

**WPEye.net: An Alternate Reality Game for WPI Admissions**

An Interactive Qualifying Project Report  
submitted to the Faculty  
of the  
WORCESTER POLYTECHNIC INSTITUTE  
in partial fulfillment of the requirements for the  
Degree of Bachelor of Science  
by

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## **Abstract**

One of WPI's long term goals is to increase the enrollment rate of accepted students. The goal of this project is to continue the work of a previous IQP to investigate the viability of alternate reality games as a marketing tool for university enrollment at WPI. The project team designed and ran an alternate reality game targeted to potential and admitted pre-freshmen to WPI, and kept track of several demographic statistics. This information will be used by the Admissions Office to adjust their advertising focus for interested students looking at WPI. In addition, the team deviated from alternate reality game norms and explored different genres of storytelling within this field.

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# **1. Introduction**

## **1.1 Problem Statement**

According to their 2007 Class Profile, the WPI Admissions Office received 5,698 applications for undergraduate study. Of these applicants, 3,745 were granted admission, and 805 of those students chose to enroll at the university.

It is one of the Admissions Office's long-term goals to increase the number of enrolled students from the pool of those who are accepted. To realize this, the Admissions Office is seeking to provide several novel ways to keep contact with accepted students and engage their interest through various means deviating from the traditional methods of campus visits and acceptance packages. One such idea was proposed to the Admissions Office and was explored during an Interactive Qualifying Project for the 2006-2007 academic year. This project centered on creating an Alternate Reality Game targeted to accepted students that aimed to promote WPI, and especially the relatively new Interactive Media and Game Development program. It aimed to portray the university in a positive fashion and encourage those students making their decision to enroll at WPI.

While the project was moderately successful, the resulting data was inconclusive. This project aims to continue exploring this avenue of interaction with accepted students, and see if this kind of project is a worthwhile endeavor in achieving its goals.

## **1.2 Goals**

There are two main goals for this project.

The first goal was for the project team to collaborate and design, build and run a fun and successful Alternate Reality Game. The team utilized their knowledge and previous coursework in game development, media production, and storytelling and writing. We defined a successful game as one where a significant number of participants (beyond the project team itself) are engaged and participate regularly within the defined gamespace.

The second goal was for the project team to use their skills and education to aid the WPI Admissions Office in advertising the university to interested students in an effort to increase the number of admitted students who decide to enroll at WPI. The team applied game development principles to devise an engaging, enjoyable way to promote the university. The design of the game included monitoring the player base, both in terms of traffic to the websites and surveying the players for marketing data. This work built upon last year's project in a continuing effort to prove if this is a viable marketing strategy.

### 1.3 Project Overview

This project was conceived as a continuation of the work of a previous IQP, exploring new opportunities of marketing WPI to potential and admitted students, specifically through the use of an Alternate Reality Game (henceforth referred to as an ARG). Upon receiving an affirmative confirmation from the WPI Admissions office, the project team began the design process, utilizing the lessons learned from the previously run ARG in an effort to improve upon the results

Through the first two terms (B07/C08) of the IQP, the project team designed the story and general structure of the ARG and created much of the content. One secondary goal of the project was to explore a genre of storytelling that has not been seen much in ARG development so far, borrowed from feature films: the romantic comedy. Early on, the team watched and analyzed several romantic comedy movies in order to design an overall story structure. The team then brainstormed and implemented ways the players could interact with this fictional story. In addition to the creation of the central website, <http://www.wpeye.net>, its bulletin-board forums, and additional blogs, the team designed puzzles of a style more typically found in ARGs, to challenge the players and provide more story content.

In the final term of the project (D08), the team launched several entry points into the main story of the ARG, commonly known as “rabbit holes”. They placed these links on several places on the Internet, including social networking sites like Facebook, and the WPI Admissions Accepted Students webpage. Fliers were also produced to be handed out in the Admissions office. Puzzles were created for Interactive Media and Game Development (IMGD) department’s presentation for the two Closer Looks (April 9th and 23rd), at which live events were scheduled for both player involvement and recruitment.

Throughout the ARG, two different kinds of statistics about the players were chronicled. First, web traffic metrics were measures through Google Analytics, keeping track of a variety of statistics, including new and returning visitors to the various websites by frequency, location and referrals. Secondly, players were polled directly about information of interest to the Admissions Office, such as their interest in WPI and other schools they may be considering. This data was analyzed and used to make some conclusions about the success of the ARG as a game and for the interests of the Admissions Office.

### 1.4 Results

The primary goal of the project – to create an engaging and successful ARG – was conditionally met; overall, the web sites generated a respectable amount of traffic. There were not as many players active in the forums as the project team originally anticipated, but there were enough to solve the puzzles and drive forward the plot of the game.

As of this writing, final data concerning accepted and enrolled students has not been provided by the Admissions Office. Generally speaking, however, those who have participated in the ARG have found it to be a positive experience. Another goal of helping to influence the decisions of accepted students was also achieved. There is one event in particular regarding a prospective student who had questions about WPI who (if she attends WPI next fall) very well may not have come to WPI if our forum was not there to serve its advertised purpose. In addition, the forum was used to answer a lot of incoming students' questions that couldn't have been answered anywhere else.

The results of this project, in terms of player participation and statistical conclusions, seems to be on par with the results of the previously run project.



## 2. Background

### 2.1 What is an Alternate Reality Game (ARG)?

According to unfiction.com, an Alternate Reality Game is “a cross-media genre of interactive fiction using multiple delivery and communications media”.

At its core, an ARG is much like the popular role-playing game *Dungeons and Dragons*, in that all of the players agree to adhere to and participate in a common, interactive fictional setting. However, ARGs aim to blur the line between this fiction and real life, by creating stories that take place in a modern, mostly plausible setting. Players are not expected to take on some other persona; rather, they act as themselves, using whatever knowledge and real life experience they already have in the game.

ARGs also benefit from using modern technology for communication. While the Internet is the chief component of most ARGs, other media used could also include telephones, newspapers, postal mail, television, and radio. Gameplay runs in real time, such that players could find themselves participating in the game at unexpected times. Sometimes there are scheduled events, where players may be required to be at a certain location and time in order to progress through the game. Most often there are puzzles for the player to solve. These take many forms, ranging from simple logic puzzles to complicated problems that require a very specific knowledge set to solve. The first of these puzzles that the players encounter is an introduction to the ARG’s story, commonly referred to as a “rabbit hole”.

Most ARGs foster a community of players. This is made very easy on the Internet; in fact, ARGs wouldn’t have come to exist if it weren’t for the collaborative opportunities the Internet allows. Players not only communicate with one another in order to share knowledge and solve puzzles, but providing all of these materials on the Internet acts as a chronicle and archive of the game itself, such that new players can be brought up to level of established players very quickly.

Because ARGs are run on the Internet and are generally free to play, there have not been many commercially run ARGs that have been able to sustain their own story. Thus, many ARGs are used as a marketing tool to promote an existing property.

### 2.2 History of ARGs

The first game to be considered an ARG was nicknamed “The Beast”, as a promotional tie-in to the 2001 movie, *A.I.: Artificial Intelligence*. The rabbit holes for this game consisted of the title of “Sentient Machine Therapist” listed within the credits of the movie, and a cryptic message referencing this person on some promotional posters. Interested persons used Google to find more about this character, and uncovered a series of controversies and mysteries to solve.

