

# Group 24 SoPra Project Proposal

We plan to implement a game in a similar fashion as [GeoGuessr](#). The player will be randomly placed somewhere on Google maps (for example: a country, a city or a monumental place like the eiffel tower). At the beginning of the game the map won't be visible and there is some sort of fog over the map. The goal of the player is to brush away as little as possible of the fog to recognize the place he is located in. The scoring will be based on points.

There will be different game modes, you can play against the time or against some friends.

## **Simple Option**

- One game mode with brushing away fog

## **Extensive Options**

- Multiple game modes (fog, pixelation/blurring/distortion, bigger/smaller brush, different difficulties)

## Our Comments to the specified Requirements:

### **Technology Stack**

React, Java, Spring Boot, GitHub (Actions), Heroku, JPA

### **Client And Server Structure**

- Client for playing the game with friends in the browser
- Server for coordinating game, points, rankboard, handling GoogleMaps API Integration

### **Server REST API**

Our server will provide a rest API with endpoints for the different clients to consume. Finding a room, submitting answers, processing answers, sending out results, ...

### **Persistence layer**

We will store scores to build up a leaderboard, we will store ongoing game status, results, members, list of coordinates we want to show to the user for them to guess.

### **Working on a shared goal**

It is a guessing game that is played in real time. The player who guesses the location as fastest, receives the most points. The goal is to encourage the players to use their intuition and geographical knowledge to surpass their opponents.

### **Usefulness of Task**

Task is more than cust CRUD Operations, we have to coordinate multi user game play, who's faster, and in general the fun aspect gives our application a decent degree of usefulness

### **Small User base is enough**

It is enough to have one or up to 5 friends to play with. You create a game room which they can join so no big user base is needed for the application to be useful.

**External API**

We will use the Google Maps API for Satellite/Streetview imagery. ( Might use Google as an SSO for Authentication as it makes getting API keys for Google Maps much easier)