Mobile Walking Tour Specifications

for the

Sir Arthur Sullivan Society

SIR ARTHUR SULLIVAN SOCIETY

WPI

John French	Computer Science ‘15
Morgan Hopeman	Management Engineering ‘16
Julian Moore	Electrical Computer Engineering ‘16
William Parry	Sir Arthur Sullivan Society Liaison
Robin Gordon-Powell	Sir Arthur Sullivan Society Liaison
John Delorey	WPI Faculty Advisor

Abstract

General Overview

- Develop recommendations for a mobile application based on the tour made last year

- Advance the mission of the Sir Arthur Sullivan Society

Sir Arthur Sullivan

Introduction

Who Was Sir Arthur Sullivan?

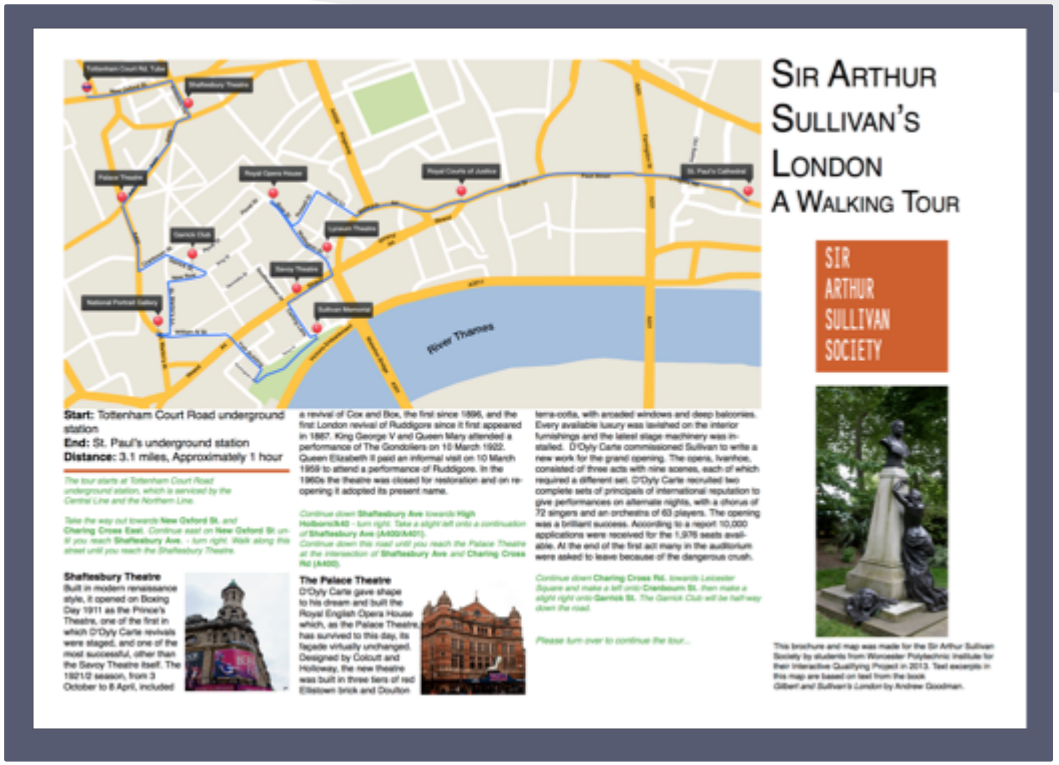
- 13 May 1842 - 22 November 1900
- The London English Composer
- Wrote
  - 19 operas
  - 158 services, hymns, songs
  - 18 orchestral chamber works

Sir Arthur Sullivan

Introduction

Paper Walking Tour 2013

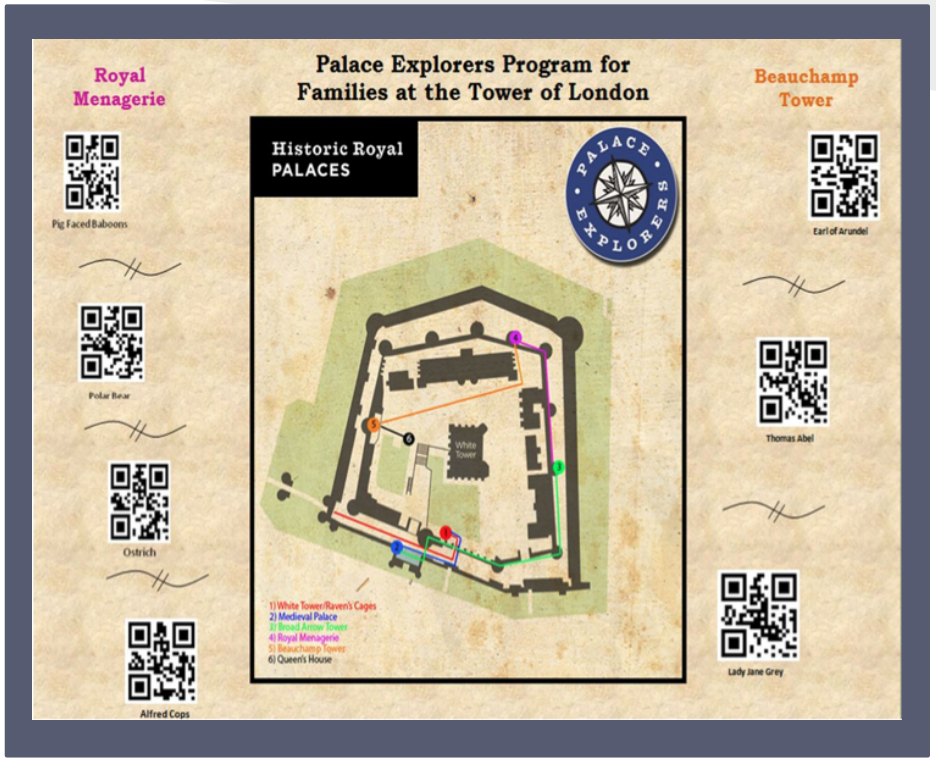
- 2013 IQP
- Developed a paper walking tour
- 11 sites in London



Background

Case Study: Tower Explorers

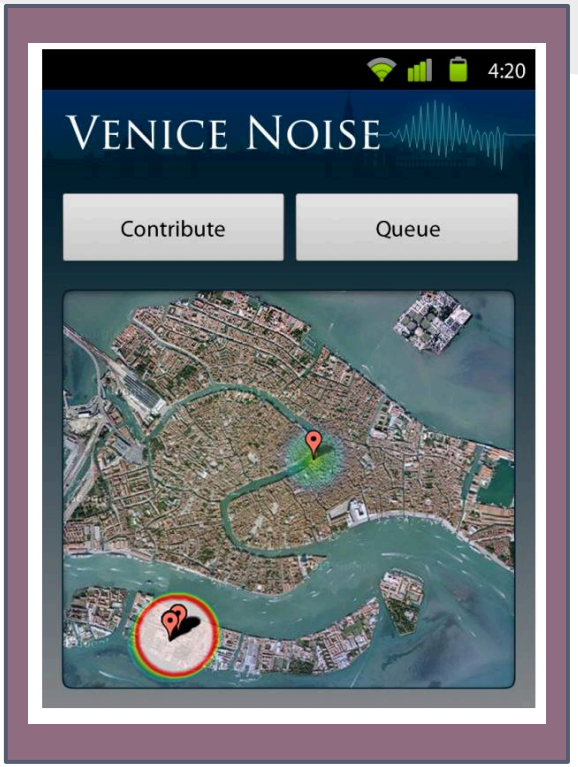
- 2012 IQP
- Tower of London Application Prototype
- Application survey



Background

Case Study: Venice Noise

- 2011 IQP
- Built an application to aid the Venice noise website
- Brainstormed application use cases for evaluation



Background

Application Design Research

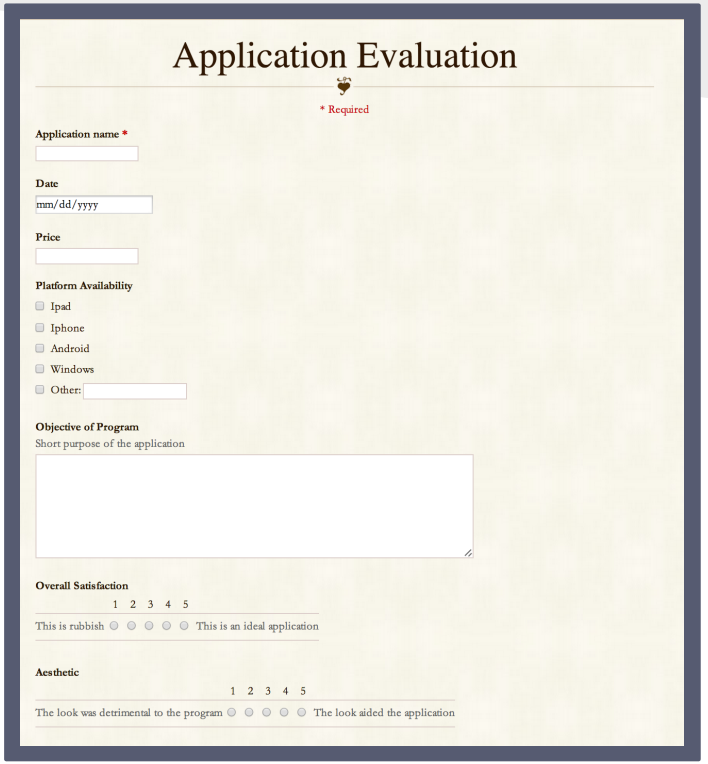
- Design Guidelines
  - Appropriate use of color, text, icons appropriately
  - Error-tolerant design for chaotic environments

