Team: Arjun Madgavkar & Zack Kimelheim

(Since we are a team of two, we are working as a unit across all tasks and responsibilities, so we both play the roles of everything)

Project: Learn about the history of the world around you.

Statement of the Problem: Tourists have to rely on **boring** guide books or **expensive/boring** walking tours to learn about the history of a city first-hand. Inhabitants have no way to get information about an interesting building they see in real-time and want to learn more about.

Hypothesis #1: When people travel to new cities, they care about learning about its history. **Tests #1**:

- 1. Interview a large chunk (50) of well traveled individuals, ranging in age, from various places. Ask the following:
 - a. As a tourist, what are the most valuable parts of your travels?
 - b. What is the most frustrating part of your travel experiences?
 - c. On a scale of 1 to 10, how important is it to learn about a new place?

Results #1 (Takeaways):

- 85% of people say that history and culture is quintessential and paramount to their travel plans and experiences
- 95% of people already pay to learn about history and culture—the main outlets are:
 - bus tours
 - · walking tours
 - guidebooks
- 75% of people do not always feel that these outlets are worth the money spent

Hypotheses #2: If we create a mobile application that provides the history of places around you on a map, tourists and inhabitants will love it.

Tests #2: A/B Testing: Which product to achieve our hypothesis is better? Augmented Reality or Image Recognition?

- 1. Go to Freedom Tower with demo options of AR and IR. See what tourists prefer. Ask the following questions
 - a. Which product do you prefer? Why?
 - b. Best / Worst features of each product
 - c. Ways to improve each product

Results #2 (Takeaways):

- 65% of people prefer Image Recognition technology. Important notes for each—
 - IR
- Easy to point at building and get info quickly
- Intuitive and easy to use
- Better than looking down at a book, easy to scan the buildings since you are looking at them any way
- Didn't want to hold iPad up to the sky for a long period of time
- Enjoyed the interactivity of pressing on the actual building
- Loved the simplicity
- AR
- People really liked the 3D models
- Loved being able to see the past of the place as well as the present (in real life and in the AR)
- They didn't see the point in using AR models when the real building is there in front of you.
- Loved being able to move iPad around buildings to see it from many angles (since you can't do that in real life)
- Seemed too complex for people
- Consistent feedback—ideal for at-home use, but want real building when in real-time touring

MVP:

(a barebones MVP, currently available on the App Store)

- An app to be deployed on the app store, where users can download and sign up
- Login with Facebook (to get their social data)
- Map with locations of historic destinations marked on it
- Ability to mark *your* favorite destinations
- Ability to click on each of those destinations to read the story about the place as well as view old pictures from the
 past
- Ability to share this information with friends/family
- Ability to contribute information to the map about a certain place
- Ability to request information about a certain place by taking a picture of it

Methods (how did we design the MVP and why):

- MVP was built strictly using all previous customer feedback and testing results and within technological restraints
- It is clear that customers prefer IR technology for this product...but, this will take over a year to build (estimated). We don't have that much time for our first MVP. What is the best way to encapsulate all of our feedback from what customers prefer in to a simpler MVP?
 - build a product aligns with all the customer feedback, although AR or IR technology won't be currently present, so that when we do include the technology, it can just be "inserted" in to the product as a feature

MVP Testing:

- Incorporated Firebase Analytics in to our software, so that we can track the usability of the app from a consumer perspective. Understand things like the following—
 - 1. What percentage of the people that download the app sign up for an account?
 - 2. How often do people open the app?
 - 3. What percentage of the people that sign up use it more than once?
 - 4. What percentage of the people that sign up delete it? When do they delete it/how long do they use it for?
 - 5. How much time do people spend on app per session?
 - 6. What percentage of people recommend it to a friend?
 - 7. How many buildings does the average person click on?
 - 8. How much time does a person spend on the facts screen vs. the pictures screen vs. the story screen?
 - 9. How many buildings does the average person add to their map?
- Get initial 100 people to download and use the app. Track their data and try to answer the following questions:
 - Do these people care about the product? If so, how and why? Otherwise, why not?
 - How do they interact with the app? What parts of the app need the most work?
 - If people stop using the app, why?
 - What is the best way to organize/manage content?

MVP Results (Takeaways):

(do not yet have 100 customers on the app, but can conclude the following thus far)...

- Average use time is only 4 minutes and 21 seconds per day
- · Target user is the young millennial
- 80% of users click on at least 5 buildings during their first experience on the app

1-Year Goal:

- Enhance the MVP, so that it ultimately incorporates full IR technology within the platform of the MVP that was already created
- Obtain conclusive feedback from customer base on how the app can be optimized, and do this
- Obtain a usership of around 5,000