JOHN WHITE: Ok. I don't want to hear any buzz about this conversation we had at work. Am I being clear?

MONIQUE: ...I'll talk to you later, Mr. White.

MONIQUE: *Disconnects*

MONIQUE: (What the heck did just happen? Why is this all happening to me? I really need to get ready to go to the club.)

--By the bathroom mirror--

******MONIQUE******: This job is killing me slowly. I don't even want to show up tomorrow, but I have to. I feel so unapreciated. I need to ask for Olivia's advice tonight.

AT MONIQUE'S APARTMENT FLOOR

OLIVIA is not ready to go out yet.

--Monique can hear an argument through the door--

OLIVIA: I'm no ready. You can go first. I'll try to be there as soon as I can.

MONIQUE: Okay, then. Your drink will be waiting for you!

AT THE CLUB

JUSTIN is there waiting for MONIQUE. He asks her to order their favorite drinks. OLIVIA doesn't show up. She sends MONIQUE some concerning messages and they decide to go check how she's doing at her apartment.

JUSTIN: Where's Olivia?

MONIQUE: She wasn't ready yet. She told me she'll come as soon as possible. I'll go get drinks. What should I get?

JUSTIN: Ok. I want a \Mai Tai\. Olivia always drinks \Cosmopolitans\, and you should definitely try a \Caipirinha\ tonight. It's my favorite Brazilian drink. Make sure you get them right. The Drinks Menu is HUGE!

--The Huge Drinks Menu Challenge----Make sure you get the right drinks--

BARTENDER: What will you get tonight, Monique? Martini Manhattan Margarita Cosmopolitan Irish Coffee Long Island Iced Tea Caipirinha Whiskey Sour Mai Tai Planter's Punch Pisco Sour Bloody Mary

--if success--**JUSTIN**: Nice memory!

--else--

JUSTIN: This is not what you said you were getting.

--Try again?

JUSTIN: Now we just have to wait for Olivia to get here. Can you text her?

MONIQUE: Sure. Let me see if she's on her way...

--On MONIQUE's phone--

MONIQUE: Hey liv, are you close? Got ur drink. XOXO

******OLIVIA******: Don't think I'm coming anymore.

******MONIQUE******: Wait what? Why?

******OLIVIA******: Tbh Thomas is crazy 2nite. Been drinkin a lot + I dont know what he would do if I went out.

MONIQUE: That's not right liv. Im coming over

--Talking to JUSTIN--

MONIQUE: Olivia's fiancé is getting dangerous. We should come. I think she needs help. **JUSTIN**: Super Monique and Atomic Justin, to the rescue!

--Urgency MSGs--**OLIVIA**: Please dont come. He'll get angry at me **MONIQUE**: Too late, I'm on my way.

OLIVIA: He's lookin weird at me.
MONIQUE: That doesn't seem right. I'll be right there

OLIVIA: He's getting violent. I think he's gonna take my cellphone away.
MONIQUE: WHAT?
MONIQUE: Are you there?
MONIQUE: ANSWER ME!!

--Talking to JUSTIN--

MONIQUE: The guy took her cellphone. Let's go!

AT MONIQUE'S APARTMENT FLOOR

JUSTIN and MONIQUE hear screams coming from inside OLIVIA's apartment, and they break in to save her.

ACT 3 – CLIMAX AND DENOUEMENT

--Three months later--

AT HOME, GETTING READY TO WORK

Olivia: You know I'll never be able to retribute your friendship, right?

-Fade scene in-

Monique: Oh, please! I'd have done what I did for any awesome best friend. Living with you is gonna be really easy.

Olivia: I really don't know what would have happened if you and Justin hadn't come that night. And you're the best for letting me move in.

Monique: You're welcome, Olivia. Make sure you do the same for me if my date eventually becomes violent, okay? Oh wait. I'm single. Nevermind.

Olivia: Hahahah! One of the things I love about you is your sense of humor.

Monique: I'll try to clean the house before I go to work today. I haven't had time in forever. Those 80-work-hour weeks are killing me.