- Walking Tours
  - Limited length and duration
  - “Front-loaded” Interaction
  - Small groups of people

Methodology

Review of Mobile Applications

- Reviewed 30 applications
- Rated for
  - Satisfaction
  - Aesthetics
  - Usability
  - Information



Application Evaluation

* Required

Application name *

Date

mm/dd/yyyy

Price

Platform Availability

- Ipad
- Iphone
- Android
- Windows
- Other:

Objective of Program

Short purpose of the application

Overall Satisfaction

1 2 3 4 5

This is rubbish ○ ○ ○ ○ ○ This is an ideal application

Aesthetic

1 2 3 4 5

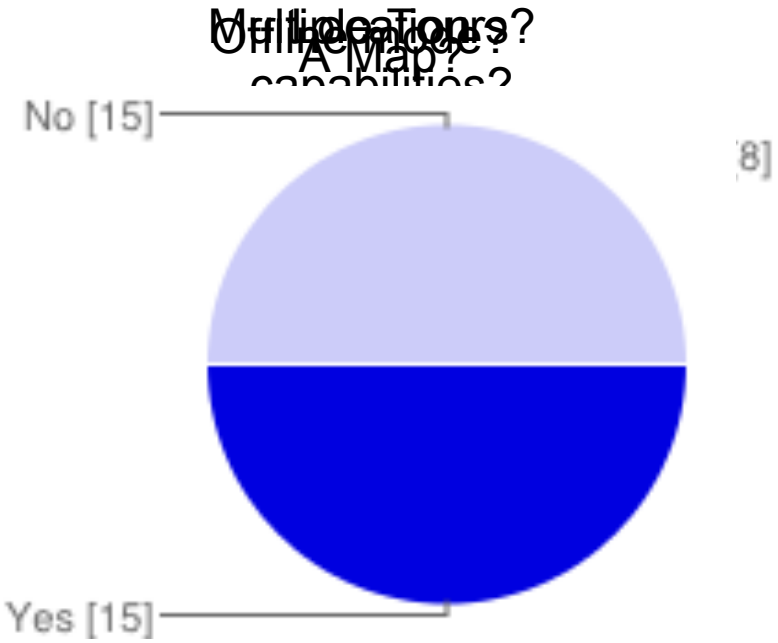
The look was detrimental to the program ○ ○ ○ ○ ○ The look aided the application