“The Beast” was very successful, and the development team behind the game, working as 42 Entertainment, was hired by Microsoft to develop an ARG to help promote the videogame *Halo 2* for the Xbox. A trailer for the game gave a clue for players to explore the website [www.ilovebees.com](http://www.ilovebees.com), while the development team sent clues in the form of jars of honey to a number of players from “The Beast”. The story is that of a young woman who maintains a website for her grandmother’s beekeeping business, but strange errors were being found and she pleads the players to help her regain control. From there grows an elaborate story about computer intelligences from outer space that came to Earth and tried to communicate with humans, and ultimately tied in with the story of the *Halo* franchise.

Some attempts at creating a commercially profitable, self-sustained ARG have been made. Electronic Arts tried with their game, *Majestic*, which featured shadow governments and espionage. However, its business model and other unfortunate circumstances led to overall failure. Another ARG, *Perplex City*, employs the use of puzzle cards that are purchased in booster packs, similar to the more conventional collectable card games.

The majority of ARGs made are more amateur efforts, by those who have played ARGs previously and wish to recreate the experience. Websites and online communities, such as the Alternate Reality Gaming Network and unforums.com were created for ARG developers to collaborate and share resources, as well as keep track and advertise currently running ARGs.

## 3 Project Design

### 3.1 Scope

Our project enabled high school students to learn about WPI through a story and a series of interactive puzzles; therefore, the project had to be appropriate and understandable to that age group. This ARG was also family-friendly, nonviolent, and lighthearted in comparison to the typical alternate reality game. This was not a difficult decision to make, considering that parents and the Admissions Office would have been viewing the game as well, and this style was the most appropriate to show off WPI's assets.

### 3.2 Analysis of Romantic Comedies

Oftentimes, ARG puzzles involve subversive tactics, or create the illusion of requiring them. Players are asked to decipher codes or hack into websites (although this is intentional from the designers' perspective). This usually gives the players a sense of accomplishment and that of having knowledge or access to an area that a limited number of other people have. As such, the majority of ARG storylines center on some kind of conspiracy theory, or take place in a science fiction setting.

The previous year's project focused on conspiracy and a secret society based at WPI. It was concluded that the nature of such a story did not necessarily portray the university in a positive fashion. Thus, the project team opted to try a genre of storytelling that had not been tried much yet in more mainstream ARGs: the romantic comedy.

The project team watched and several romantic comedy movies: *His Girl Friday* (1940), *The Shop Around the Corner* (1940), *Addicted to Love* (1997), *You've Got Mail* (1998), and *Three to Tango* (1999). We analyzed the stories and determined a general outline that this genre follows, and then designed the story of the ARG to fit this outline.

The main characters of the story fall under the archetypes of Protagonist, the Love Interest, the Sidekick, and the Rival.

**Act 1: The Status Quo.** The audience is introduced to the main characters, depicting them in their daily lives. Typically ends with The Catalyst – some event where the Protagonist and the Love Interest meet, and the Protagonist decides to enact a plan to woo the Love Interest.

**Act 2: The Comedic Pursuit.** This is where most of the comedy of the romantic comedy happens. The Protagonist is put through increasingly bizarre and humiliating situations, all in the name of winning the Love Interest's affection. Usually, there is some secret the Protagonist tries to maintain, without which he feels he cannot keep her interest in him. This act is punctuated by the Love Interest's discovery of this secret, and the Protagonist finds himself at his lowest point – without her affection and publicly

disgraced.

**Act 3: The Resolution.** The Love Interest now takes on the role of pursuer, upon realization that the Protagonist has cared for her the entire time. The story ends with a climactic scene where the Protagonist and Love Interest finally end up together.

### 3.3 Game Design

#### 3.3.1 Story

Our story began at Joe Cotnoir's, the sidekick, birthday party. Our hero, Drew Hickcox, wanted to express his innermost feelings to the lovely Sarah Gilkey, but backed out embarrassingly when he noticed her multitude of male friends. However, he did manage to converse with Sarah off-camera, where he learned that she could "really fall for a well-rounded guy." Drew left his friends' birthday with great resolve.

Sarah's comment triggered an idea for Drew. He silently vowed to find all of Sarah's male friends and beat them at their favorite activities to impress her. Over the next few days, he began to engage his competition; he began with fencing with Sam, then moved on to the Social Committee and Pep Band. All of these events were videotaped, but since Drew cannot actually defeat any of his "rivals", he decided not to share the videos.

Eventually, he learned that Sarah was planning on attending a Masquerade Ball event. Drew decided to show up, cut in, and dance with her--simultaneously wooing her and defeating his rival, although he did not know who the rival would be. However, upon reaching the event, Drew was mortified to find that the sidekick character, Joe, appeared to be dancing with Sarah. Joe was Drew's best friend, and the resulting realization left our hero incredibly depressed, frustrated, and moody.

In truth, Joe and Sarah were not dancing partners. Drew simply received the information about the color of Sarah's mask, and she had handed it off to someone else during the course of the night, who happened to be Joe's partner. Nevertheless, Joe is not able to figure out why his friend was angry at him. He and another friend of Drew's, DC, started to ask the players to help them solve the mystery of Drew's emotional state. With the help of the characters and the players, Drew's videos were slowly uncovered. After the Pep Band puzzle was solved, Joe made an appeal to Drew on the forums, and the Ballroom logic puzzle was revealed. When a player asked Joe who his dance partner was, Drew learned the truth and suffered from guilt. In a haste to leave, he left the door to his room wide open, which allowed Joe to gain access to the party video, which had been lying on Drew's desk. Joe posted up the video of the birthday party and, upon watching it, noticed that Sarah definitely had something to do with Drew's condition. Sarah reveals on the forums her "well-rounded guy" comment, and players suddenly learn the truth.

Sarah is touched by Drew's effort, and devised an idea to cheer him up. She summoned a bunch of people to hold up signs that say "I <3 YOU DREW" and awaited Drew's arrival. Once

Drew discovered this act, Sarah embraced him and admitted that she had feelings for him as well. Joe videotaped the finale, with the conclusion of now-happy couple walking away together.

### 3.3.2 Puzzles

The players discovered the story by solving a series of puzzles. These puzzles were designed for three main purposes. Firstly, the puzzles gave the players something interesting and fun to do while discovering the story. Secondly, the puzzles allowed players to interact with the story. The players uncovered Drew's sad tale rather than watched it play out. Finally, the puzzles showed off different aspects of WPI by including different clubs and organizations that WPI offers. Each puzzle involved one activity from WPI, usually showed off in a video clip.

#### 3.3.2.1. Fencing Puzzle

The fencing puzzle was simple, as the first puzzle in an ARG tends to be. The entire challenge of the first puzzle was to click the link provided. The puzzle here was not the action of clicking so much as discovering the beginning of the plot inside WPeye.net's forums. The reward of this puzzle is a video of Drew fencing with a rival, and being subtly humiliated. For anyone not familiar with fencing, this video may have been a bit confusing, but with the proper application of cohorts on the forums, the message of Drew's embarrassing defeat was understood by the players.