-- Cleaning This Mess Challenge --

Monique: (Oh well... I better get all the clothes and put them in the laundry basket in the bathroom. But I gotta be quick. Mr. White is gonna kill me if I'm late to work. Or even worse: fire me!)

-- INTERACT with the clothes on the floor to grab them --

-- Take ALL the clothes to the LAUNDRY BASKET in 30 seconds --

Olivia: Hey, Monique! Look who's flaunting his wealth on TV!

Monique: WHAT? MR. WHITE?!?

- On TV -

Reporter: Thanks for showing us the Whites' private resort, Mr. White. As the heir of a whole Plain White empire, one of the top 10 richest people in the world, what would you say is the key to your success?

Mr. White: Well... I would say hard work is my proudest accomplishment. I've never been given anything in a platter. You know, in this world, you get what you deserve!

Reporter: This is it for today. Watch out for the next episode of "Mansions of The Rich and Famous", exclusively on PWBC!

-In the Apartment-

Olivia: Hard work... and millions of dollars from your father's bank account for an expensive school and extravagant parties, right?

Monique: Hahah! He really doesn't understand how privileged he is, huh?

Olivia: Oh, he surely doesn't. The IT industry is full of people like him. You start to work, and you're the only woman in the entire department - no one really empathizes with you or even understands most of your daily struggles.

And then you're working late hours and you get hit on by one of your coworkers, and you find yourself conjecturing how you would escape if he tried something physical with you. And people will pay more attention to bugs on the code you program than your coworkers'. And you'll have to hear people question your work without saying anything, because if you talk about any of those things to anyone, you become "the troublemaker", "that girl". Talking to Human Resources? you're can say goodbye to your job. And you feel alone. And you feel unappreciated. And you feel scared. I'm like a million times better off now that I'm working as a manager in a restaurant. Seriously. **Monique**: Oh wow... Did this all happen to you when you were a video game programmer?

Olivia: Yeah. But every company is different, and every case is unique.
If every girl just dropped out like me, I'm affraid things would never change. You shouldn't listen to my complaints. Go to work, go be the awesome programmer you are.

Monique: I'm not really in a position to drop out now, so don't worry. I'll just be strong.

IN THE BUS, MEDITATING

Monique: The story Olivia told me is kind of disturbing.
Is it really worth it to dedicate a years of your life to an industry that will use the best of you and then kick you out?
What am I even doing for myself?

AT WORK, STARTING THE DAY

-A man on a suit leaves the building as Monique arrives-

Cayla: But Mr. White, I swear I didn't mean to be rude with him.

Mr. White: We always hire ladies as receptionists to assure our clients are welcomed with a delicate touch. They don't make receptionists like they used to! I should have hired a more professional person for this job. Women are so fickle, one day you're great, then next day you're in your PMSing!

Cayla: This will never happen again, I promise!

Mr. White: Don't even bother promising. YOU ARE FIRED! Now go cry somewhere else.

Monique: What should I do?

- Let it go

- Ask what is going on

If "Defend Cayla is chosen":

Monique: What happened, Mr. White? Why are you yelling?

Mr. White: OH, GREAT. Here comes the feminist squad leader. One of our biggest clients asked Cayla out for drinks tonight and she said "No thanks" like it was not a big deal. Then he insisted, and she made an angry "I-said-no" face to him. She should at least have lied she has a boyfriend. The man left the company really upset. Now it'll be so hard to get him to close a deal. You better not even say this is sexist, I've had ENOUGH of this feminist bullshit from you and Cayla.

Monique: (Wait, what? Cayla is being fired because she didn't accept to go out with a rich guy? And I'm being yelled at? What should I do?)

- Let it go.

- Talk to HR. (Game over)

--Ending Dialogue of the episode--

Cayla: Hey Monique... I actually feel relieved that I'm being fired. Before I leave the company, I'd like to talk to you about something. I've been looking online, and it seems like Mr. White has been abusive to many female workers before. The Plain White Corp is just so powerful that we never get to hear the stories, and Mr. White has never been prosecuted. These women are sharing their stories on this website, and it seems like they'll join a class lawsuit. I feel like we need to do something.

-- Do you wanna join this class lawsuit? --THE END