

Expeditors – Java Academy

Capstone 01 Instructions & Requirements

Create an API for a Music and Entertainment management system (tracks and artists). The application will be built using Java and can be exercised directly either via tests and/or via console UI. During our second capstone, we will convert our API to a Spring Boot REST API callable via web request but for this capstone, direct exercise of the API functions in Java code is fine.

- Students will work in teams designing and building the application
 - Design work should be done as a team – each member of the team should be aligned on any design decision made
 - Implementation individually or as a group using paired or mob programming; if executed as a group, it is critical that every member of the team get an opportunity for “hands on keyboard” coding
 - Each team should have a short meeting at a fixed time every day to talk about status and any issues or blockers that team members are facing

Features:

- Provide CRUD (Create/Retrieve/Update/Delete) functionality
- Allow for querying across domains (tracks and artists) – enable management of each domain model type individually as well as management of the composed type (i.e., support CRUD functionality for artists and for tracks which have an associated artist)

Tech Stack:

- Java
- Data will be kept in memory (during our third capstone, we will leverage a database for persisting our data)

Deliverables:

- A functioning Java API
- A suite of unit tests for all tiers of the application (including mocking where appropriate)
- A presentation on the completed application