(Fig. 3.3.2.1-1) Drew (on the right) loses his foil, and the final point.

### 3.3.2.2. SocComm Puzzle

The second puzzle was a small step up from the first. A link to a page containing a hint led to a YouTube video containing another attempt on Drew's part to do better than a rival. Involving WPI's Social Committee, an attempt to sell more tickets than Sarah's friend at the table was completely thwarted by the presence of an enthusiastic pirate.



(Fig. 3.3.2.2-1) A kindly pirate quietly takes over selling tickets by intimidating our plucky hero into retreating.

### 3.3.2.3. Pep Band Puzzle

The third puzzle stepped the challenge up, containing a series of puzzles, each answer leading to another puzzle. This took the players a few days to solve, and proved to be a difficult but worthwhile puzzle. The video at the end of the series of puzzles is one of Drew attempting to be excellent in Pep Band the first time around, which turns out to not be as easy as it seems. Seeing how out of place Drew is compared to the organized band makes up for any lack of knowledge on the players' part.



(Fig. 3.3.2.3-1) As the Pep Band changes positions, Drew (white shirt, center of block) remains the same.

#### 3.3.2.4. Ballroom Puzzle

The final puzzle was a logic puzzle about a ballroom dance night. The clues of the logic puzzle were embedded in an online argument between Drew and Joe. The solution to the puzzle itself was a little strange, as there was one missing character. The puzzle was solved when a player asks the identity of Joe's dancing partner. When the players put forward their confusion, it was revealed that Drew had assumed Joe was dancing with Sarah, although Sarah had only attended the dance for a short time. Drew then exited the forums permanently. Initially, a video of Joe's birthday party is posted, which reveals the reason Drew has been acting the way he has. After some back and forth, a video of Sarah surprising Drew with signs of love is posted, and the two's story goes on happily ever after.



(Fig 3.3.2.4-1) Sometimes students can't afford candles. This was Joe's cake on his birthday.

### 3.3.3 Web Sites

There were four websites which were created, modified, or utilized in some way for the purposes of this project. A list of these websites (though not the exact pages) are:

- [www.wpi.edu](http://www.wpi.edu)
- [www.blogspot.com](http://www.blogspot.com)
- [www.facebook.com](http://www.facebook.com)
- [www.wpeye.net](http://www.wpeye.net)

At WPI's main website, there were two additions. On the Accepted Students page in the Admissions Office domain, a link was added which directed prospective students to a website featuring current students' experiences of WPI.

The second addition was in the Pep Band's website who graciously hosted a puzzle for the ARG. The added pages were hidden to everyone but those linked to it from our website, [www.wpeye.net](http://www.wpeye.net).

At [www.blogspot.com](http://www.blogspot.com), three of the characters of our ARG created blogs to chronicle their lives during their tenure at WPI.

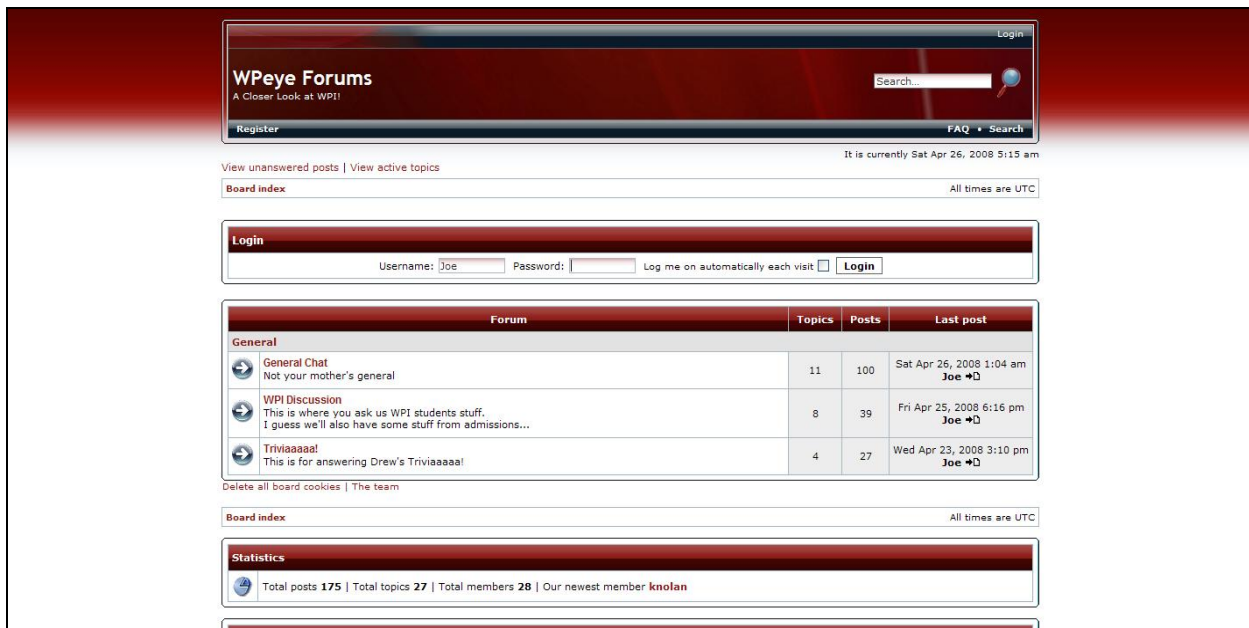
The additions to Facebook were entirely for attracting players to [wpeye.net](http://www.wpeye.net) and are mentioned in the "Rabbit Holes" section (3.2.4).

The most notable website was [www.wpeye.net](http://www.wpeye.net). (Fig. 3.2.3-1) The site was created in its entirety to fulfill the purpose of the project. On the website, there were links to blogs, and a forum. The forum served as a central location for our players, fellow students, and prospective students to socialize and discuss life at WPI, the ARG, and other topics that interest them. (Fig. 3.2.3-2)





(Fig 3.2.3-1) A screenshot of the homepage at www.wpeye.net.

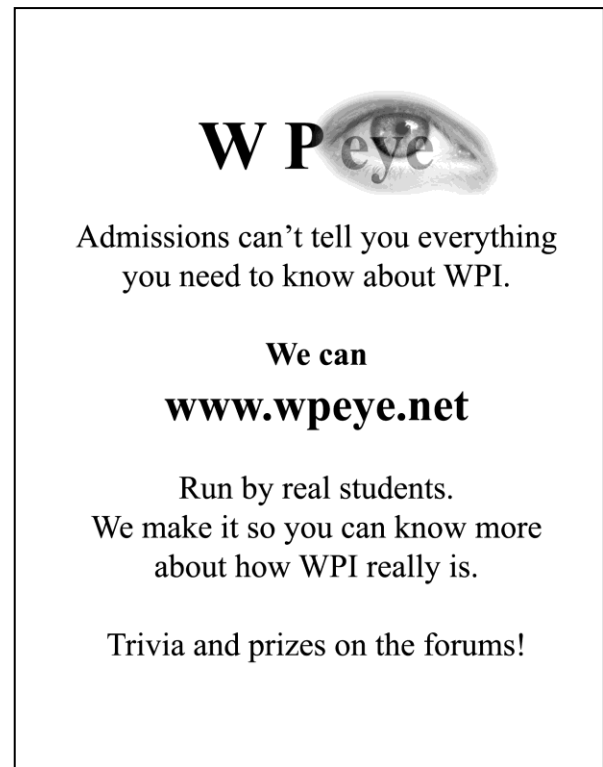


(Fig 3.2.3-2) A screenshot of the wpeye.net forums.

