## Monday

#### Java

- High Level (WORA, JDK/JRE/JVM, OOP, etc)
- Scopes
- OOP
  - Interfaces
  - Abstract Classes
- Threads
- Logging (Log Levels, Config / log4j2.xml)
- JUnit
- Streams API
- Design Patterns (Singleton, Factory, DAO)
- Maven Lifecycles
- JDBC

### SQL

- General Overview
  - SQL commands
  - WHERE and HAVING
  - o ORDER BY and GROUP BY
  - Scalar / Aggregate Functions
  - Joins and Set Operators
  - Indexes
  - Views
- Normalization
- ACID Properties
- Read Phenomena

### Monday Exercises / Assignments

• Java / SQL Hackerrank

# Tuesday

- HTML / CSS Review (necessary for Angular)
  - o Elements and Attributes
  - Selectors and Properties
  - o Bootstrap (?) have a video that I've shared with them.

#### Web Services

- Http Recap
- Servlets
  - ServletContainer, ServletConfig
  - Deployment Descriptor
  - Interface / Class Hierarchy
  - Front Controller
  - HttpSession
- Front Controller
- REST / Endpoints
- JavaScript
  - Scopes
  - o DOM Manipulation
  - Objects
  - JSON (parsing and stringifying XMLHttpResponses mostly)
  - Asynchronous functions
    - AJAX
    - Fetch API
    - Promises

### **Tuesday Exercises / Assignments**

• API: Pick an existing api and create an interactive webpage (i.e. PokeApp)

# Wednesday

### **Application Architecture**:

- Back End: Entities, Repo, Service, Controller layers
- Front End: Presentation and Application Layer
- Connecting front and back end

### Application Set Up and Config

Steps and debugging techniques

#### **AWS**

Group research exercise

## Wednesday

• Quizzes - Java, SQL, HTML/CSS/JavaScript/Servlets

# Thursday

• 1-on-1s

### Friday

• P1 Presentation