Group 14 Project Proposals

1. **Fractify (4/10-5/5)**
   Description: Creates a Spotify playlist fractal cover based on attributes of the music in a playlist, specifically valence, mode, and energy. After the user logs in with their Spotify account, they can select the playlists in their library to create fractals for. The fractals can then be downloaded or replace the corresponding Spotify playlist covers.
   Database: playlist/cover image cache, song information cache
   APIs & **Datasets:** Spotify and Fractal (https://github.com/rafgraph/fractal)
   Oauth: Logging in with Spotify
   Backend: Any Oauth secret keys

2. **YellowBrick (2/19-4/10)**
   Description: Maps out most well lit routes and safest routes in Boston for walking at night. Using google maps, give a handful of routes from point A to point B, and then rank them based on how many street maps there are / emergency lights give it a score. Potentially leave it up to the user to make the final choice what route to take, or choose by algorithm based on the highest safety score based on streetlight data.
   Database: MongoDB, google map sign-ins
   APIs & **Datasets:**
   - Boston coordinates of streetlight: https://data.boston.gov/dataset/streetlight-locations
   - Crime rates: blue phone locations, property values, sidewalk cracks?
   - Light Pollution: https://www.lightpollutionmap.info/#zoom=4.00&lat=45.7116&lon=-51.3669&layers=B0FFFFFFTFFFFFFFFF

   Oauth: Logging in with Google, Facebook, or Twitter.
   Backend: Any Oauth secret keys.