Application Evaluation Survey

Methodology

Data

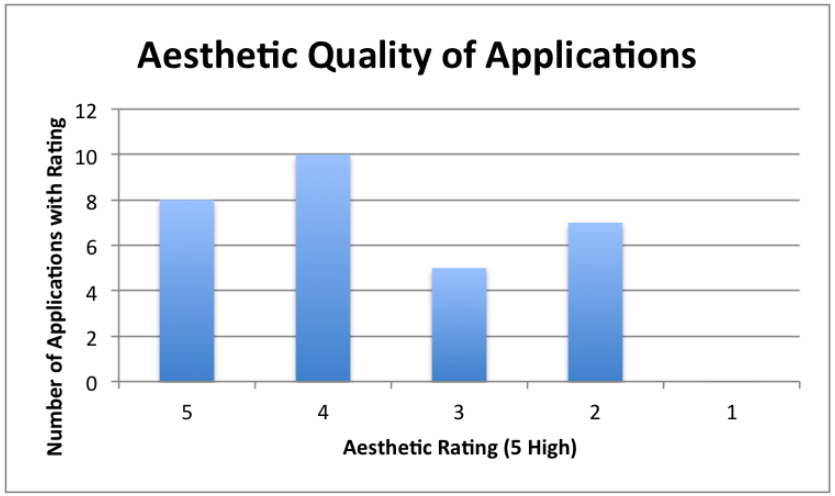
Did the application have…

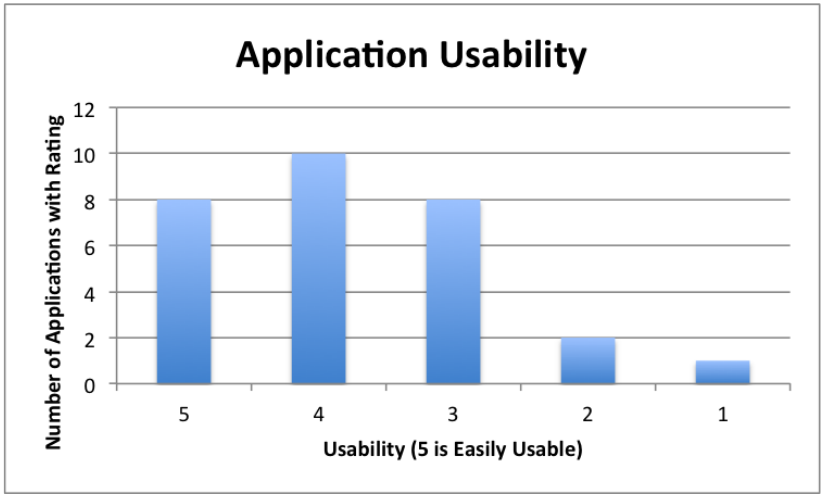


Methodology

Data

On a scale of 1 (worst) to 5 (best), how would you rate the application on…

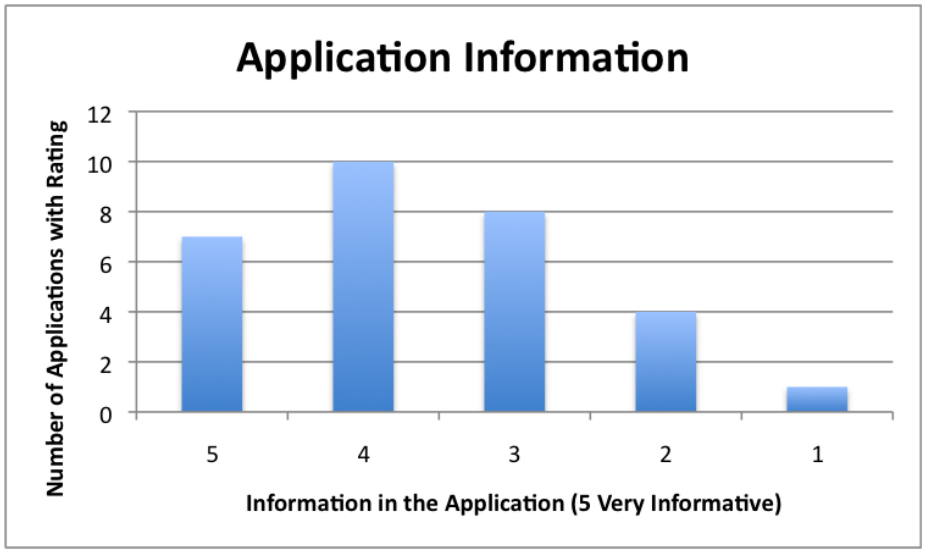


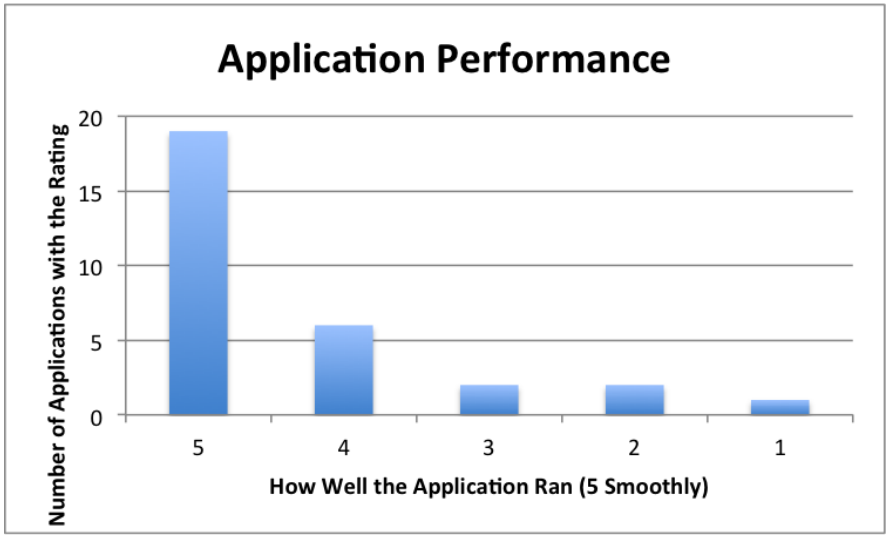


Methodology

Data

How would you rate the application on…

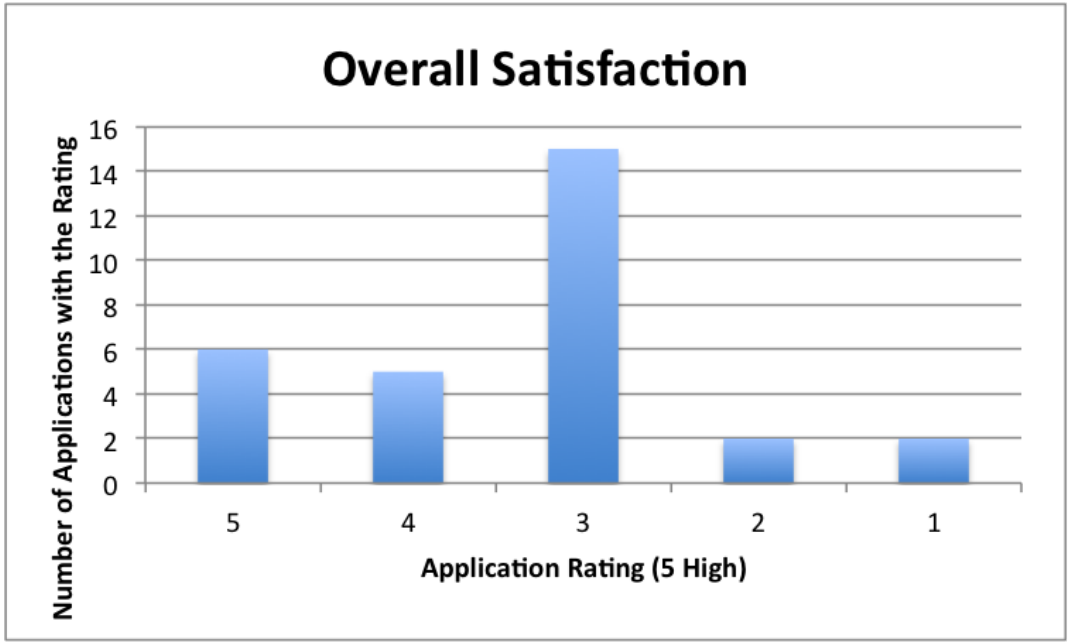




Methodology

Data

On a scale of 1 (unsatisfied) to 5 (high satisfaction), how would you rate the application on…



Methodology

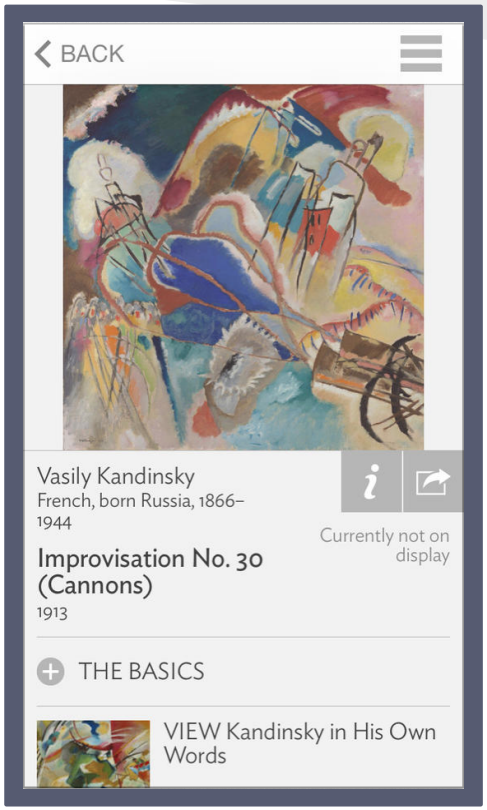
Best Mobile Applications

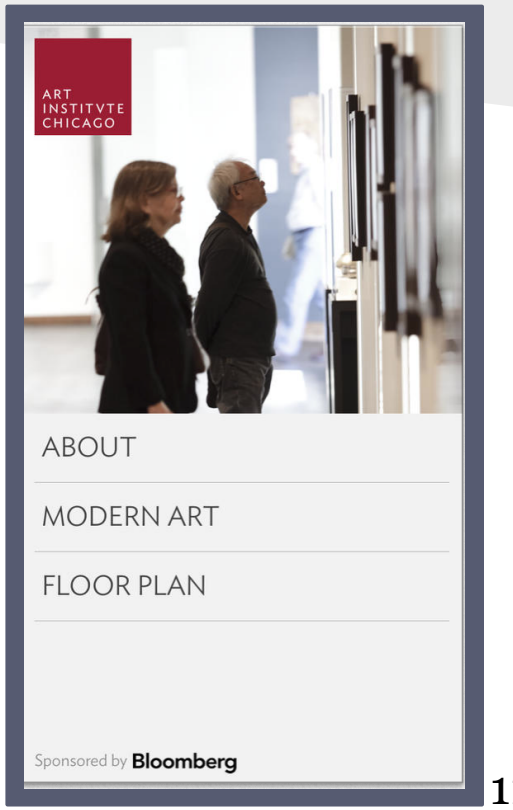
- *Freedom Trail Walking Tour*
  - Satisfaction
  - Aesthetics
  - Usability
  - Information

Methodology

Best Mobile Applications

- *A Closer Look in the Art Institute of Chicago*
  - Satisfaction
  - Aesthetics
  - Usability
  - Information

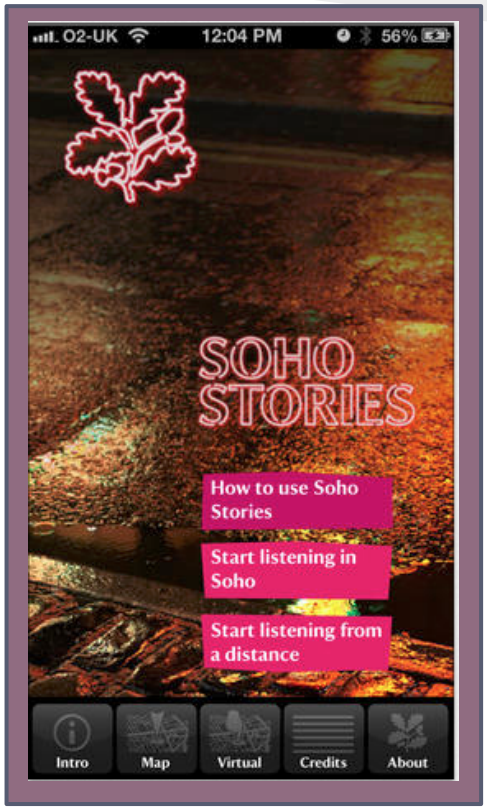




Methodology

Best Mobile Applications

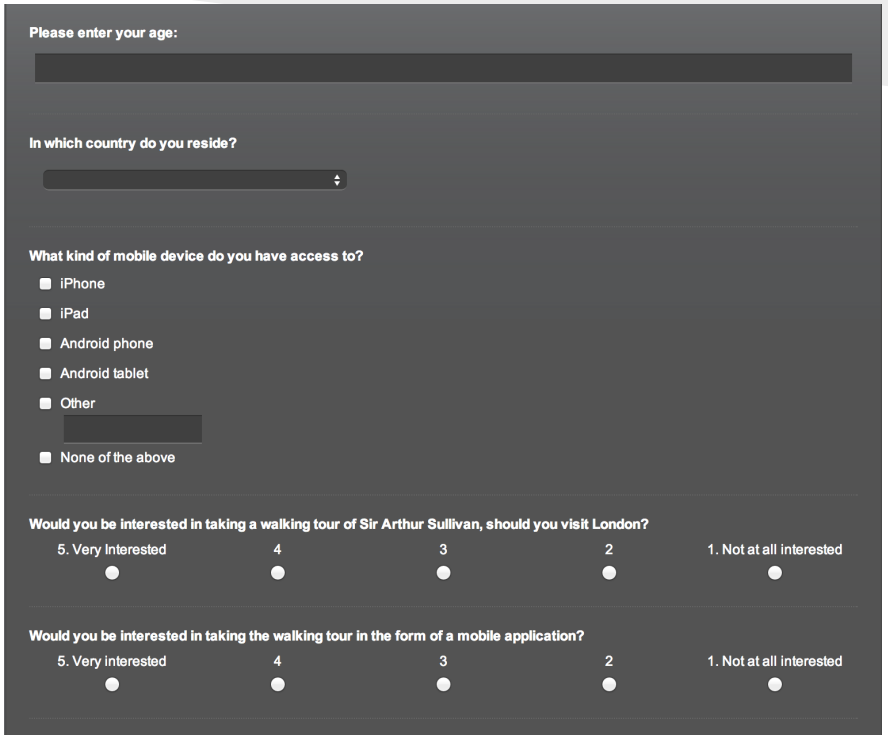
- *Soho Stories*
  - Satisfaction
  - Aesthetics
  - Usability
  - Information



Methodology

Develop Online Survey

- Survey based on prior results
  - Evaluations
  - Interviews
- Used Qualtrics to distribute
- Opened on 3 June



