



## API EC May – August 2022:

### CAT 1: Lab Exercise (Group Work)

#### **Instructions**

- Attempt the entire task
- In groups of 6 members (**minimum of 5**), complete the following task:

#### **Task**

- Choose an entity from the list below (Appendix 1)
- Identify at least classes that can be used to describe the entity (refer to **bookfarm** exercise)
- Create an association diagram for the **3** classes and include the possible relationships between them (One-to-One, etc.) (**10 Marks**)
- Create a Spring Boot Application on **IntelliJ** or **Spring Initializr** (<https://start.spring.io/>) and:
  - Load the application into your IDE
  - Ensure you also include the relevant dependencies during app initialization
  - Create the 3 models you designed in (iii above)
  - Ensure the relationships are also enforced in the model creation on the Spring Boot App
  - Compile the application (running the Spring Boot Starter app), to confirm the app setup is successful.

NOTE: Since we have not designed actual APIs, the server log will be able to tell you where your application assembly is successful when it does not generate an error

**(15 Marks)**

- Add your entire project to a local repository and then push the project to a remote repository on GitHub

**Deliverable: Submit the link to your GitHub repository at the eLearning portal**

**(5 marks)**

**Deadline: 23 July, 2022 (11:59 PM)**

### **Appendix 1: List of Possible Entities**

- i. Hospital
- ii. School
- iii. Hotel
- iv. Car Hire
- v. Bank
- vi. Real Estate Company
- vii. Bakery
- viii. Charitable Organization
- ix. Airline
- x. Superstore
- xi. **Any other of your choosing**

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