Project Inception Document

CSCI 360-01-02, College of Charleston

Hello World Scavenger Hunt

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Approver Name	Title	Signature	Date
Parvez Rashid	Initial SRD Creation	[]	8 September 2024
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Section 1 Purpose

- **Intro:** This document's purpose and motivation is to give and explain this application's project requirements, while defining such project requirements that shows the usability and function of the project application being developed. Constraints and issues are also being examined and accounted for.

- **Scope:** The users for this application are the students of College of Charleston, primarily the students of Fall 2024 CSCI 360-01-02, while the customer for this application is the instructor of the Fall 2024 CSCI 360-01-02 course, Dr. Parvez Rashid. This application and everything in its entirety is/will be developed by Team Hello World, comprised of Aidan McKittrick and Kevin Brigham.

- **Purpose:** The intended motivation behind this service is to supplement the College of Charleston with an exciting new app that allows students to further interact with this great institution.

- **Overview and Reality:** The product being developed is an Augmented Reality (AR) mobile application that will give the user/actor a 'Scavenger Hunt' mini-game using locations on The College campus. This application will let users log in and authenticate their accounts, use their location services for app functionality, track and store visited or checked-off locations and tasks, provide concise information regarding all tasks of the Scavenger Hunt or location, and store and track all user information and progress regarding the main function of the product: the Scavenger Hunt.

Section 2 General Use Cases

2.1 Actor/User Takes a Tour of The College/Charleston

Scope:
Mobile Application

Level:
Tour Charleston and Find Badges at multiple locations

Primary Actor:
Students calls application to initiate tour and find badges

Stakeholders and Interests:
- Tour Charleston

- Student: As a user their interests are in the usability and badge finding capabilities of the application.

- City of Charleston: Wants more tourism and exploration of Charleston, and admitted students' parts of their tuition fees are paid to the City of Charleston in the form of taxes and miscellaneous fees.

- CofC: Intends to ensure that users spend time exploring the campus and learning the importance of the history of the campus and city to strengthen academic dedication; the faculty and staff are in this sentiment as well.

Preconditions:
- Have to be in Charleston
- Have to have Location Services
- Have to have internet
- Have to have time to go on the tour

Postconditions:
- They get a badge
- They get XP
- They have the location completed badge outline

Main Success Scenario (or Basic Flow) :
1) Choose a route
2) Path to route start is generated

3) Route Starts when start location is reached
4) Information given at route start
5) Directions to next stop
6) Information and XP from stop is given upon arrival
7) Repeat step 5-6 until end of route
8) Route completed, badge given

Extensions:

1) User cancels route: Route ends and returns to home menu
2) User skips a stop: Directions to next stop is given

Special Requirements:

- Get a badge for completion
- Get XP for account
- Provide text for information on location

Technology and Data Variations List:

- Mapbox for the map API plugin
- Different types/OS of phones used for app

Frequency of Occurrence:

- When tourism is most prominent and when new students arrive, traffic will increase on application.
- Year-round usage, primarily for students who live in Charleston/in the Charleston Metro area.

Miscellaneous:

- N/A

2.2 Actor/User Visits a Specific Location

Scope:
Mobile Application

Level:
Tour Charleston and Find Badge(s) of a Location/of Locations

Primary Actor:
Students calls application to initiate tour and find badges

Stakeholders and Interests:
Tour Charleston

- Student: As a user their interests are in the usability and badge finding capabilities of the application.

- City of Charleston: Wants more tourism and exploration of Charleston, and admitted students' parts of their tuition fees are paid to the City of Charleston in the form of taxes and miscellaneous fees.

- CofC: Intends to ensure that users spend time exploring the campus and learning the importance of the history of the campus and city to strengthen academic dedication.

