

Missions and Madness

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Problem Statement

Missions and Madness began as a small scale location based adventure game, but our client wants to expand it! To do so we need to up scalability

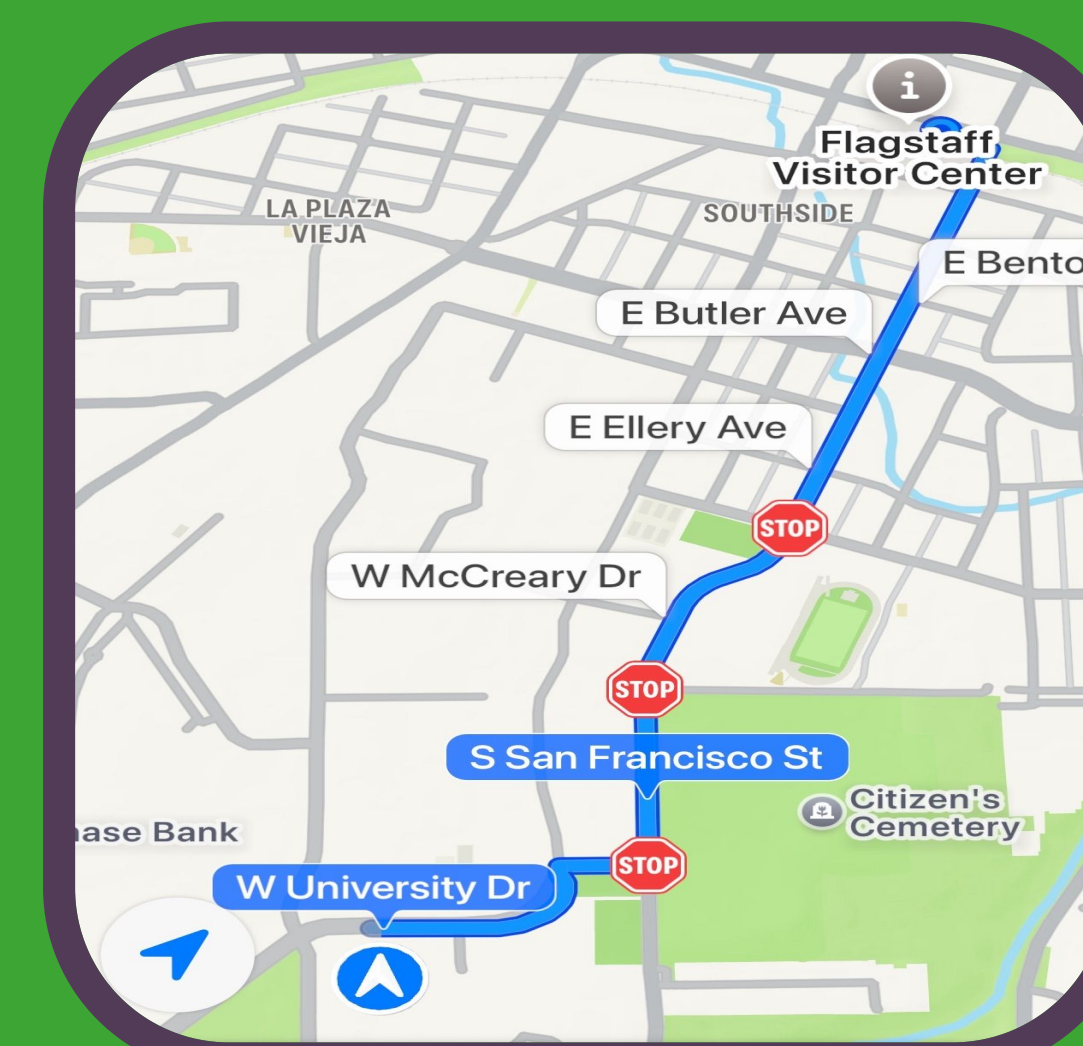


Fig. 1 Current Image of gameplay, wanted to be more interactive - **Fig. 2** UML Flowchart of game play