### 3.3.4 Rabbit Holes

There were multiple locations and forms of media that were used to attract players to the wpeye.net website.

- Websites
- WPI Admissions
- Facebook
- E-Mail
- Paper Fliers



(Fig. 3.3.4-1) Sample flier used for website promotion.

The Admitted Students page on the Admissions Office's website contained a link to wpeye.net. In Facebook, the message board of the "WPI Students of 2012" group frequently contained a link to wpeye.net. Email was sent by the Admissions Office to various groups of prospective students that directed readers to wpeye.net. Paper fliers were created and handed out at a number of events involving prospective students, as well as tours, and for visitors to take in the Bartlett Center.

Puzzles indicative of the typical ARG experience were created to be presented at the IMGD presentations of the WPI's Closer Look programs. The content of these puzzles were not related to the story, but players were directed to the website upon solving them.

Upon following a rabbit hole to our website, players were presented links to Student Blogs and the prospect of answering trivia for prizes on the forum. Once they visited the forum, they were presented with the opportunity to ask questions about WPI, communicate with current and other prospective students, the aforementioned trivia, and the ARG story.

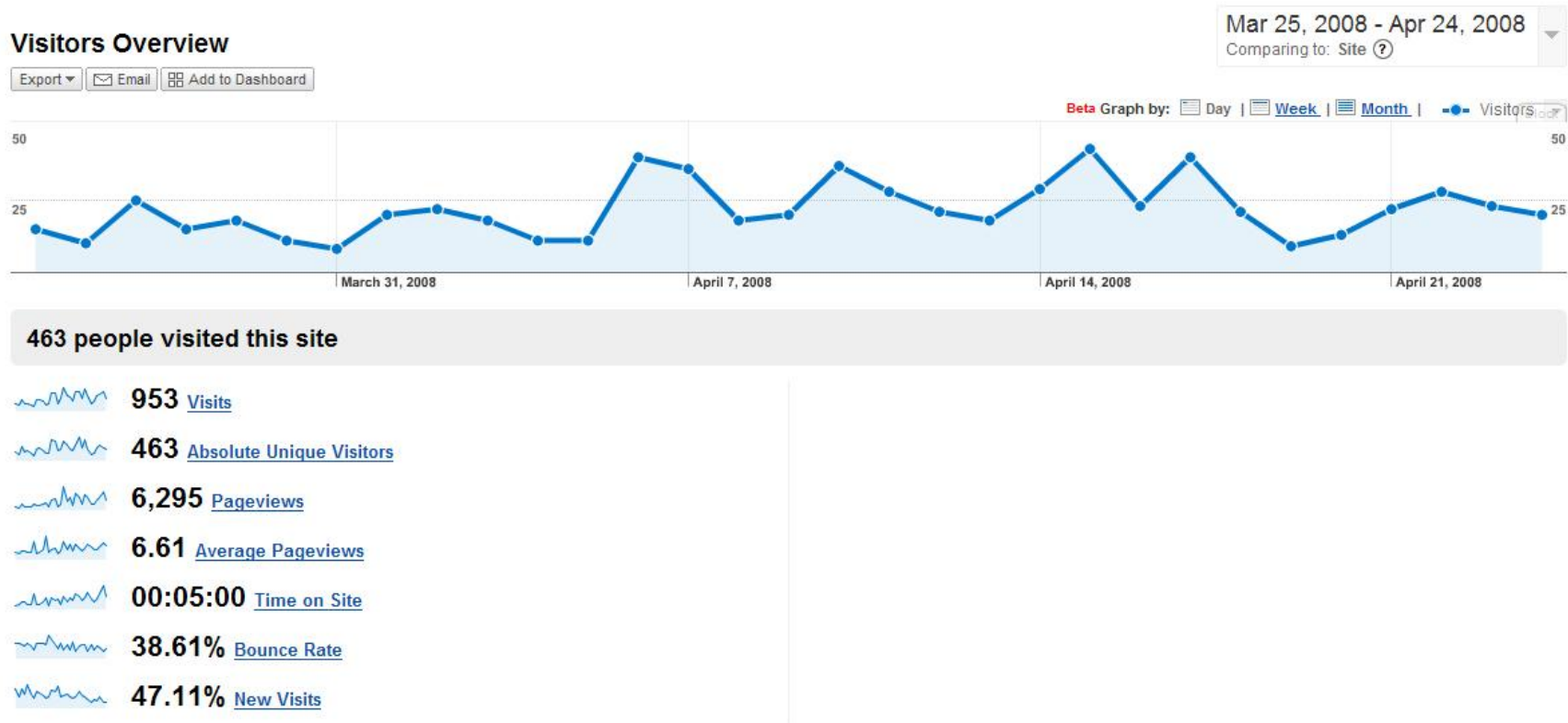
### 3.4 Gathering Data

The data given to the Admissions Office allows them to alter their marketing strategies and show off WPI's assets in a more effective manner. This was possible with the extensive amount of web software at wpeye.net's disposal, including Google Analytics and our forum

software. Using both of these, we could collect multiple kinds of information that could be given to the Admissions Office and interpreted in a variety of ways by the office and our team.

### **3.4.1 Google Analytics**

Using Google Analytics, which is free and available at <http://www.analytics.google.com>, tracking our players became much less of a chore. Using the software, we were able to check where our hits were coming from and where they were going. Here are the hard statistics for the entire site—not just the front page:



(Fig. 3.3-1) A statistics overview from Google Analytics.

- Here, we have the statistics overview of the wpeye.net domain. As you can see, we generated a great number of unique visitors--that is, a great number of individuals. (Fig. 3.3.1-1)








## 6.61 Pages/Visit

(Fig. 3.3-2) The average number of pages that visitors viewed on the website by day from Google Analytics.