Preconditions:
- Have to be in Charleston
- Have to have Location Services
- Have to have internet
- Have to have time to go on the tour

Postconditions:
- They get a badge
- They get XP
- They have the location completed badge outline

Main Success Scenario (or Basic Flow) :
1) Actor chooses a location to explore on the map
2) Travels to said location via given path/is already there
3) Information of location is given
4) XP is given to user

5) Badge for visiting stop is given
6) User can shutdown app usage or continue to other functions

Extensions:

1) User cancels visit to stop
2) User starts a route/tour (akin to 2.1)
3) User exits and closes out of app
    a) User exits app but does not shut it down
        i) Can still run in background

Special Requirements:

- Get a badge for completion
- Get XP for account
- Provide text for information on location

Technology and Data Variations List:

- Mapbox for the map API plugin
- Different types/OS of phones used for app

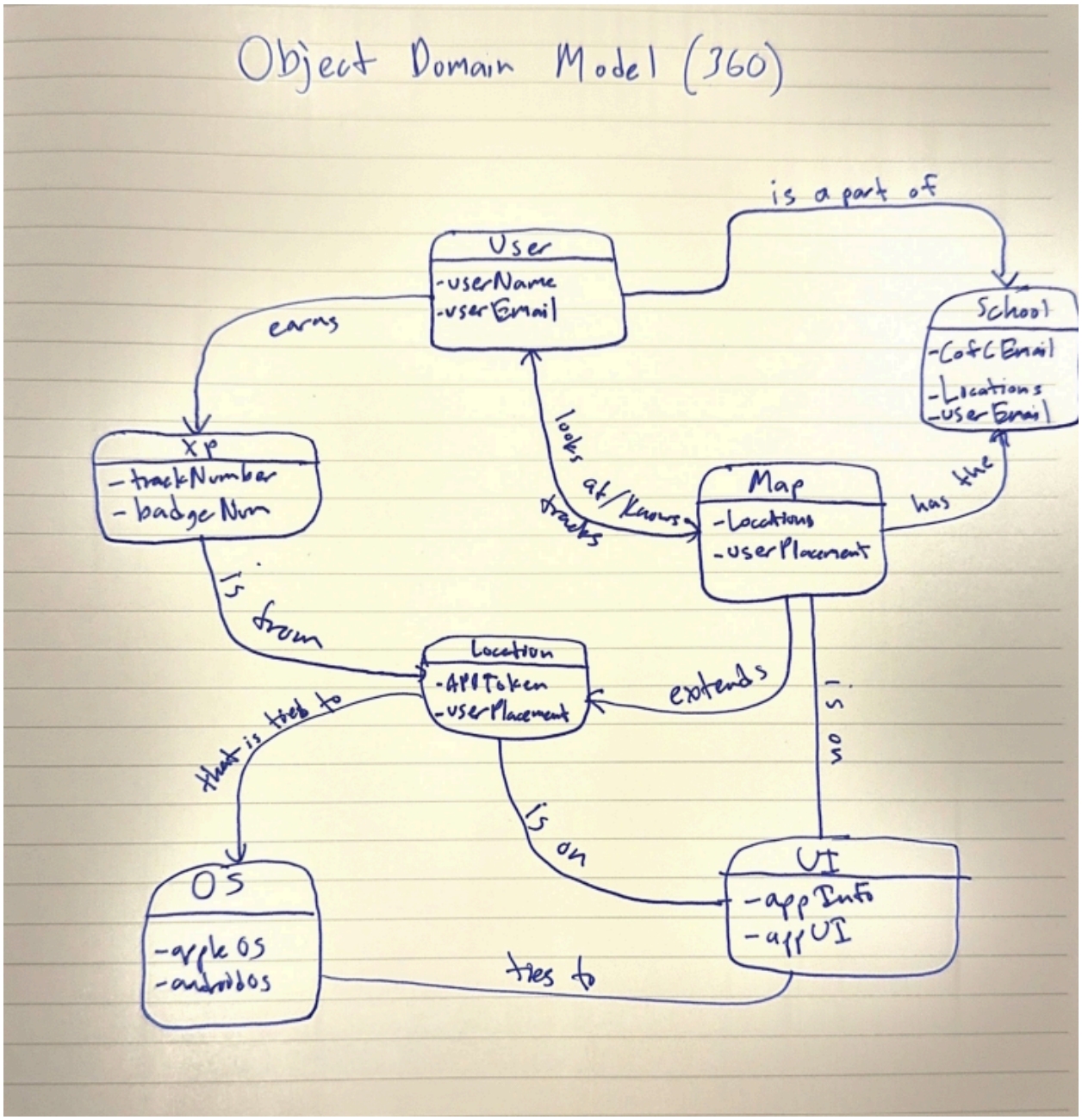
Frequency of Occurrence:

- When tourism is most prominent and when new students arrive, traffic will increase on application.
- Year-round usage, primarily for students who live in Charleston/in the Charleston Metro area.