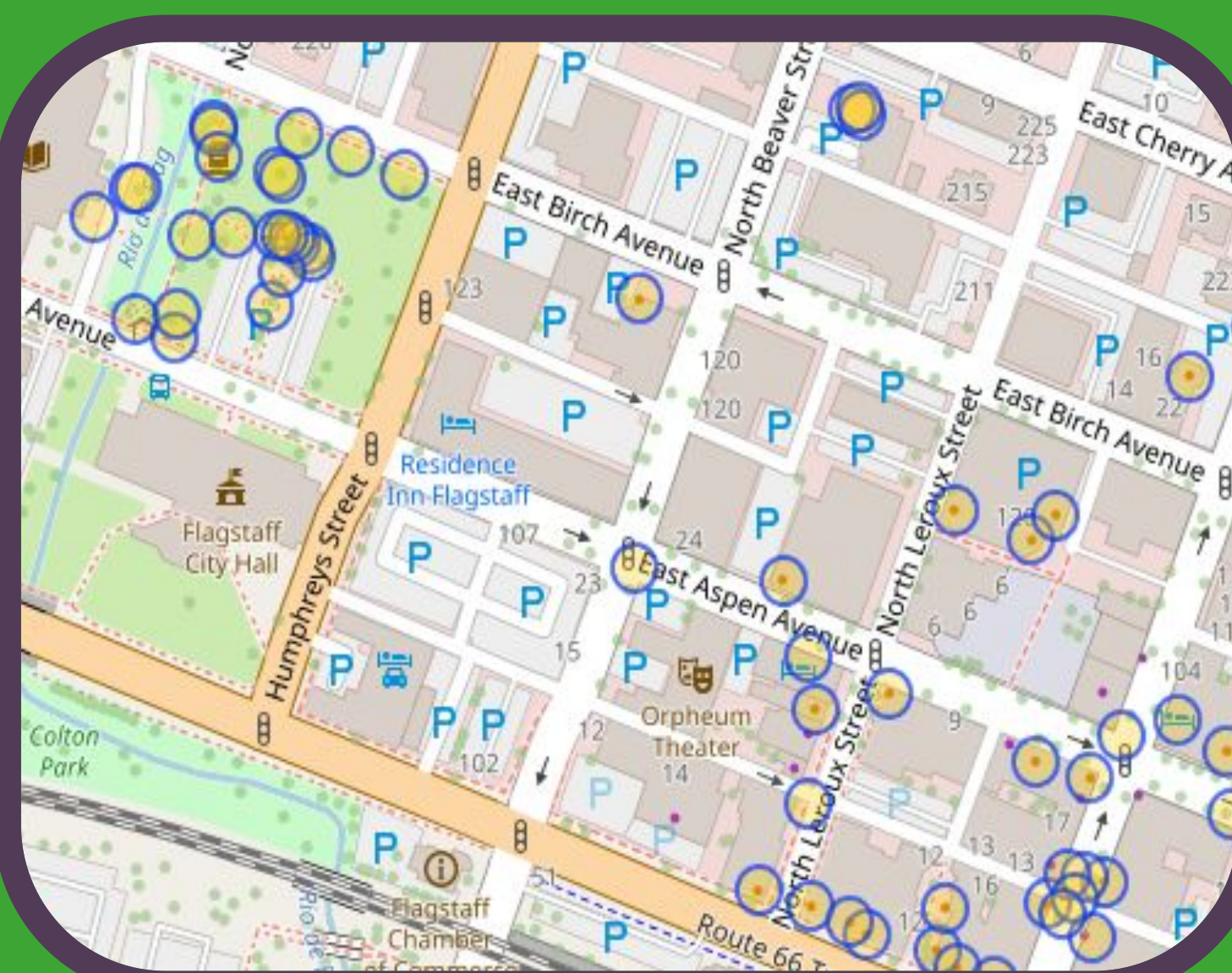
Proposed Solution

Through meetings with our client - We came up with this core idea of a version with 3 key aspects:

[1] A connected Map and GPS to help guide the user, with varying levels of information



[2] A connected Database of Points Of Interest (POIs), making the game playable anywhere!



[3] A refined a polished UI to give a better User experience, as well as implementing tutorials.



Prototypes

After work in our tech feasibility we have found this all to be rather feasible, with the following prototypes already developed!

