

# Spring Boot Proposal for Final Project

**Project Participants:** Lindy Hagedorn

**Title:** Swim\_Events

## Executive Summary:

This is an application for swimmers to find what events they will be swimming and what pool location they will swim at for the event.

## Web API Spring Boot Project:

- **Database design which contains at least 3 entities and 3 tables:** location, swimmer, event
- **Contains all CRUD operations (Create, Read, Update & Delete) ( Each entity should have at least one CRUD operation)**
  - (Post) Create-Create a Location, swimmer and event
  - (Get) Read-Retrieve location\_event\_id
  - (Put) Update-update location, swimmer and event
  - (Delete) Delete-remove location, swimmer and event
- **Contains at least 1 one-to-many relationship:** Swimmer and Location is a one-to-one mandatory. So there is a relationship between location and swimmer.
- **Contains at least 1 many-to-many relationship with one or more CRUD operations on this Relationship:** swimmer and swimmer\_event is the many-to-many relationship. The join table is between swimmer and event.
- Required: REST Web API Server tested through AdvancedRestClient (ARC)

## Initial Features:

**Create a bulleted list of Initial Features. This will be a list of features that meet the requirements of the final project.**

### Example of list of Features/Endpoints for a Library API:

- Entity Ideas: location, swimmer, event
- Operation (Endpoint) Ideas:
- Login, and use system
- Browse all swimmers (GET swimmers )
- Browse events (GET events by specified school or swimmer)
- View all details about a specific location (GET on location by primary key)
- Update a location change (Put) Update-update location, swimmer and event
- Update a swimmer (Put) swimmer using Advanced Rest Client
- Update an event(Put) event using Advanced Rest Client

- Update an location (Put) location using Advanced Rest Client
- Delete swimmer (Delete) swimmer using Advanced Rest Client
- Delete location (Delete) location using Advanced Rest Client
- Delete event (Delete) location using Advanced Rest Client

**Stretch Goals (to be completed if time allows, or after graduation):** Build a FrontEnd application with it.

Database Design -- maybe an ERD which demonstrates the design.