Qualtrics Survey

Methodology

Interviews With SASS

- Conducted semi-structured interviews with members of SASS including
  - Doreen Harris
  - Elaine Richardson
  - Chris Richardson
  - Robin Gordon-Powell

Sir Arthur Sullivan Society

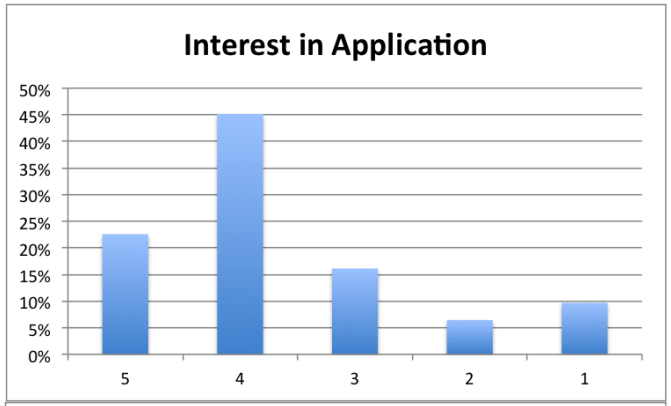
Results

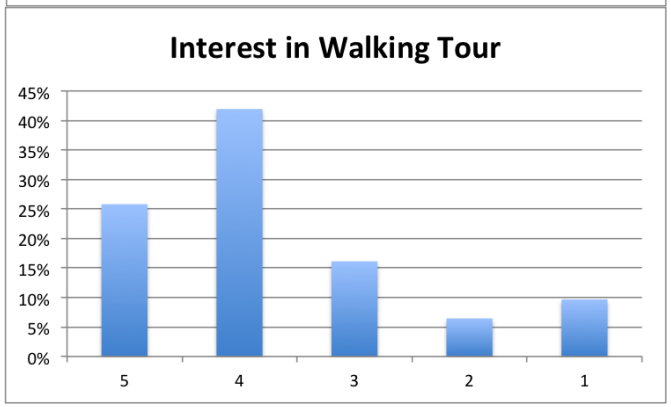
Interview Responses

- Goals
  - Use as publicity and educational tool
  - Target younger audiences, new demographics
- Implementation
  - Planner vs. Explorer tour
  - Virtual tour
  - SAS's Life Game

Results

Qualtrics Responses

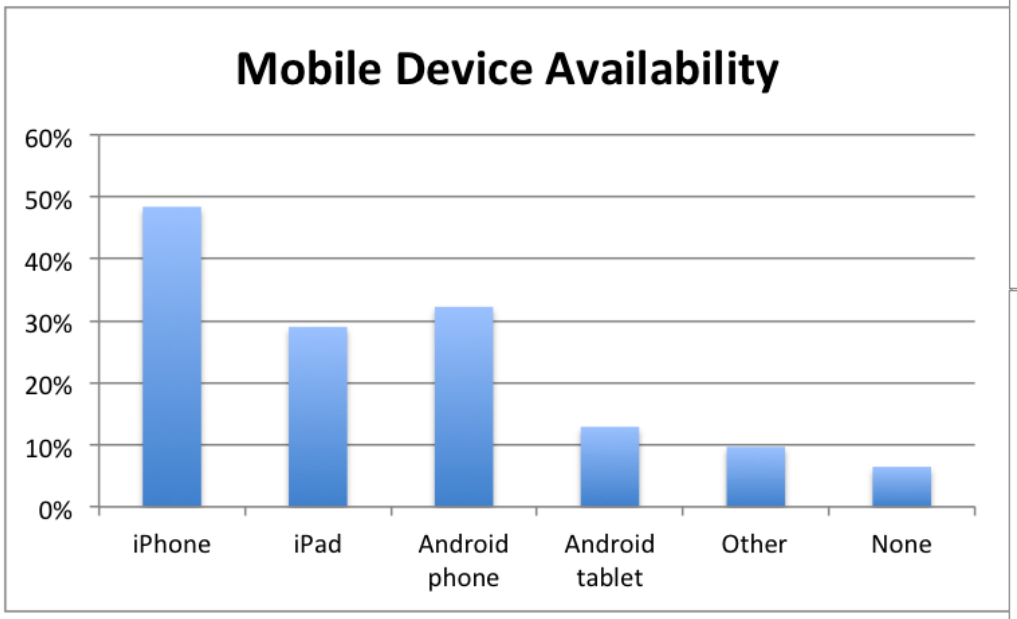


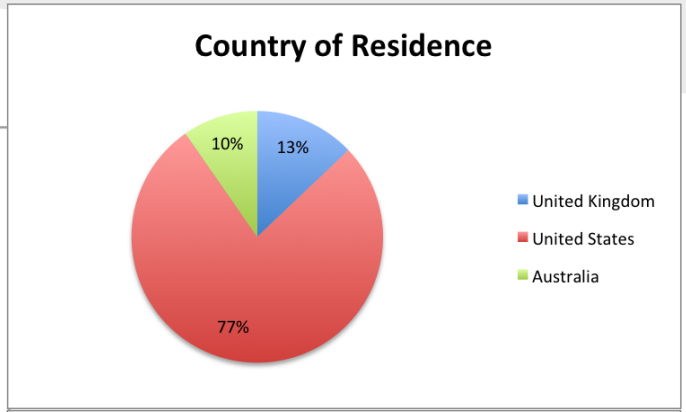


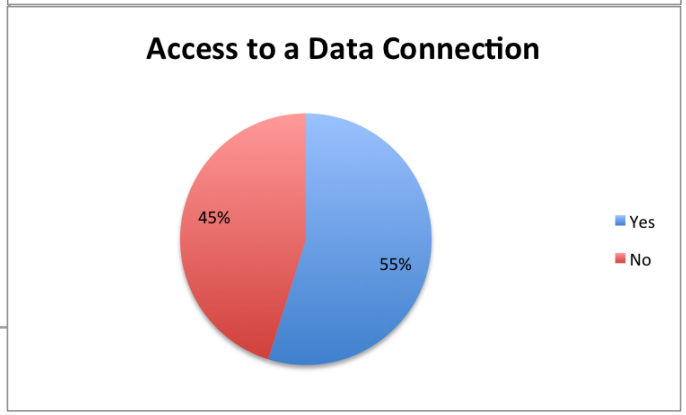
Location Services	4.55
Virtual Tour	4.06
Offline Content	4.00
Multimedia	3.72
Nearby Interests	3.57
Multilingual	2.27