- There is also a detailed graph of the number of average page views. This feature tracked the average number of pages within the site that visitors viewed every day. While six pages per visitor may sound very promising, this data is unfortunately slightly skewed by the team's own work on the website. (Fig. 3.3-2)

## Referring sites sent 554 visits via 17 sources

Segment: **Source**

Site Usage		Goal Conversion		Views:     		
Visits <b>554</b> % of Site Total: 58.13%	Pages/Visit <b>5.34</b> Site Avg: 6.61 (-19.17%)	Avg. Time on Site <b>00:04:18</b> Site Avg: 00:05:00 (-13.74%)	% New Visits <b>48.19%</b> Site Avg: 47.11% (2.29%)	Bounce Rate <b>44.58%</b> Site Avg: 38.61% (15.46%)		
Source	Visits ↓	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate	
1. <a href="#">wpeve.net</a>	300	5.64	00:05:00	25.00%	47.33%	
2. <a href="#">admissions.wpi.edu</a>	187	4.64	00:03:29	75.94%	41.71%	
3. <a href="#">facebook.com</a>	22	5.95	00:02:45	63.64%	27.27%	
4. <a href="#">elliotborenstein.com</a>	12	4.50	00:02:54	75.00%	33.33%	
5. <a href="#">mail.google.com</a>	10	1.40	00:00:44	100.00%	80.00%	
6. <a href="#">us.f827.mail.yahoo.com</a>	5	15.00	00:05:59	100.00%	0.00%	
7. <a href="#">bl102w.blu102.mail.live.com</a>	3	19.67	00:25:41	0.00%	0.00%	
8. <a href="#">myzipple.com</a>	3	3.33	00:00:17	66.67%	66.67%	
9. <a href="#">wpi.facebook.com</a>	3	1.67	00:01:00	66.67%	66.67%	
10. <a href="#">us.f450.mail.yahoo.com</a>	2	6.00	00:05:39	100.00%	0.00%	
Find Source: <input type="text" value="containing"/> <input type="button" value="Go"/>			Go to: <input type="text" value="1"/>	Show rows: <input type="text" value="10"/>	1 - 10 of 17	

(Fig. 3.3-3) Referring site data from Google Analytics.

- Shown here are the referral sites. A referral site is the website that the user came from in order to visit any of our pages. Most of these came from wpeve.net itself, simply due to all of its recursive links or users typing in the site's address directly. It is important to note that the Admissions section of the WPI website constituted a large portion of our visits. Only incoming students could view those links, and over three-fourths of those students had visited the site before. They visited approximately five pages on the website, meaning that they were interested in what the website had to offer. The Office of Admission's link on the Admitted Student page certainly helped our website gain new members quickly. The Facebook.com rabbit hole also had an impact upon the website, and gave us a small, though dedicated collection of users. (Fig. 3.3-3)

## Visitor Loyalty

Mar 25, 2008 - Apr 24, 2008

Comparing to: Site ?

Export Email Add to Dashboard

### Most people visited: 1 times

Number of Visits	Visits	Percentage of all visitors
1 times	449	47.11%
2 times	80	8.39%
3 times	29	3.04%
4 times	18	1.89%
5 times	15	1.57%
6 times	14	1.47%
7 times	12	1.26%
8 times	9	0.94%
9-14 times	37	3.88%
15-25 times	36	3.78%
26-50 times	104	10.91%
51-100 times	136	14.27%
101-200 times	14	1.47%

(Fig. 3.3-4) Visitor loyalty data from Google Analytics.

- Player loyalty is another vital aspect that Google Analytics provides for our website. With this feature, we can see how often individual users returned to the site. It appears that most users only visited once, but there are a few issues with that particular statistic. It is very likely that a student may have visited the site on multiple computers, causing the loyalty factor to break apart. Nevertheless, we had a good portion of visitors who returned to the website constantly. (Fig. 3.3-4)

Country/Territory	Visits ↓	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
1. <a href="#">United States</a>	864	6.96	00:05:15	45.37%	36.69%
2. <a href="#">China</a>	11	1.00	00:00:00	72.73%	100.00%
3. <a href="#">Sierra Leone</a>	9	9.56	00:15:05	22.22%	11.11%
4. <a href="#">Denmark</a>	9	1.78	00:00:27	11.11%	77.78%
5. <a href="#">India</a>	8	2.38	00:01:36	62.50%	37.50%
6. <a href="#">Jamaica</a>	6	3.00	00:00:44	50.00%	50.00%
7. <a href="#">Vietnam</a>	4	1.25	00:00:08	75.00%	75.00%
8. <a href="#">Bulgaria</a>	4	2.75	00:00:38	75.00%	75.00%
9. <a href="#">Honduras</a>	3	4.33	00:03:52	100.00%	33.33%
10. <a href="#">Bangladesh</a>	3	2.33	00:00:30	66.67%	66.67%

Visits: **953** (100.00%)  
 Pages/Visit: **6.61** (Site Avg: 6.61 (0.00%))  
 Avg. Time on Site: **00:05:00** (Site Avg: 00:05:00 (0.00%))  
 % New Visits: **47.11%** (Site Avg: 47.11% (0.00%))  
 Bounce Rate: **38.61%** (Site Avg: 38.61% (0.00%))

Find Country/Territory: containing  Go Go to:  Show rows:  1 - 10 of 34





(Fig. 3.3-5) International location data of wpeye.net domain from Google Analytics.

- Of course, location data is important. Our website received hits from all over the globe. Here you can find international statistics (Fig. 3.3-5), as well as statistics within the United States below (Fig. 3.3-6).



## This country/territory sent 864 visits via 24 regions

Detail Level: [City](#) | Region | Segment: [Choose...](#)

Site Usage		Goal Conversion		Views:    		
Visits <b>864</b> % of Site Total: 90.66%	Pages/Visit <b>6.96</b> Site Avg: 6.61 (5.41%)	Avg. Time on Site <b>00:05:15</b> Site Avg: 00:05:00 (4.97%)	% New Visits <b>45.37%</b> Site Avg: 47.11% (-3.70%)	Bounce Rate <b>36.69%</b> Site Avg: 38.61% (-4.99%)		
Region	Visits ↓	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate	
1. <a href="#">Massachusetts</a>	611	7.11	00:05:07	34.04%	35.52%	
2. <a href="#">New York</a>	56	4.79	00:04:22	57.14%	42.86%	
3. <a href="#">Connecticut</a>	45	7.22	00:04:16	95.56%	33.33%	
4. <a href="#">Virginia</a>	24	12.67	00:11:51	29.17%	16.67%	
5. <a href="#">New Hampshire</a>	16	2.25	00:03:09	100.00%	50.00%	
6. <a href="#">New Jersey</a>	12	7.83	00:04:06	83.33%	50.00%	
7. <a href="#">California</a>	12	8.75	00:06:35	75.00%	16.67%	
8. <a href="#">District of Columbia</a>	12	4.17	00:02:54	91.67%	41.67%	
9. <a href="#">Rhode Island</a>	10	2.90	00:04:16	70.00%	70.00%	
10. <a href="#">Ohio</a>	10	16.70	00:26:56	30.00%	10.00%	

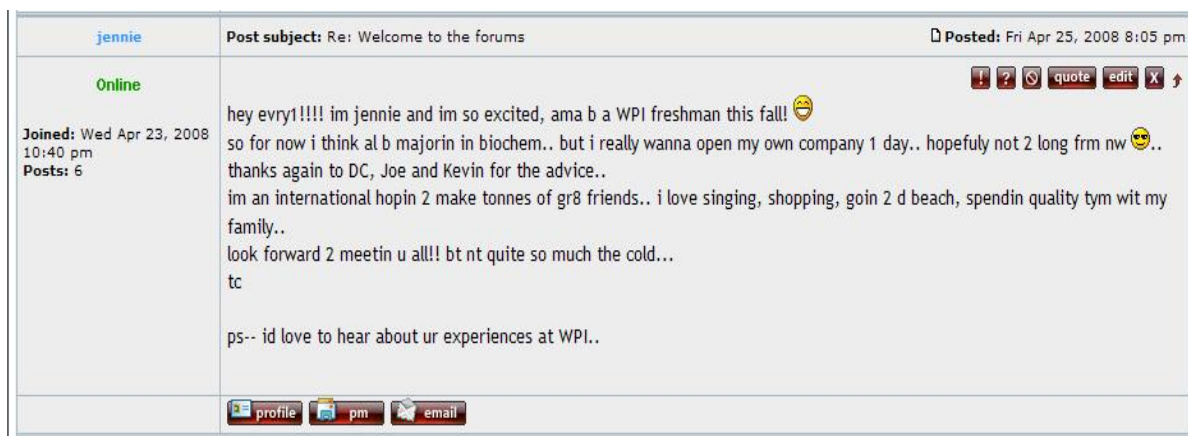
(Fig. 3.3-6) Location data of wpeye.net from Google Analytics for only the United States.