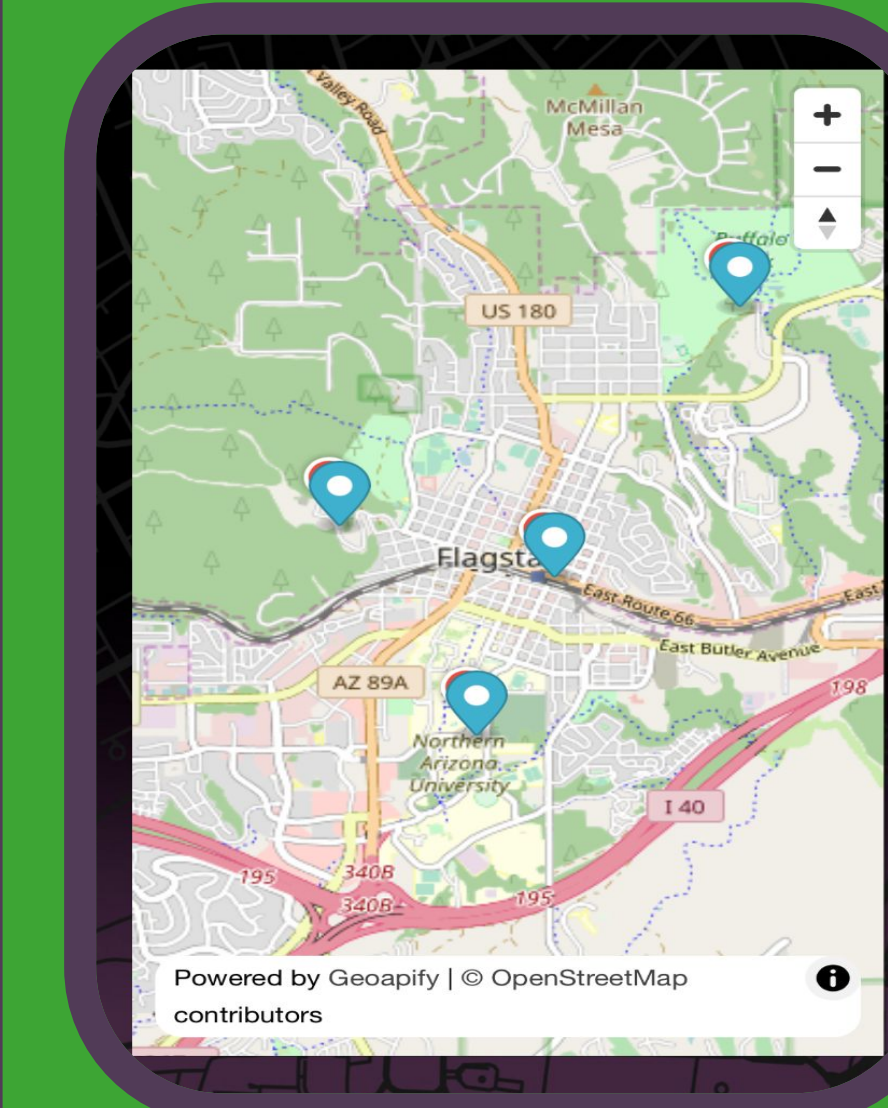


Fig. 3 Our prototype of Maps via GeoApify - **Fig. 4** Our prototype of GPS Coordinates with Unity Packages

