

## CS411 A4-Group2

### Idea Proposals

#### Idea 1: Stargazing report in your area

Takes user location and finds stars/constellations/planets/moons that would be good to look at on any given night. Checks weather API to see if it will be a clear/cloudy night. Checks light pollution API to see what is visible. Lists whether objects can be seen with the naked eye or needs a telescope. Possible AR night sky finder component? Could allow easy copy-paste of objects to AR app. A feature that tells you where the best location is to view the night sky in your immediate area based on user input for how far the user is willing to travel. Could also give the best time to view objects and the best date to view them. The database could store users as well as which objects they are interested in and their log-in locations.

Some possible APIs:

<http://simbad.cds.unistra.fr/guide/sim-url.htx>

<http://www.sky-map.org/>

<https://vizier.cfa.harvard.edu/viz-bin/VizieR>

<https://stellarium-web.org/>

#### Idea 2: Finances

Recommends different investments to add to your portfolio. Given a user's portfolio, we use an API to see how to further diversify investments. Another API can be used to recommend what the user should invest in that specific market. A database is needed to store user profiles and information. OAuth would be needed to log into the user's portfolio with a given brokerage.

Some possible APIs:

<https://polygon.io/>

<https://portfoliooptimizer.io/>