Hopefully, this data allowed the Admissions Department to see how users reacted to our site, and whether or not they would consider similar future projects. We also determined which parts of the site are faulty--immediately, we can see that the front page should have been vastly improved to be more enticing to new users.

### 3.4.2 Specific Data Collection

At the moment, the primary method of collecting user data was simply discussion on the forums. The wpeye.net's WPI Discussion subforum was specifically created for potential students to pose questions to current students or answer ones that we ask.

So far, data has been somewhat sparse, as students are asking more questions and giving fewer answers. So far, people have queried about first-semester classes, financial aid, and the male-to-female ratio. However, this does not mean that our efforts on the forum have been fruitless--on the contrary, one such case involved a young lady from Great Britain who had a one-day ultimatum to decide which school she would be going to. Immediately, the members of the forum, including two of the project members, leapt to answer her questions about WPI and encourage her attendance here. She later responded with very pleasing results (Fig. 3.3-7).



(Fig. 3.3-7) A screen shot of wpeye.ent forums where Jennie shared the good news.

So while the data collection may be low at the moment, we can at least claim that we played a critical role in gaining one new student for WPI.

In addition to this forum collection, we also have the ability to set up surveys at will. The forum will remain running as long as there is interest from pre-freshmen and current students, allowing us to update the Admissions Office with any new data on incoming students that we can find over the summer and through the next school year.

## **4. Conclusions**

### **4.1 Postmortem**

Since the conclusion of the game, we have found the following to be true.

#### **4.1.1 What Worked**

The forums were certainly a hidden blessing. Players used the forum to ask plenty of questions about WPI, and appreciated the attention we gave to their problems. The hosting website and Google Analytics were fantastic as well, and gave us all of the tracking tools we could have asked for.

Although it was rushed, our final storyline turned out to be rather strong. The characters were well-developed, Drew's antics were certainly wacky, and the acting in the videos was as good as we could have hoped for.

Finally, the puzzles were simple, but interesting. The Closer Look preview puzzles, especially, were rather fun.

#### **4.1.2 What Didn't Work**

Despite our efforts, high school students were mostly uninterested by the concept of an ARG. They were even less responsive to our rabbit holes, and for a while, we had absolutely no players. Our audience was too narrow and focused—had we attempted to broaden our focus, perhaps things would have turned out better.

Communication was also an early issue that persisted throughout the project. Despite our daily meetings, it seemed very unnecessary to contact each other over e-mail and messenger. Not surprisingly, we kept skewing and forgetting our original ideas, and a few members of the project wouldn't even read the few e-mails that were sent out and missed meetings because of it.

#### **4.1.3 What We Would Do Differently**

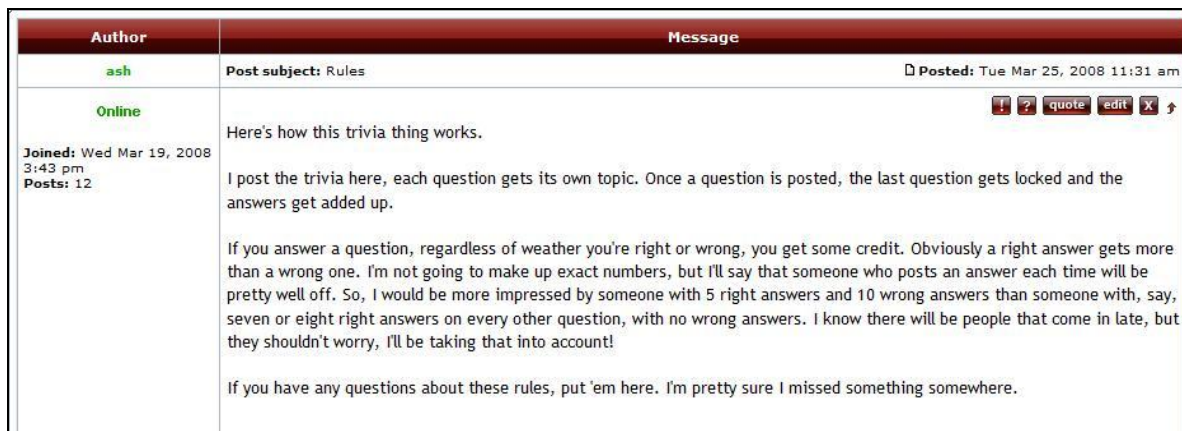
Planning would play a more important role, obviously. We ended up changing a lot of our content at the last minute, since our original goal was to encourage player interaction. With a strong "Plan B", our ARG would not have been as rushed and would have contained far more content.

Evaluating our target audience would have also been more helpful. Clearly, high school students do not want to spend the time and effort on an interactive story. We should have discovered what would have worked.

## Appendix A. Drew's Trivia

On the forums, a set of trivia questions were employed to keep pre-freshmen returning to the wpeye website. The trivia was put up a month before the game began, and was originally intended to be the main draw of the wpeye website. However, application of the trivia questions revealed that pre-freshmen won't stick around just for small puzzles, even when a prize is promised. Helpful forums, such as WPI-centric discussions, were posted on the website, which ended up holding the players much more successfully.

### A.1 Game Summary



(Fig. A.1-1) Screenshot of the trivia rules, as appeared on the wpeye.net forums.

On top of the challenge itself, there was a promise of a material prize to keep the players interested.

### A.2 Scoring, Winning, and Prizes

Players participating in the trivia contest received points for posting intelligent answers for effort, and those who gave the correct answer first gained the bonus points. The player with the highest score total at the end of the trivia contest was announced as the winner. The winner was awarded an iPod Shuffle.

### A.3 Questions

- The first question is simple. Which dorm did my grandfather live in, way back when he was a freshman at WPI? It also used to have the student lounge in the basement.

- Tough one second (or at least I hope it's tough. Might be incredibly obvious, in which case won't I be the embarrassed one). WPI has a unique wooden frame building. Which building and why is it unique?
- How many years did it take for WPI to award its first advance degree?
- When I was a freshman, they put us all in hall in this building. It's set up in Gothic style or something—similar to a Catholic church, minus all the Jesus. The entrances are all nicely done up—I'll get a few more pictures of the area up later in the day.
- So there are all sorts of rumors about the steam tunnels at WPI. However, the steam tunnels have been investigated/ reported upon/ exposed by plant services. What are the buildings connected by the steam tunnels?
- Despite what is said, this building is never locked. Although a small hubbub about no longer leaving this building open 24/7 occurred a few months back, you can still access this building at any point in the day, although there really isn't much to see at 3 am. What building am I talking about?
- Here's a little question for the monetarily invested. Which violations would you need to be fined for to receive an invoice for \$85? Extra points will be added if you accompany the violations with an interesting story, which may be posted.
- Who is the director of public safety and chief of police at WPI?