Results

Qualtrics Responses



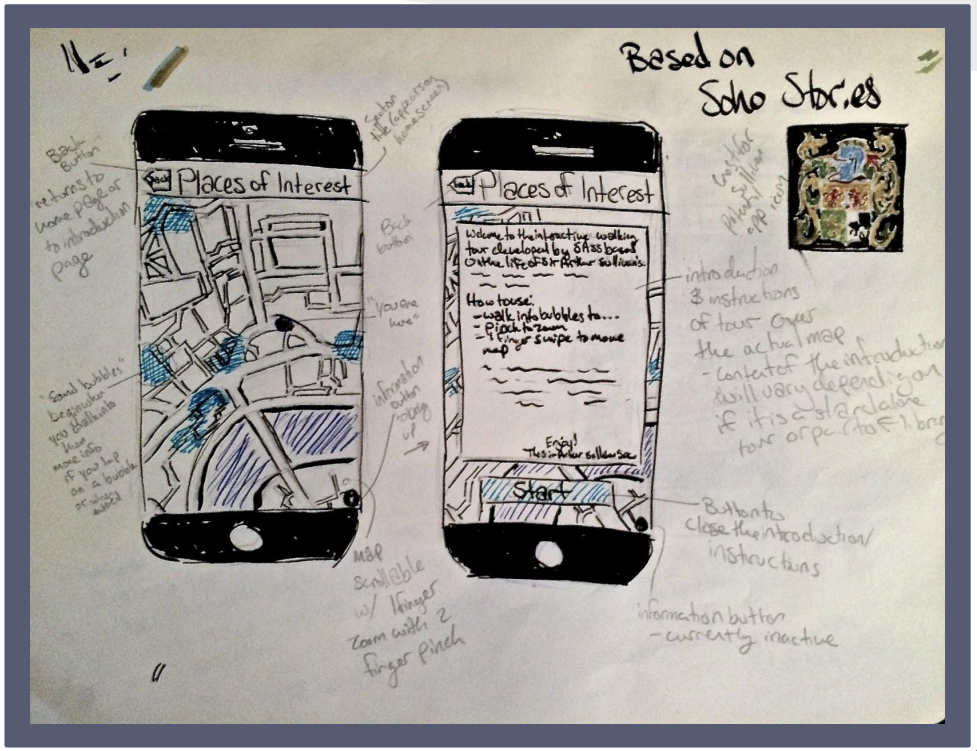




Results

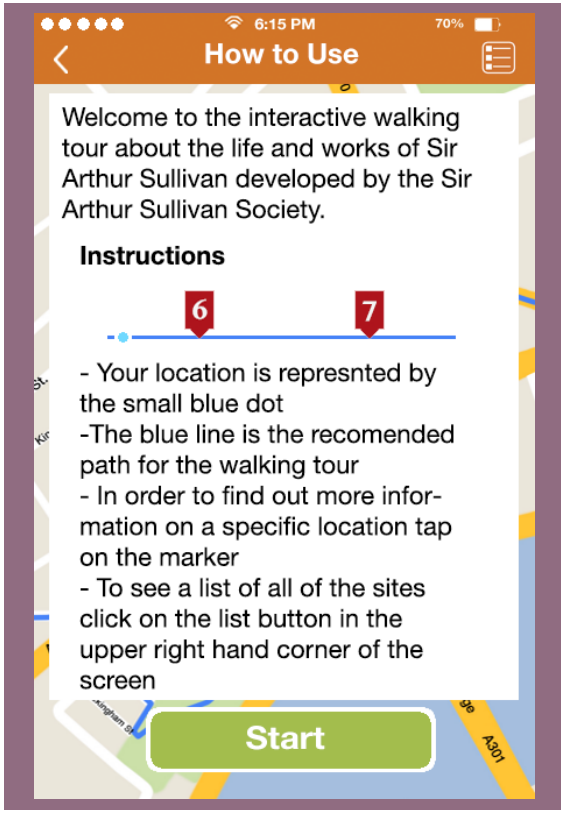
Paper Prototype

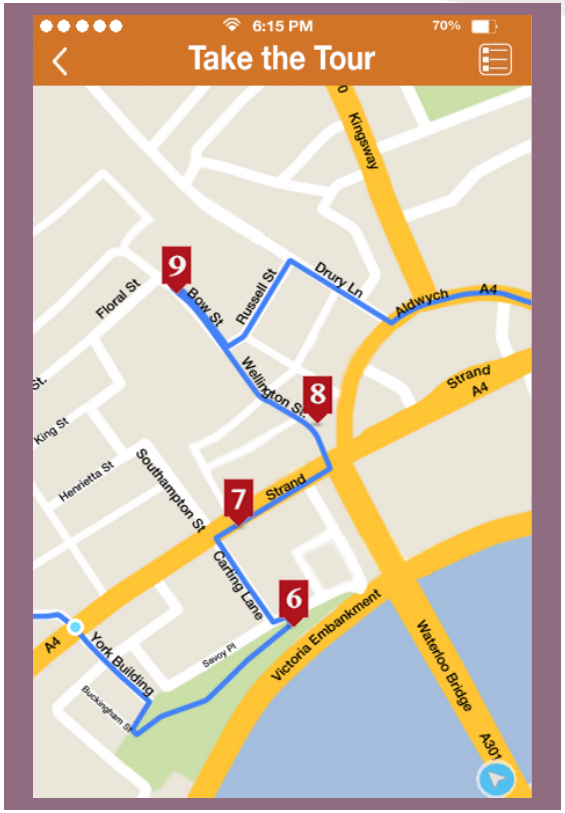
- Hand drawn storyboard of the application
- Tool for developing ideas



Conclusion

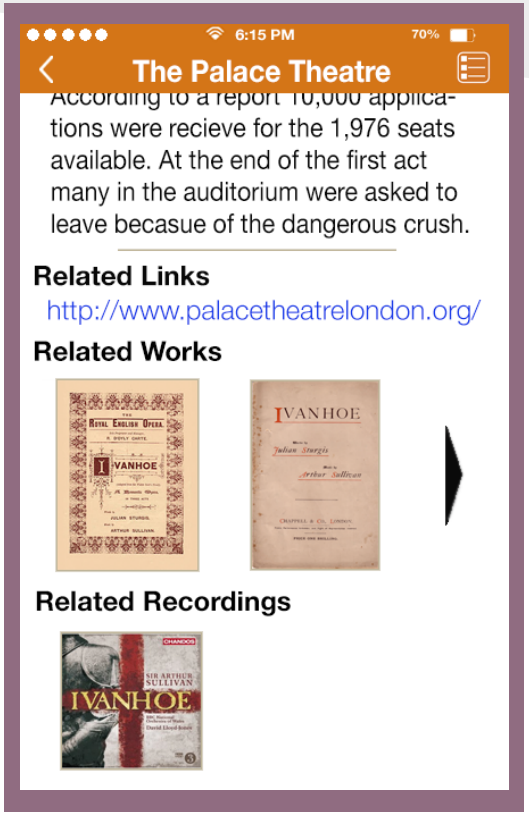
Digital Prototype





Conclusion

Digital Prototype



Conclusion

- Demonstrates need for Application
- Provides a framework for application
- Next Steps
  - Outside Vendor
    - mubaloo
    - Red C
    - The App Business
  - Potential IQP or MQP

We would like to thank the following people for their assistance with our project:

The Sir Arthur Sullivan Society
Worcester Polytechnic Institute
John Delorey
Robin Gordon-Powell
William Parry
Doreen Harris
Elaine Richardson
Chris Richardson
Members of SavoyNet

