# **Spring Boot Proposal for Final Project**

#### **Overview:**

This Final Project spans the final few weeks of the bootcamp, including 1-2 weeks for design and approval, and two full weeks for implementation. The Project will implement a RESTful Web API with full CRUD (Create, Read, Update and Delete) operations on a MySQL database.

The Spring Final Project is worth 200 points, and accounts for 25% of your final course grade.

**Instructions:** For this assignment, you will begin brainstorming and creating a proposal for your Spring Boot Final Project. Begin brainstorming ideas and come up with one you (and your group if you choose) feel fulfills all the requirements listed below. Your proposal will need to be approved during class in Week 16 by your instructor and finalized by the end of Week 16. Below, you will find a simple template for your proposal.

NOTE: You will <u>not</u> be turning anything in for this assignment this week.

## **Requirements**:

## **Project Requirements:**

### **1-person Project:**

- Database design which contains at least 3 entities and 3 tables
- Contains all CRUD operations (Create, Read, Update & Delete)

- **Each entity** should have **CRUD operations** with one entity having all 4 CRUD operations (Create, Read, Update & Delete).
- Contains at least 1 one-to-many relationship
- Contains at least 1 many-to-many relationship with one or more CRUD operations on this relationship

## **Group Project (max 3 people):**

- · Database should have at least two tables per group member + one.
- Contains 2 entities per person, plus 1 entity done together at the beginning to solidify the structure expected for the project.
- Each member of the group is required **to code their entities top to bottom**, including entity, controller, service, & DAO.
- Each member of the group is required have CRUD operations on both of their entities, and implement all 4 CRUD operations (Create, Read, Update, & Delete) on one of their 2 entities
- · Contains at least 1 one-to-many relationship
- · Contains at least 1 many-to-many relationship with one or more CRUD operations on this relationship

# **Proposal Template:**

(copy and paste into a Word Document)

# **Project Participants:**

List all group members here. Just write your name if you are working solo. **Aaron Hamilton** 

#### Title:

Rezource Scheduler (The "z" is on purpose)

## **Executive Summary:**

I want to create an application that will take a resource, such as a person, place or thing and schedule (rent) it out to others. Such as AirBnB does with a house, but also include items (resources) such as a person providing a service, like a ferrier, or renting out a boat that a person may own.

#### **Initial Features:**

- Entities: Person (which can also be a Rezourcer and/or a Scheduler),
  Reservation, and a Resource
- A User can perform the following operations:
  - o Register as a rezourcer (Post a Person)
  - o Register as a Scheduler (Post a Person)
  - Browse all rezources (Get Rezources)
  - Look at rezource availability (Get a specific rezource)
  - Browse rezources by whether it is a service, place or thing as well as by location. (Get a Rezource by Rezource type)
  - Schedule a rezource (Post a Reservation)
  - Cancel a reservation (Delete a Reservation)
  - Create a rezource (Post a Rezource)
  - o Change the phone number for a scheduler (Put a Person)

## Stretch Goals (to be completed if time allows, or after graduation):

• Calculate the travel time for a service resource and add it into the Schedule availability

- Distance of Address of Resource to Address of Scheduler or distance from adjacent Reservation.
- Allow people to leave Reviews for a rezource
- Have an amenities table/list for a rezource
- Have "knowledge articles"
  - o Things to know
  - o Safety considerations
  - o Cancellation policy
- Add Validation
- Add more Junit test scenarios