## **Appendix B. Characters and Rivals**

Through the story of the romantic comedy, there was a hero, a side kick, and a love interest, as well as several rival characters.

### **B.1 Hero Character: Drew Hickcox**

Drew Hickcox was the hero of the story. Drew was a sophomore at WPI, studying a dual CS/IMGD major. He was somewhat involved in the Science Fiction Society's activities, but didn't do all that much around campus. He had a work study with Admissions, because he enjoyed interacting with pre-freshman. This was the reason he helped to create WPeye.net, to further communicate with perspective students, with the help of his roommate and best friend, Joe Cotnoir, who was also the side kick.

Drew and the love interest, Sarah Gilkey, were both in the Game Development Process class A Term. There the two worked in a group together on a short game through that class. From the experience of working together, Drew fell in love with Sarah, and had secretly pined for her since.

Drew was an energetic and excitable person, and was very persistent. He was also a little childish. However, Drew had good intentions and is a hard worker.

### **B.2 Love Interest Character: Sarah Gilkey**

Sarah Gilkey was the love interest of the hero, Drew Hickcox. Sarah was a sophomore at WPI, studying an IMGD Art major. She was involved in Alpha Gamma Delta Sorority and the Panhellenic Council.

She and Drew shared a class A Term where they both worked on a project and first met. She also began to fall in love with Drew from that class, but she kept it secret. Sarah was a very shy person, so she did not tell anyone, even her friend Joe Cotnoir, about the crush she had on Drew.

### **B.3 Side Kick Character: Joe Cotnoir**

Joe Cotnoir was the side kick to Drew Hickcox. Joe was a sophomore at WPI, who has recently changed his major from CS to IMGD Art. Joe was involved in various activities on campus, including Alpha Phi Omega Service Fraternity and the Writing Club. He also worked at the CCC Computer Lab at Fuller Laboratories.

Joe and Drew met as pre-freshman during one of Admission's Closer Look programs. From this event, they became very close friends. They were also roommates this year in their apartment. Joe and Sarah lived on the same floor of Morgan Hall during their freshman year, and became friends.

Joe Cotnoir was also the final rival in the story. Although he does not actually turn out to be a true rival, Drew believed that Joe was trying to steal Sarah away at the ballroom dance, and therefore viewed Joe as a rival during the game. He would rather sleep than solve puzzles, and is known for being particularly loud or particularly quiet.

## **B.4 Rival Characters**

### **B.4.1 Rival Character: Sam Bailey**

Sam Bailey was the first rival in the story. Sam was a sophomore at WPI, studying IMGD. He participated in various activities on campus, but he was most active in the fencing club. Sam has been a close friend of Sarah since the two met during C Term of their freshman year.

### **B.4.2 Rival Character: Joseph Alea**

Joseph Alea was the second rival in the story. Joseph was a sophomore at WPI, studying IMGD art. He was a part of SocComm, where he loved to table sit and sell tickets for the various events SocComm brings to campus. Joseph and Sarah both lived at Morgan Hall during their freshman year, and became good friends because of it.

### **B.4.3 Rival Character: Tim Volpe**

Tim Volpe was the third rival in the story. Tim was a junior at WPI, studying IMGD Tech. He was a big part of the Pep Band, being one of the more senior and influential members of the group. Tim and Sarah had several CS classes together, and eventually began to work on class projects together. From working together, the two became friends.

## Appendix C. Event Timeline

### April 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31	1	2 Joe's Birthday	3	4 Fencing Contest	5 Pep Band Contest
6	7 SocComm Contest	8	9 Closer Look Ballroom Dance Drew becomes angry	10	11 Fencing Puzzle	12
13	14 SocComm Puzzle	15	16	17 Pep Band Puzzle	18	19
20	21 Ballroom Puzzle	22	23 Closer Look	24	25 Birthday Puzzle	26
27	28	29 Finale	30	1	2	3

(Fig. C-1) Calendar of April 2008 showing schedule of the ARG.

- The green events are the events as presented to the players. For example, Drew becomes very angry for the first time on April 9th.
- The purple events are the Admission's Closer Look programs for admitted pre-freshman, in which a portion of the accepted students will be on the WPI campus.
- The blue events are the events as they happened in the story. For example, the players find the birthday video on April 25th, however, it is videotaped in the story on April 2nd.



## **Appendix D. Videos, Blogs, and Assorted Scripts**

Videos are provided in the accompanying DVD, and the saved blogs are provided in the accompanying Blogs.zip file.

Forum posts as script:

### **Intro:**

#### **Joe:**

I'm a little confused. Drew got really angry at me today... he seemed really upset whenever I saw him afterwards. He might not come on the board (his username is Ash) much, I'm guessing, which is too bad...

#### **Drew:**

Forget you, Joe. You tiptoed around my back, and I trusted you. Forget this website, and see if I'll sign a lease with you again.

You said you were gonna help me out. See if I ever ask for your assistance again. Were you really trying to help during any part of that, or was it all just trying to one-up me? It doesn't really make a difference, I suppose.

On a similar note, I'm not gonna give you any help, either, so don't ask for it anymore. Have a nice life, I'll see you at the 10-year reunion.

### **Fencing:**

#### **Joe:**

Well, as I'm sure most of you have seen, Drew is kinda depressed and ticked at the moment. He's worse than he seems on these forums--he keeps locking himself in rooms, running away from people he knows, and keeping away from any sort of social contact.

I figured this was something that warranted investigating, so I started looking around and asking questions. The only thing I can find that is anywhere near as unusual was something I found on a bit of storage space I gave to Drew for his personal use when this site came up.

<http://www.wpeye.net/drew/fencingclips.wmv>

I didn't know Drew fenced... at all. (He's the one on the right if you can't tell.) He's always been competitive too, but he was never one to go out of his way to challenge people.

#### **Sarah:**

Hey, that's funny I am in it. I was wondering where this video was, Drew did it a few weeks ago and told me it was for his blog, but I never saw it up there.

I think that's my friend Sam, I remember seeing him all suited up just before I went up the stairs. I know he does fencing, but I don't know why he is going against Drew. Does Drew want to join the fencing club? Maybe it was a tryout gone horribly wrong?

**SOCOM:**

**Joe:**

So I found this "reminder" text file in Drew's folder--personally, I don't get it. It's kind of weird.

Anyone wanna figure this out?

<http://www.wpeye.net/drew/reminder.txt>

**DC:**

So, it seems that Drew is a closet fan of... making an ass of himself?

I can see him wanting to switch to video for his blog, but these events aren't really blog stuff. It's like he's going out of his way for stuff to happen as opposed to telling what life at WPI is normally, which is what he wanted his blog to be.

I'm gonna do some thinking on this. Maybe trace back some steps to see where this came from...

edit: Also he looks like an ass in those videos. He's not usually like that either.