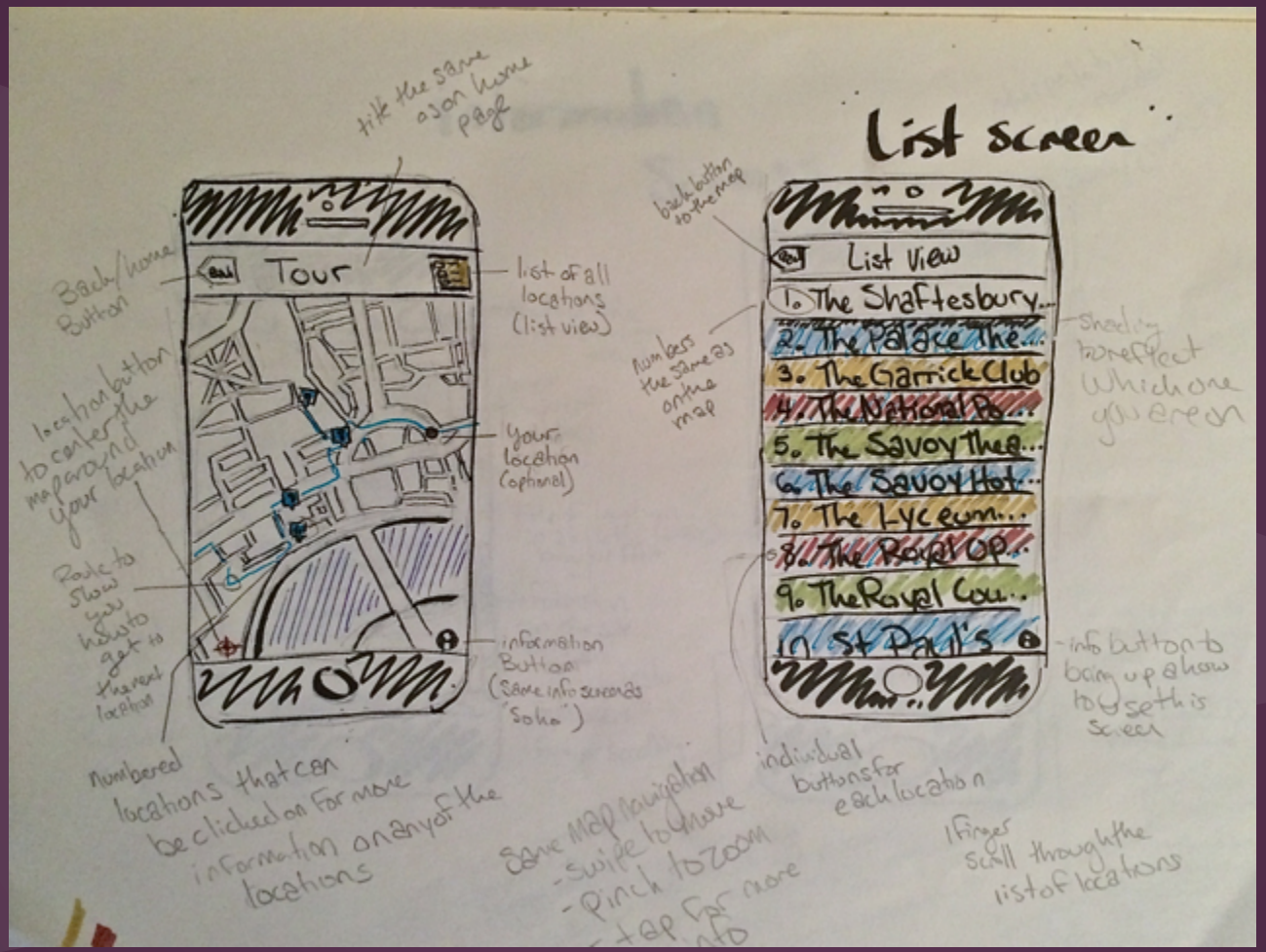
References

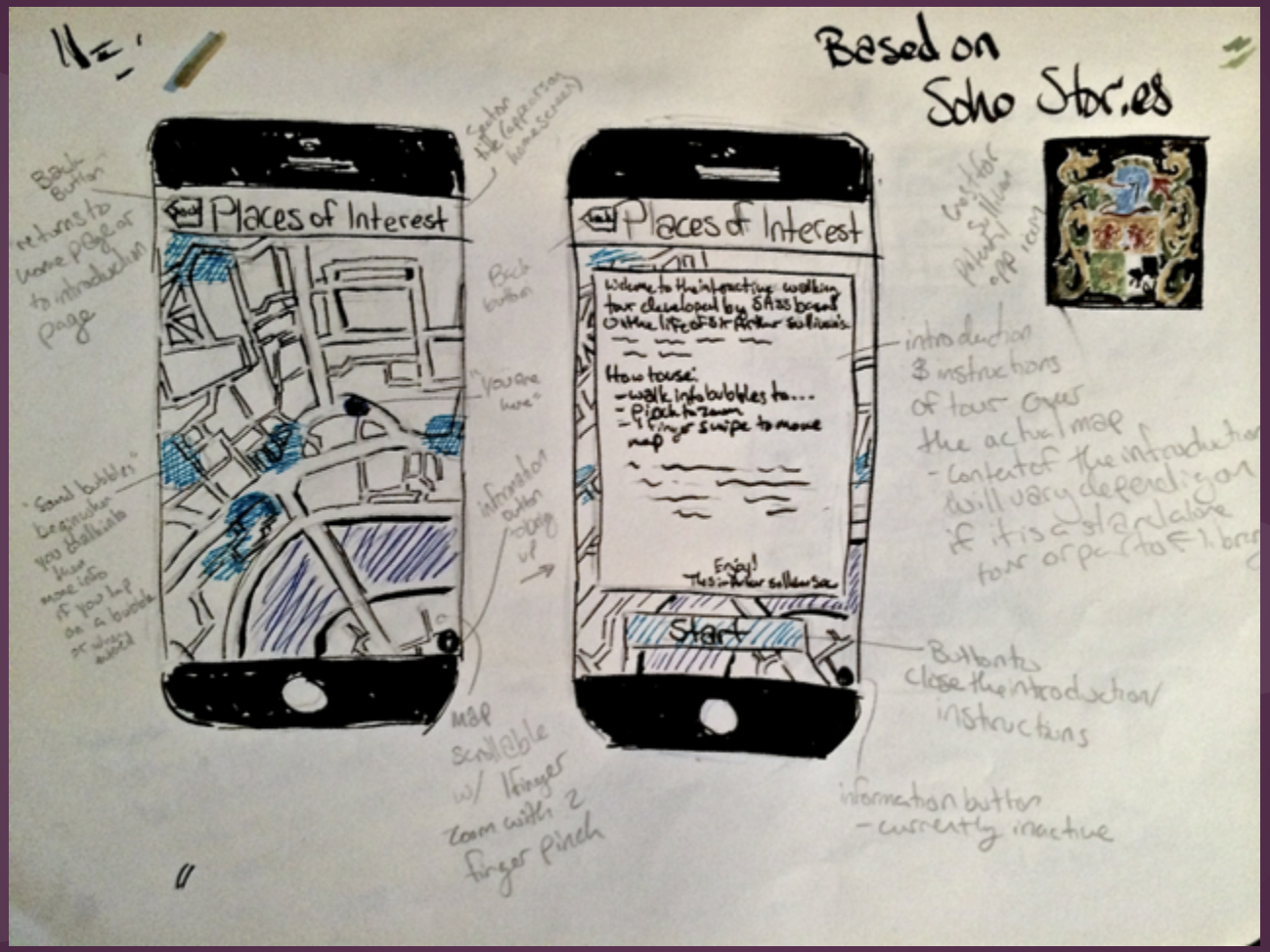
- Art Institute Chicago. (2014). A Closer Look in the Art Institute of Chicago (Version 1.0) [Mobile application software]. Retrieved from http://itunes.apple.com
- Berg, B. L., & Lune, H. (2012). *Qualitative research methods for the social sciences*. Boston: Pearson.
- Jacobs, A. (1984). Arthur sullivan, a victorian musician. Oxford University Press.
- Kramer, R., Modsching, M., Hagen, K., & Gretzel, U. (2007). Behavioural impacts of mobile our guides. *Information and communication technologies in tourism 2007*, 109–118.
- Lawrence, A., Findon, B. W., & Bendall, W. (1980). *Sir arthur sullivan: life-story, letters, and reminiscences. with critique*. J. Bowden.
- London & Partners Ltd. (2014). London Official City Guide (Version 1.9) [Mobile application software]. Retrieved from http://itunes.apple.com
- Mobile Technology Team. (2010). Freedom Trail Walking Tour (Version 1.0) [Mobile application software]. Retrieved from http://itunes.apple.com

