### Brookelynn

Lift Off Project Outline

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### **Overview**

Destination travel is a popular way to experience the world for millions of people. This software application will allow users to create and view custom travel dashboards, populated with their own unique information, and view an embedded web map to help plan great travel experiences. There is great potential for increased utility of custom, tailored web-GIS tools, especially those that take existing user needs and feedback into consideration. Current recreational travel tools are often difficult to navigate or place a burden on the individual to learn how to use complicated GIS tools. These applications fail to fulfill basic travel planning needs, like incorporating the ability to store and organize spatial and temporal elements, which affect user decision-making. In addition, most existing trip planning systems are proprietary in nature or host data on a proprietary system, which often monetize user data to generate ads and influence a user’s decision making. As such, development efforts will utilize free and open source development and GIS layers/tools to the greatest extent possible.

Existing research shows that people use maps at every stage of travel- during planning, while actively traveling, and even after the trip has ended to reflect or remember locations they visited. However, many find that existing web map, data storage, and visualization functionalities are limited. In addition, only the most dedicated of planners actively take the time to organize and curate this information in a meaningful, structured way that allows for greater search, evaluation, or analysis. This software will allow people to create and edit trips and associated itinerary details, organize them by type or location, search for previous locations, and view details in a calendar or map.

### **Features**

* Create user account and log in
* Search by keyword
* Edit trip data
* Organize by overarching trip detail (Italy trip, Romania trip...) or by type (Italy trip; hotels OR Italy trip; sightseeing)
* View or interact with a map
* Integrate with calendar tools
* Create post or tags (free text posts about things they liked/didn’t like)

### **Technologies**

This software applications will use the following stack:

* + Java
  + Spring Boot
  + Hibernate
  + MySQL (possibly postGres)
  + Thymeleaf templates (javascript)
  + Leaflet.js

### **What I'll Have to Learn**

* I need to refresh the basics of how to create user accounts, set up the db connection, and generate my build.gradle files
* I will need to learn how to create an interactive web map on my page or incorporate a web map of any type. I have found the following learning resources:
  + LiftOff GIS devOps page:
    - <https://education.launchcode.org/gis-devops/week05/display-map/index.html#create-tests-indexcontrollertests-java>
      * Create templates/index.html
      * Create static/js/script.js
      * Create controllers/IndexController.java
      * Create tests/IndexControllerTests.java
    - <https://www.baeldung.com/geo-tools>
    - <https://medium.com/@hermanmaleiane/spring-boot-thymeleaf-leaflet-js-mapping-corona-virus-a8309c5a0b6d>
    - <https://www.concretepage.com/thymeleaf/thymeleaf-javascript-inline-example-with-variable>
* I will need to learn more about the benefits/pros/cons of learning postGres or MySQL. I can install this easily and see if I can set up an instance; if not, I will use MySQL. I have found some installation/setup resources on the GIS DevOps web page:
  + <https://education.launchcode.org/gis-devops/installations/00-prep-week/index.html#prep-week-installation>
* I need to learn how to incorporate a calendar element or share to a user’s google calendar.

### **Project Tracker**

<https://trello.com/b/js2SzEQG/destination-unknown-lo-2020>