**Pep Band:**

**DC:**

<http://users.wpi.edu/~pepband/membersonly.html>

It's a music-type quiz on the WPI PepBand website. I wasn't able to get very far... at all, actually. I could've sworn those things are called "ties"...

Anyway, I'm pretty sure this will lead to another video with Drew in it. I had to track down the guy that mentioned the video at DAKA a couple days ago, who directed me to one of the officers, who told me to go to the PepBand webmaster.... was nuts. If I didn't know better, I'd say they were messing with me. Although, maybe they are with this quiz.

**Ballroom:**

**Joe:**

I'm sick of your shenanigans, man. We used to be friends, but now you're a jerk who throws stuff at me and hides in your room like a freaking vampire. What's gotten into you? Why are you being so hateful towards me?

Come on, dude, this site needs you!

**Drew:**

So I guess you don't remember anything. Typical.

Do you remember the dance thing you butted into on the 9th? That's two Wednesdays ago, to save you a trip to your calendar. Becky, Gary, and Felicia were there, and I ended up dancing some chick Haley in a purple-feathered mask. Recall the night at all, *jerk*?

**Joe:**

Hey, I remember, just not what set you off... I know Chelsea, Aaron and Eric were there, too, in fact. I had been there the whole time, dancing for pretty much over an hour. I wore a green mask, and my partner had a mask with pink feathers.

Eric and his partner were dancing next to me, at the front of the room. I remember that 'cuz he was freaking out about wearing a purple mask. He really doesn't like purple, so he wouldn't wear it. He was dancing with Chelsea, who was wearing blue feathers. They were there for a loooong while... not as long as me, though.

I think I was dancing next to Aaron, too... I know because he, for some reason, wanted to wear the gold mask. He did very little dancing, which upset his partner, who was wearing a silver mask. Heh, he tripped over her feet a lot, too.

**Drew:**

That chick in the silver mask was Felicia, in the middle of the room. You weren't "just dancing" Joe. I can't believe you have no clue what this is about. It's like I don't even know you. I thought you were smart.

**Joe:**

That wasn't half as bad as you. I noticed you stormed out after a half hour, and you haven't talked to me really since then. What the heck?

Of course, it wasn't just you... the couple at the back of the room didn't seem to get along that well, either. Becky was really upset at her partner in the black mask.

**Drew:**

Everything is apparent here, Joe. I moved along from here, and what do you think I found out? Or do you even care?

**User:**

So who were you dancing with, Joe? We know you had the green mask, but nobody mentioned who you were with.

**Drew:**

Yeah, Joe. Tell them. Who WERE you dancing with, huh?

**Joe:**

I don't know. It wasn't really anyone I recognized. I think she said her name was... Mei or something.

**Finale:**

**Joe:**

Alright guys, here's the deal.

Drew ran out of his room yesterday, probably ticked that he was sort of wrong about the whole me-dancing-with-not-Sarah thing. Oddly enough, he left his door unlocked.

A little while back, on April 2nd, I had taken some video footage of my birthday party. Drew had kept the tape in his room, so I was unable to post it online. But with Drew out of his room, I grabbed the tape back, edited out the unimportant parts (like me losing at Smash Bros. Brawl...), and hereby present to you the newest possible video of Drew not doing something crazy or being sad.

<http://www.wpeye.net/drew/birthday.wmv>

(I'll upload it to youtube later if you can't view the movie.)

There's nothing specific on the video that points to why he would attempt fencing, selling tickets, marching, and apparently dancing. I think something happened during this party that made him act so weird afterwards. Sarah, did you say anything to Drew that night? (Besides how much you like cake, of course.)

**Sarah:**

Not that I can remember really...I was talking with Sam about something, and then Drew came up and asked me if I liked the cake. I said yeah, and then he turned around and left. I didn't get too much of a chance to talk with him, he was playing a lot of Brawl. I can't blame him for that though, he is really good at that game.

What about that scene at the end, why was Drew going to go talk to me anyway?

**Joe:**

I promised him I wouldn't say anything, but I suppose now is a better time than never...

Drew *likes* you. He's been crushing on you for a while now. Are you sure you didn't encourage him to try everything on campus?

**Sarah:**

Drew likes me? Since when?

## Appendix E. Closer Look Example Puzzles Walkthrough

- 1) Start at <http://www.wpeye.net/puzzles/start.html>

This page has a background of varying shades of pink, and a picture of a restaurant that has been altered slightly (the name is not shown). Knowledgeable players should be able to identify the building as Pink's Hot Dog Stand in Hollywood, CA.

This, plus the background, should lead players to the clue **pinks**. In a separate image at the top of the page is a hand pointing upwards, suggesting the players try entering the clue into the address bar.

- 2) Go to <http://www.wpeye.net/puzzle/pinks.html>

This is an array of pictures of a familiar person, done in the style of the Andy Warhol's "Marilyn Monroe" painting. In the top right corner is a running track of the clues, so it says "pinks".

Mousing over one particular image of the man with the blue beard causes the rest of the photos to change to that image, so the whole page is full of blue-bearded men.

The clue for this page is **bluebeard**.

- 3) Go to <http://www.wpeye.net/puzzle/bluebeard.html>

This page only has what looks like a paint-by-numbers picture, only every space has a different number from a wide range. The top corner reads "pinks" and "bluebeard".

Players are encouraged to try and figure out a pattern (all odd numbers, all even numbers, multiples, etc.). If they get stuck, viewing the source code for the page reveals a hidden clue in the comments: "At the end of this day, one shall stand, one shall fall." If players are unable to identify this quote (from the *Transformers* movie), a look at the source code from [bluebeard.html](http://www.wpeye.net/puzzle/bluebeard.html) shows the filename 10108p.jpg. Open this file from the website to show a picture of Optimus Prime. Players should hopefully figure out the clue "prime". Open the image in MS Paint and fill in the prime numbers. The result is the word **lupin**.

[Three extra images are included so you don't have to go through filling in each one. solution-even.gif, solution-odd.gif, and the correct solution-prime.gif.]

- 4) Go to <http://www.wpeye.net/puzzle/lupin.html>

In addition to the clues in the corner (pinks, bluebeard and lupin), the only other thing on this page is a brief message. "Almost there! Now what does it all mean?" Hidden against the background is a 1 followed by 100 zeroes – a googol. A subtle hint to try entering the words into Google.

5) Assemble the clues.

What do pinks, bluebeard and lupin have in common? Players might guess colors, pop singers, pirates or fictional characters. However, Googling all of the terms at once reveal that they are the names of kinds of **flowers**.

6) Go to <http://www.wpeye.net/puzzle/flower.html>

This page simply states “Go see the flower guy”, and shows a zoomed-in area of the standard WPI campus map, highlighting the courtyard behind the Campus Center. Hint that they may be able to continue the ARG by venturing to this area.

7) Go to the Campus Center.

Players have two tasks at this area. First, there is a “block puzzle”, where the players rearrange several large cardboard boxes in a jigsaw-puzzle style. When solved, the boxes read “WPEYE.NET”. Additionally, they talk with “the flower guy” – Drew is stationed there with flowers. He instructs them to take a flower to Sarah, who is sitting inside the Campus Center, as a way to cheer her up as she’s doing her homework. This is meant to drive the players further into the story.

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