#### Abstract:

Our project is a take on the game Geoguesser adapted to the OSU campus. Our game will be a web-based application where users are shown a 360 image from around the Oregon State University Campus and asked to guess the location of the image taken. Our major developmental goals are, a user authentication system, user profile, leaderboard system, and integrated locational data.

#### 1. Team info

Provide a concise summary of the project team and project artifacts. Specifically: List each team member and their role in the project.

- Blake Database
- Joy API/ data collection
- Kevin Tran Backend
- Kevin Nguyen Backend
- Sam UI Designer/Dev
- Gavin Frontend
- Lukas API/data collection

# **Role Description:**

Database:

Creation of database and integration with application

API/data collection:

Collection of photos and integration of Google Maps API's

Backend Developer:

Creation of server and backend logic

• Frontend Developer:

Creation of website and integration of website with backend processes and user interface

• UI designer/Dev:

Creation of user interface and frontend structure

#### Communication/Tools:

Link to each project-relevant artifact such as your git repo (this can be empty for now). <a href="https://github.com/blakethomas12/Team-18">https://github.com/blakethomas12/Team-18</a>

List communication channels/tools and establish the rules for communication.

Discord server

# Rules:

- Communicate any changes
- Members report when they can't be present
- Give everyone a chance to talk
- Ask for help when there's an issue with their task

## 2. Product description

#### Goal:

The goal of this project is to help students engage more with the OSU campus by playing a game while familiarizing themselves with the different classrooms and buildings.

**Current practice:** How is it done today, and what are the limits of current practice? The inspiration for this project, Geoguesser, is designed around trying to guess the general area around the world that the player is shown, which limits how accurate guessing can be within smaller areas and distances.

**Novelty**: What is new in your approach and why do you think it will be more successful than other approaches? Do not reinvent the wheel or reimplement something that already exists, unless your approach is different.

This would be a project that works on a more local scale, one that is more applicable to the current living environment that the group and other students at OSU are currently familiar with, thus encouraging a more observant approach to everyday student life.

**Effects**: Who cares? If you are successful, what difference will it make? Students at Oregon State University will seek this game for simple, but engaging entertainment. If the product is successful, students will have more knowledge about the OSU campus and its landmarks.

**Technical approach**: Briefly describe your proposed technical approach. This may include what system architecture, technologies, and tools you may use.

Create a website connected to a custom database of locations and the Google Street View API. We serve a random picture or location from the database to the user. The is linked to a point on the map. The user inputs a point on the map. This is analyzed, and the user is given a certain amount of points for how close they are. These points are stored in the database and added to the leaderboard, which is displayed at the end of the game.

**Risks:** What is the single most serious challenge or risk you foresee with developing your project on time? How will you minimize or mitigate the risk? Don't state generic risks that would be equally applicable to any project, like "we might run out of time".

There may be limits to the Google Maps API, but as long as we stay under the limit of requests per month, we should be able to use it for free.

# 3. Additionally, add the following:

## **Major Features:**

- Location Data
- Leaderboard
- User Authentication
- User Profiles

## **Stretch Goals**

- Multi-User competition
- User Submissions
- Reward System