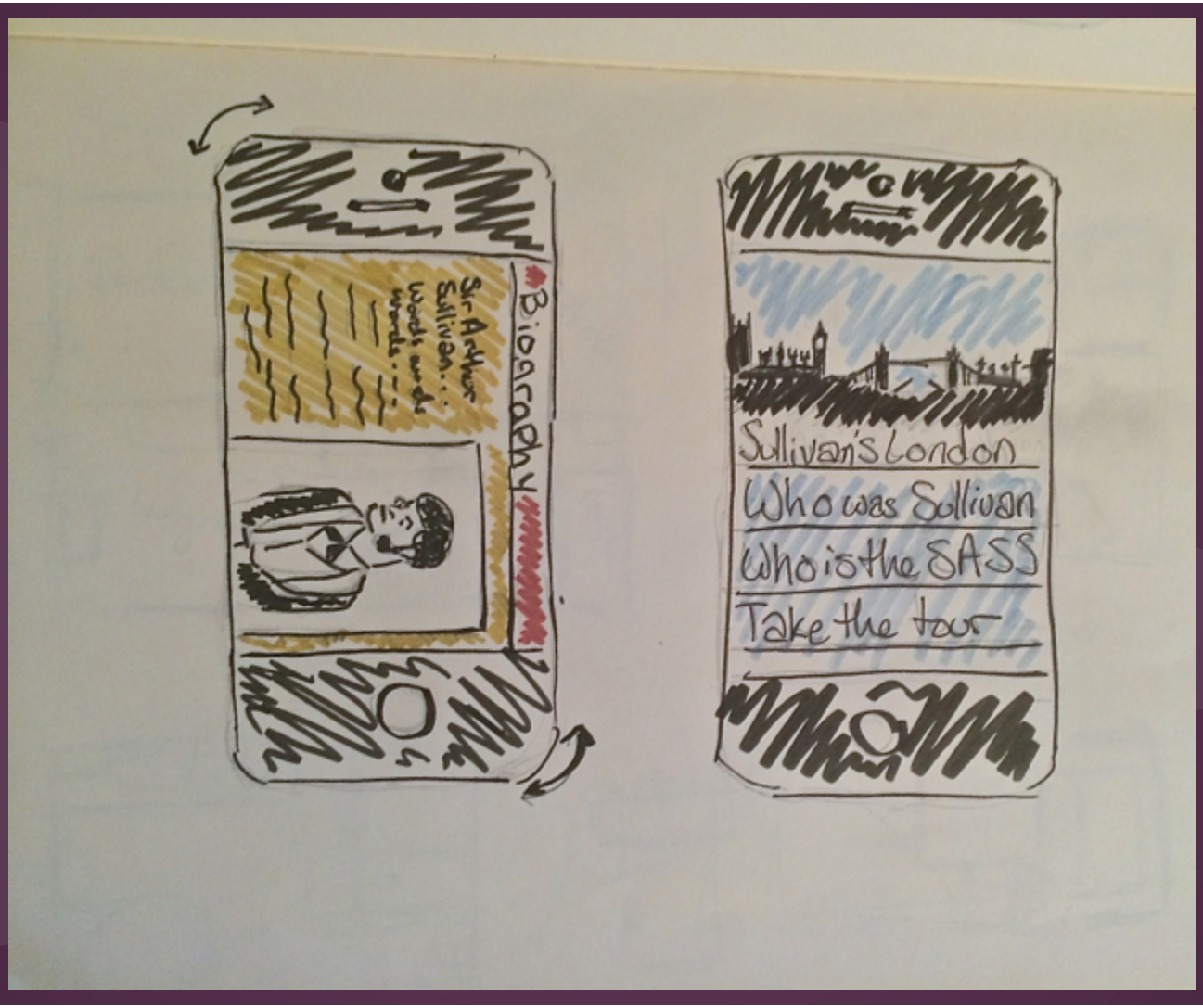
References Continued

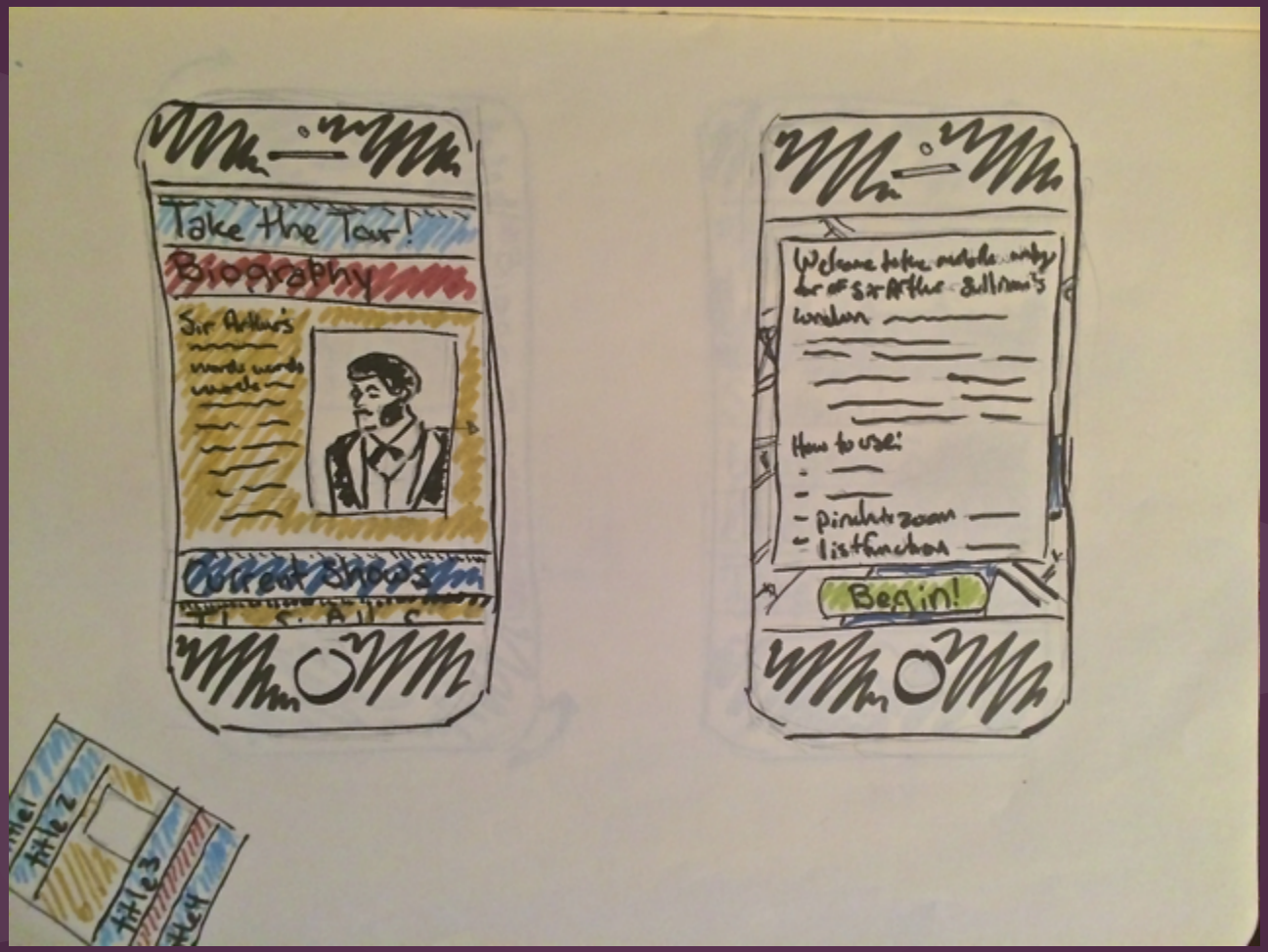
- Ripley, W. J., Pomerleau, N. C., Puishys, R. E., Calamari, E. S., Bianchi, F. W., & Carrera, F. (2012). The noises of venice – an exploration of noise in a historic city.
- Rosenman, J. V., Richard, E. J., Megin, J. L., Karp-Neufeld, G. G., Hewgley, N. R., Haley,
- C. M., . . . Delorey, J. F. (2013). A Walking Tour of Sir Arthur Sullivan's London. Shepherd, M. (2011, November 9). Savoynet. Retrieved April 8, 2014, from http://savoynet.oakapplepress.com/
- Society, S. A. S. (2012). About the society. Retrieved April 6, 2014, from http://www.sullivansociety.org.uk/society.php
- Turnbull, S. (2010). Posthumous reception. Retrieved from http://www.sullivansociety.org.uk/reputation.php
- Whittier, K. M., Graedel, I. S., Feeney, A. J., Cullen, J. A., Davis, F. a., Paul W., & Fisler, K.(2012). Digital palace explorers – an on-site storytelling application for families at the tower of london.

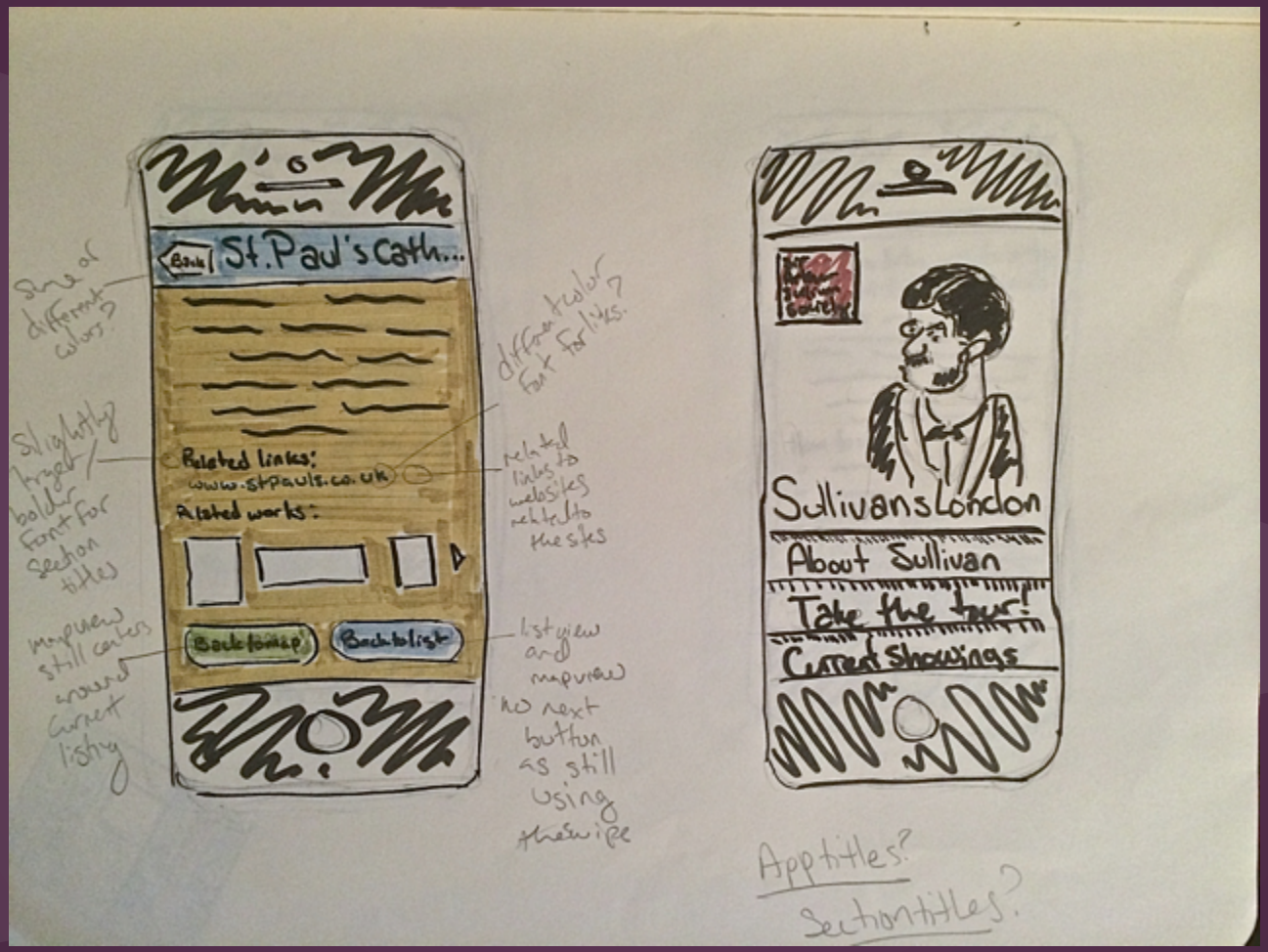
Questions?