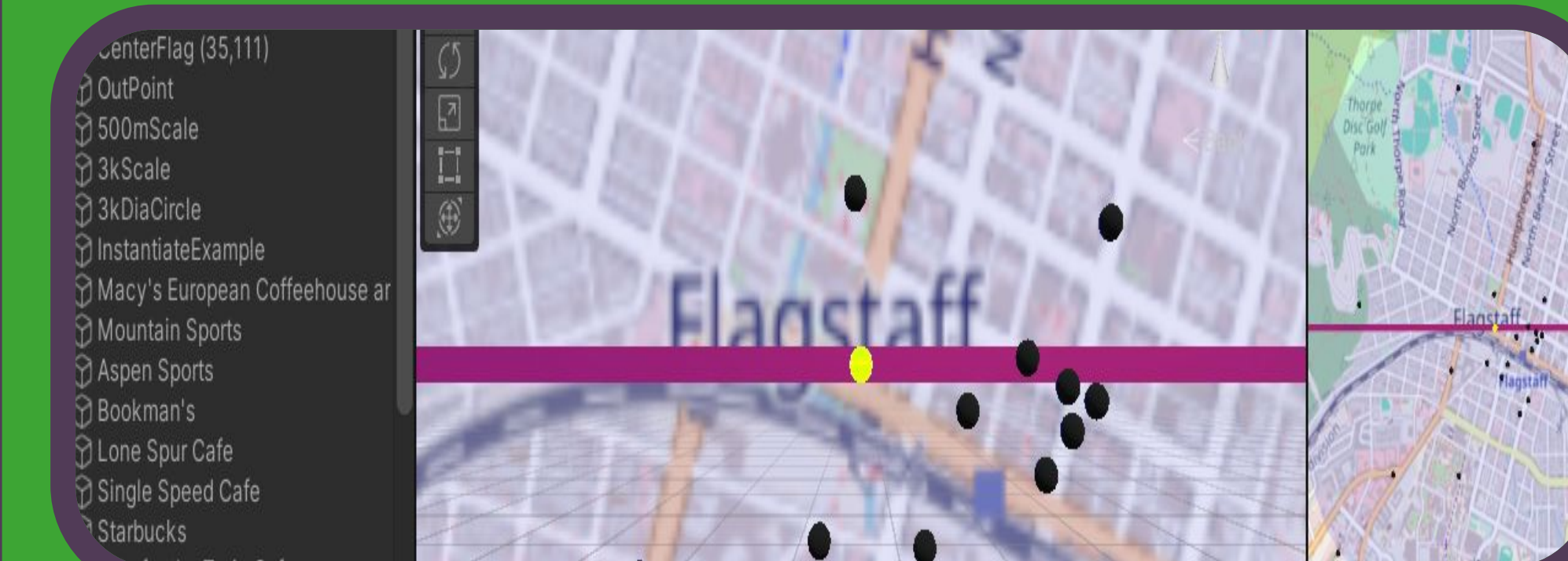


Fig. 5 Our prototype of Querying POIs (OverPass Turbo) from inside Unity

Plans and Goals



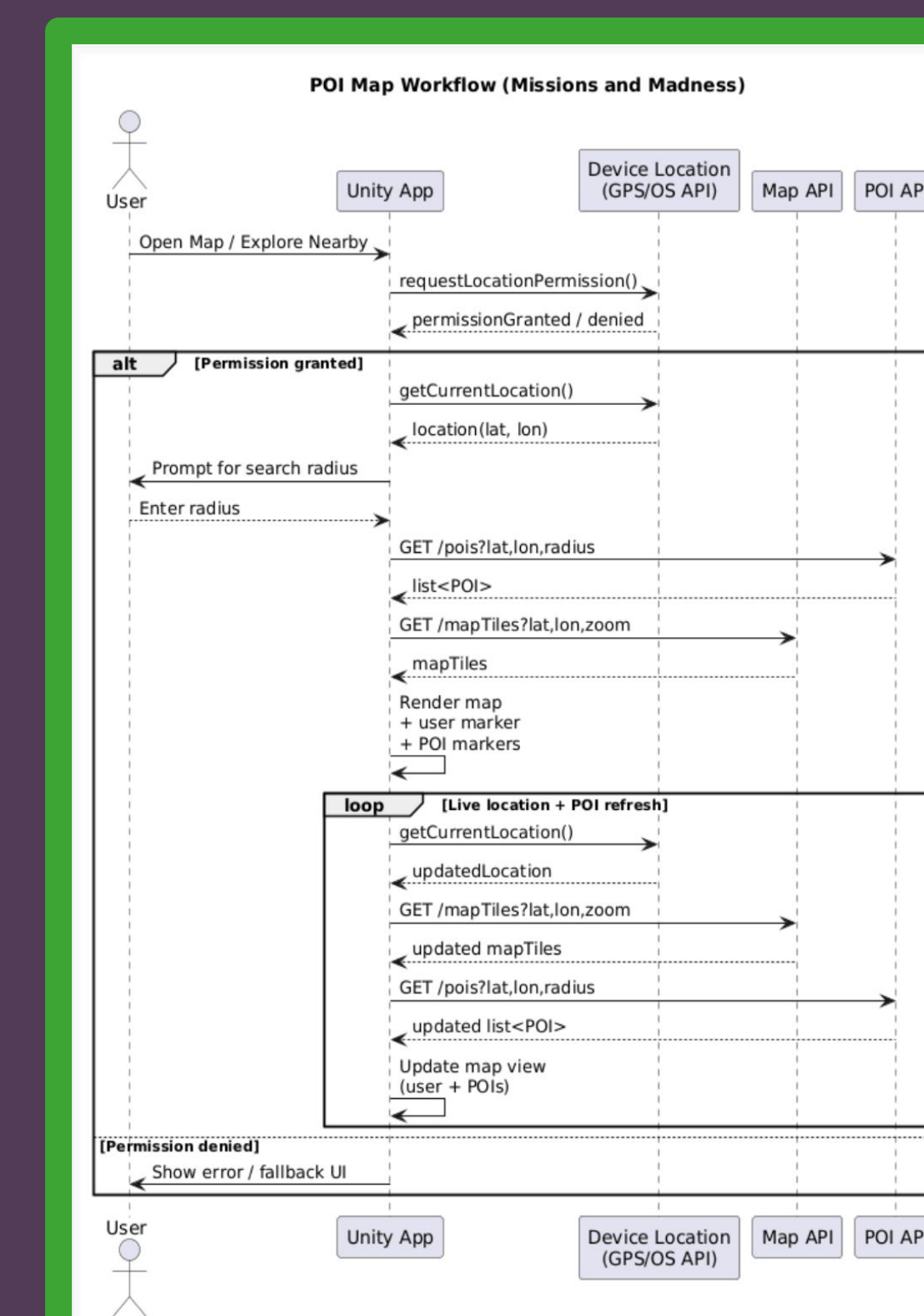
Fig. 6 Current flow of our plans for future production

We will start the with **implementing the map**, then we will connect the **GPS** and **POIs**, and during all of this we will overhaul the **UI**, and finally we will end with **beta testing and revisions**.

Solution Schema

We will deliver an application for both **iOS** and **Android** mobile devices that is easy to use for new players and has a modern, clean **UI** that can be used **nationwide** at launch

Fig. 7 Current tech flow of our product



Technologies

- Unity
- GeoAPIfy
- OverPass Turbo API
 - Hits OpenStreetMaps DB
- WikiData API
 - Hits Wikipedia DB
- Android
- iOS

