

## Booking Service

1. Configured the project – In application.properties and pom.xml.
2. Created the Data Access Layer - Started by creating BookingInfoEntity and TransactionInfoEntity according to the schema provided. Proceeded to create DAO package.
3. Created Error Handler Class.
4. Created the Service Layer - Created BookingService Interface and then proceeded to implement the concrete BookingServiceImpl Class. Started by creating the acceptDetails method and provided it with the functionality to generate random room numbers.  
Set the base price per room to 1000 and created the method to calculate number of days customer is going to stay and then calculated the price accordingly.  
Finally created the bookRoom method to book the rooms.
5. Created the DTO Layer – Created BookingDTO and TransactionDTO inside dto package.
6. Created the Controller Layer – Created the BookingController with all the CRUD functionalities and REST APIs. Also, handled the exceptions by instantiating ErrorHandler class. Following are the exceptions :
  - A. To return “Invalid mode of payment” if payment mode is other than Cash or Card.
  - B.To return “Invalid Booking Id” if the requested Booking Id does not exist.
7. Checked all the rest endpoints in Postman and made sure whether the exceptions are handled properly.

## Payment Service

1. Configured the project – In application.properties and pom.xml.
2. Created the Data Access Layer – Started by creating TransactionDetailsEntity according to the schema provided.
3. Created the Service Layer - Created PaymentService Interface and then proceeded to implement concrete PaymentServiceImpl class. Started by creating performTransaction method which will save transaction details in the DAO Layer. Created getTransaction method to return the transaction based on Id.
4. Created the DTO Layer – Created TransactionDTO in dto package.
5. Created the Controller class – TransactionController.
6. Checked all the rest endpoints in Postman and made sure everything works according to the guidelines provided for the project.