Miscellaneous:

- N/A

Section 3 Domain Model

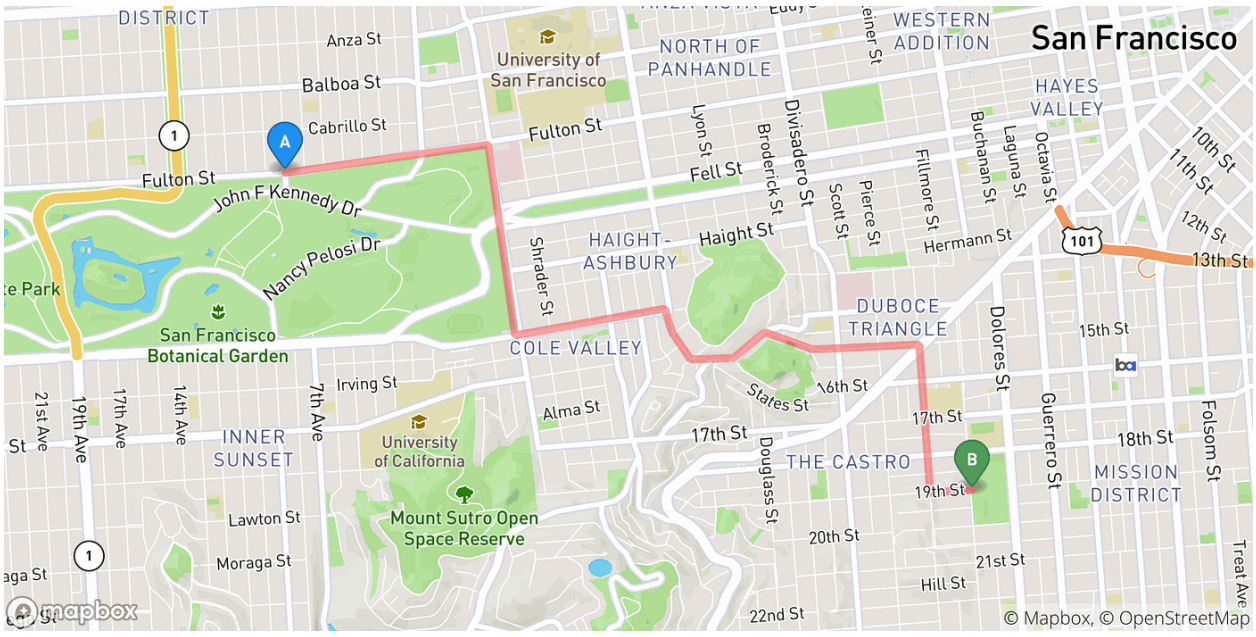


Section 4 Supplemental Specs

- Our use case format

Use Case Section	Comment
Use Case Name	Start with a verb.
Scope	The system under design.
Level	"user-goal" or "subfunction"
Primary Actor	Calls on the system to deliver its services.
Stakeholders and Interests	Who cares about this use case, and what do they want?
Preconditions	What must be true on start, *and* worth telling the reader?
Success Guarantee	What must be true on successful completion, *and* worth telling the reader.
Main Success Scenario	A typical, unconditional happy path scenario of success.
Extensions	Alternate scenarios of success or failure.
Special Requirements	Related non-functional requirements.
Technology and Data Variations List	Varying I/O methods and data formats.
Frequency of Occurrence	Influences investigation, testing, and timing of implementation.
Miscellaneous	Such as open issues.

- An example of the Mapbox API Developer Route Tool



Section 5 Glossary

- API: Application Programming Interface
- AR: Augmented Reality (using the real world as the background with computer-generated content that interacts with the physical features of the world).
- CofC: College of Charleston
- Domain Model: A visualization of the main objects of the software.
- OS: Operating System.
- Special Requirements: Requirements that are not necessary for the core functionality of the project to work.
- Use Case: An instance where an actor interacts with the program/parts of a program.
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