

# Project Walk-Through

## Eureka Server

In Eureka Server, we have eureka server application annotated as `@EnableEurekaServer`. So that Booking service and Payment service register themselves on the Eureka server.

In application.property file some fields( like: port, resgisterWithEureka and fetchRegistry) were created.

## Booking Service

In Booking service we have three packages:

### 1. Entity

Here, we have BookingInfoEntity class which is annotated with `@Entity`. This class contains fields related to room bookings and two methods.

generateRoomNumber method generates the random room numbers based on the number of rooms needed.

calculateTotalPrice method generates the total billable amount based on the number of rooms and number of days of stay.

### 2. DAO

Here we have BookingDao interface extending JPA repository. Which provides us different methods to work with database without any boilerplate code.

### 3. Controller

Here we have BookingController annotated with `@RestController` and mapped with `"/hotel"` request.

Inside we have roomBooking method handling post requests for saving booking details in booking table and also some fields (booked On, total Price and room numbers) generated in this method.

Then we have roomPayment method which handles post requests for saving payment details for a booking id inside transaction table. Inside this we first check for valid booking Id. Then we check for valid payment mode details. After validations, a synchronous call sends to payment service, which returns the responseTransactionId for booking payment.

Note: If this responseTransactionId is -1 then the payment is already completed for that booking Id.

## Payment Service

Here we have three packages just like Booking service.

In controller package we have payment controller in which we have two methods: createTransaction method receives the post request from booking service to validate and save the transaction details. So here we first check whether received booking id already present or not. If booking id is already present in table then -1 will be returned to booking service.

getTransactionInfoByTransactionId is get method which returns the transaction details for provided id.