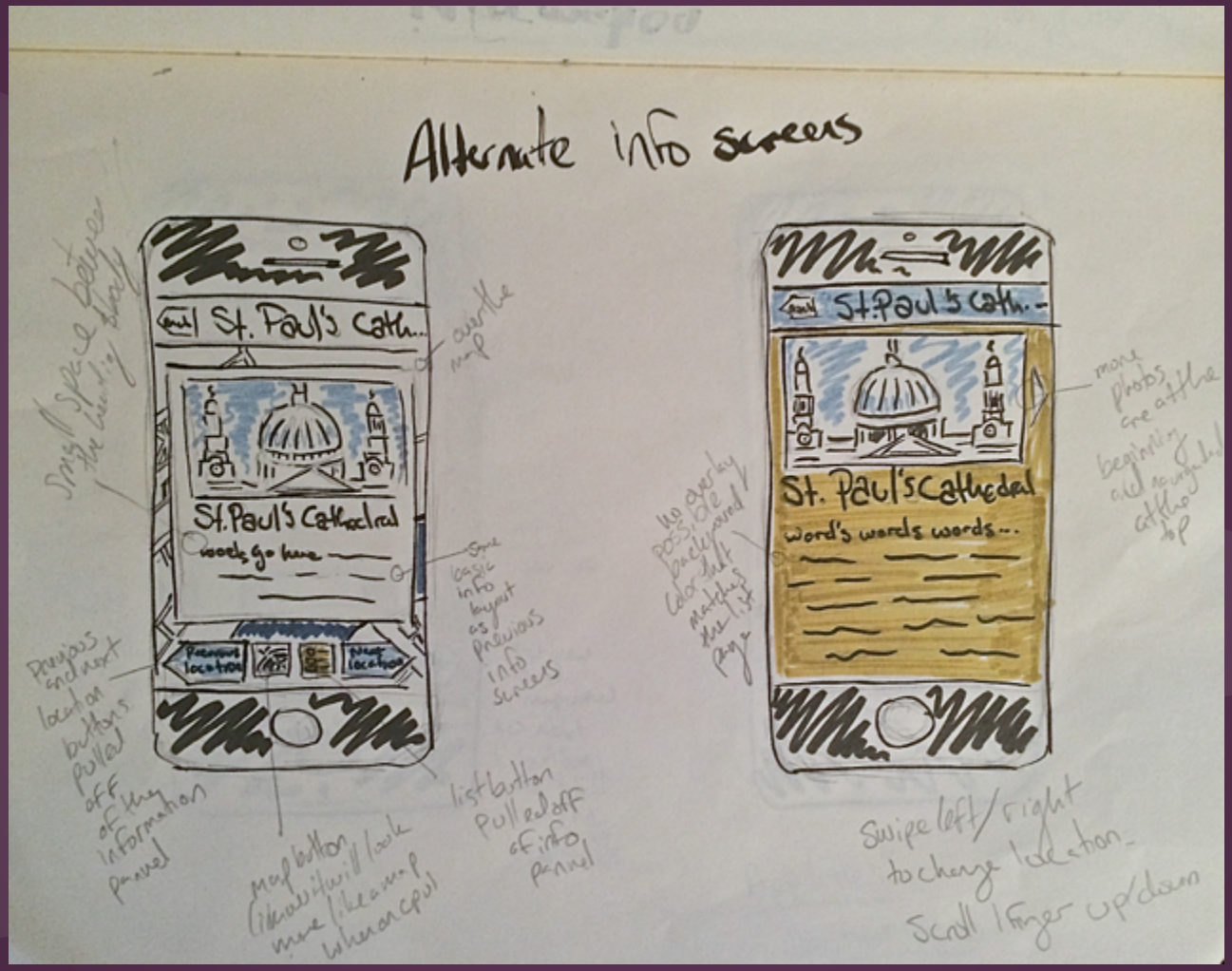

List screen
tilt the same as on home page
Back/home Button
Tour
list of all locations (list view)
location button to center the map around your location
your location (optional)
Route to show you how to get to nearest location
information Button (same info as on "soho")
Numbered locations that can be clicked on for more information on any of the locations
Same Map navigation
- swipe to move
- Pinch to zoom
- tap for more info
back button to the map
List View
1. The Shaftesbury...
2. The Palace The...
3. The Garrick Club
4. The National Po...
5. The Savoy Thea...
6. The Savoy Hot...
7. The Lyceum...
8. The Royal Op...
9. The Royal Cou...
10. St Paul's
numbers the same as on the map
shading to reflect which one you are on
info button to bring up a how to use this screen
individual buttons for each location
fingers scroll through the list of locations

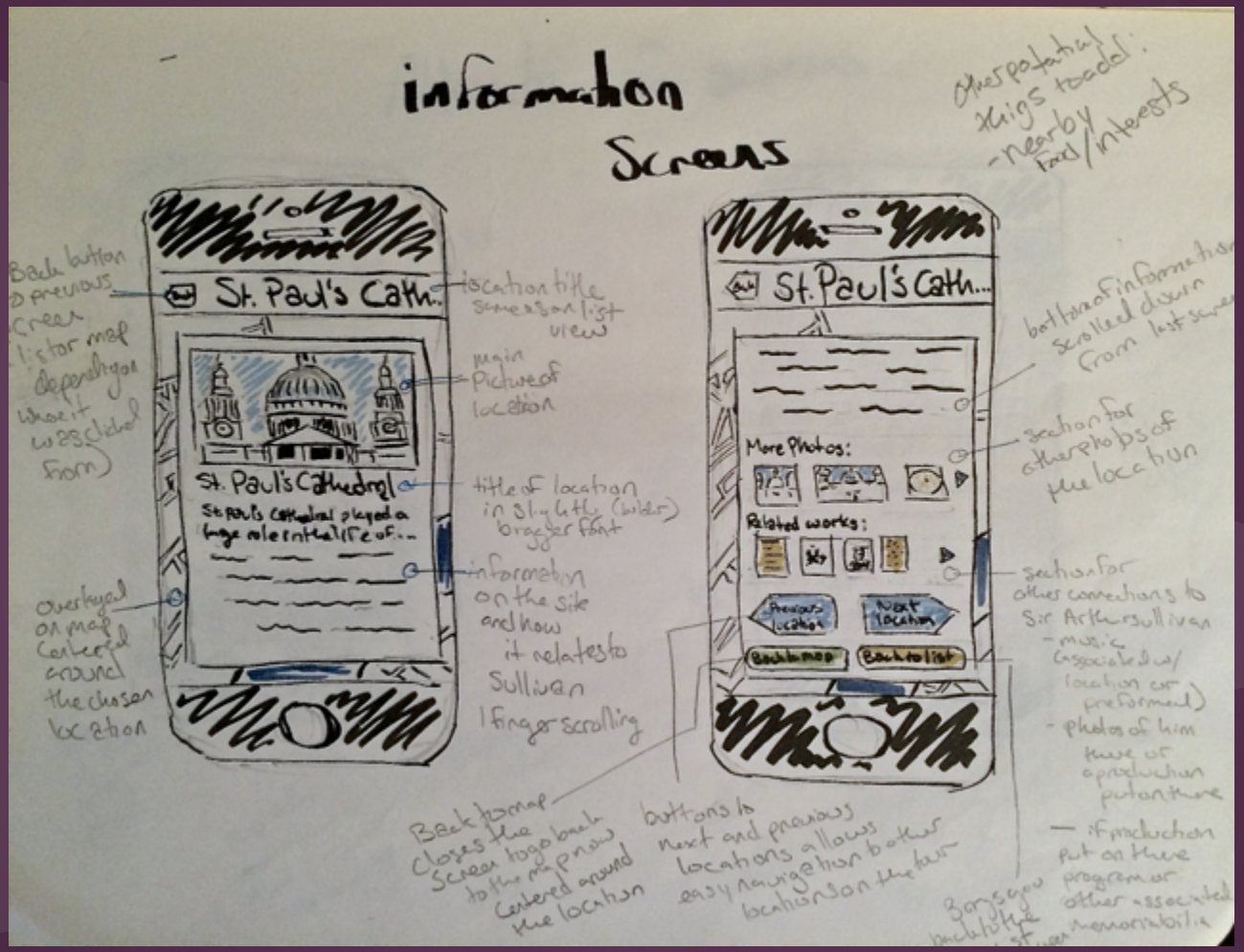

Based on Soho Stories
Places of Interest
Places of Interest
Start


Biography
Sir Arthur Sullivan...
Words words words...!!!
Sullivan's London
Who was Sullivan
Who is the SASS
Take the tour


Take the Tour!
Biography
Sir Arthur's
Begin!


Back
St. Paul's Cath...
Related links:
www.stpauls.co.uk
Related works:
Backtotop
Backtolight
Sullivans London
About Sullivan
Take the tour!
Current Showings
App titles?
Section titles?


Alternate info screens
St. Paul's Cath...
St. Paul's Cathedral
words go here
Previous location
Next location
St. Paul's Cath...
St. Paul's Cathedral
word's words words...
Swipe left/right to change location
Scroll finger up/down


information
Screens
Other potential things to add:
- nearby food/interests
St. Paul's Cath...
St. Paul's Cathedral
St. Paul's Cathedral played a large role in the life of...
St. Paul's Cath...
More Photos:
Related works:
Previous location
Next location
Back to map
Back to list
Back button to previous screen (list or map depending on where it was clicked from)
location title same as on list view
main picture of location
title of location in slightly (bolder) bigger font
information on the site and how it relates to Sullivan
1 finger scrolling
overlayed on map centered around the chosen location
bottom of information scrolled down from last screen
section for other photos of the location
section for other connections to Sir Arthur Sullivan
- music (associated w/ location or preformed)
- photos of him there or a production put on there
- if production put on there program or other associated memorabilia
Back to map closes the screen to go back to the map now centered around the location
buttons to next and previous locations allows easy navigation to other locations on the tour