**Problem Statement**

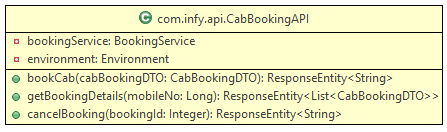
InfyCabs is an application for booking cabs. Its following functionalities needs to be exposed as REST API:

1. Book a cab
2. Get booking details
3. Cancel booking

The service and persistence layer of this application is already implemented. You have to implement the API layer of this application for exposing the above functionalities. Follow the below mentioned steps to get started:

1. Click [here](https://academy.onwingspan.com/common-content-store/Shared/Shared/Public/lex_auth_013063843061391360885_shared/web-hosted/assets/InfyCabsToTrainee1640782917580.zip) to download​​​​​​​ and import the project in Eclipse.
2. Change the database credentials in application.properties file
3. Execute TableScript.sql file to upload sample data to your database

1. **CabBookingAPI**  
 Implement the CabBookingAPI class based on the class diagram and instructions given below:



1. Annotate this class with proper annotation to declare it as REST controller class.
2. Annotate this class with proper annotation so that all its methods are mapped with **/bookings** as base URI.
3. Inject bookingService and environment using appropriate annotation.

**Method description:**

**bookCab(CabBookingDTO cabBookingDTO)**

* This is a REST controller method to book a cab.
* Implement it using proper annotations according to description given below:
  + **Resource endpoint:** /
  + **HTTP method:**POST
  + **Input:**Booking details as part of HTTP request body.
* It should invoke the bookCab() method of BookingServiceImpl class which returns a booking id.
* Retrieve the success message associated with property API.BOOKING\_SUCCESSFUL from application.properties files using environment and append it to booking id in following format:
  + <success message>booking id
* It returns an object of ResponseEntity created using above message and HTTP status code as CREATED.

**getBookingDetails(Long mobileNo)**

* This is a REST controller method to get cab booking details based on mobile number of user.
* Implement it using proper annotations according to description given below:
  + **Resource endpoint:** /{mobileNo}
  + **HTTP method:**GET
  + **Input:** mobileNo as path variable.
* It should invoke the getDetails() method of BookingServiceImpl class which returns a List<CabBookingDTO>.
* It returns an object of ResponseEntity created using List<CabBookingDTO> obtained in previous step and HTTP status code as OK.

**cancelBooking(Integer bookingId)**

* This is a REST controller method to cancel cab booking based on bookingId.
* Implement it using proper annotations according to description given below:
  + **Resource endpoint:** /{bookingId}
  + **HTTP method:**PUT
  + **Input:** bookingId as path variable.
* It should invoke cancelBooking() method of BookingServiceImpl class.
* Retrieve the message associated with property “API.BOOKING\_CANCELLED” from the properties file.
* It returns an object of ResponseEntity created using above message and HTTP status code as OK.

2. **Use the Postman tool to test the API using following data:**

* Resource URL : http://localhost:8765/bookings/9877766756
  + HTTP Method : GET
  + Expected output :

1. [
2. {
3. "bookingId": 1,
4. "source": "San Jose",
5. "destination": "Los Angles",
6. "fare": 340,
7. "travelDate": "2020-07-14",
8. "userMobile": 9877766756,
9. "status": "B"
10. }
11. ]

* Resource URL : http://localhost:8765/bookings/
  + HTTP Method : POST
  + Input :

1. {
2. "source": "San Jose",
3. "destination": "Los Angles",
4. "fare": 1524.00,
5. "travelDate": "2019-07-25",
6. "userMobile": 9998766756,
7. "status":"B"
8. }

* Expected output :

**Booking successfully with booking id :  3**

* Resource URL : http://localhost:8765/bookings/1
  + HTTP Method : PUT
  + Expected output :

**Booking cancelled successfully.**

3. Develop a REST client using RestTemplate and consume the API.