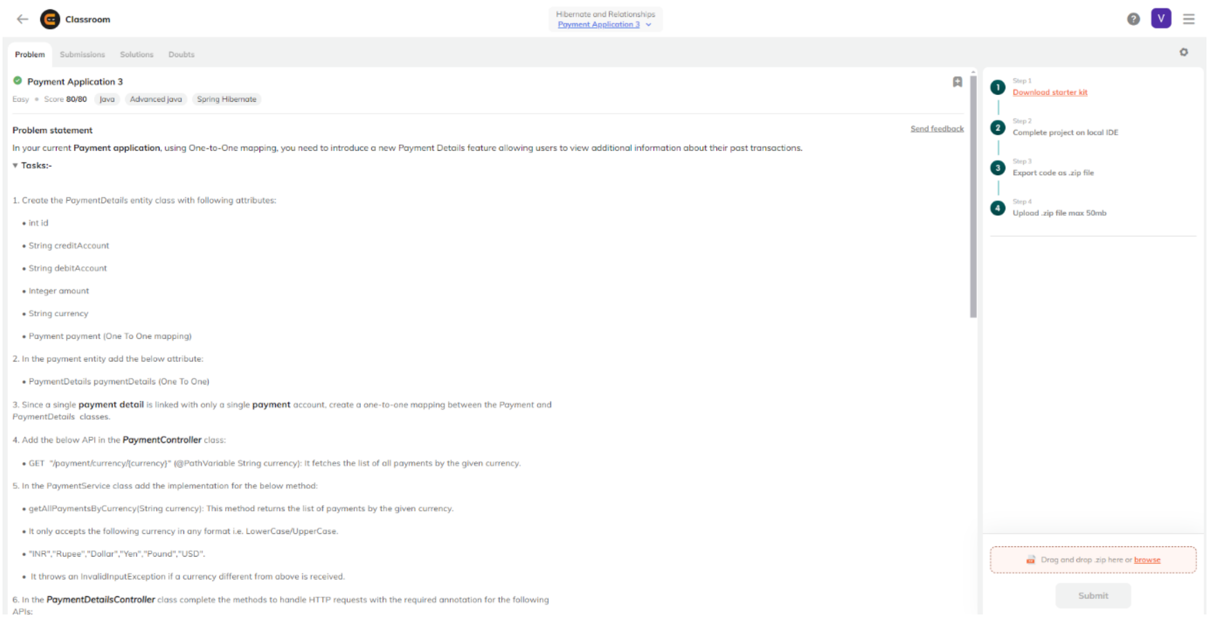
Payment Application III

Problem Statement:



Payment Application 3

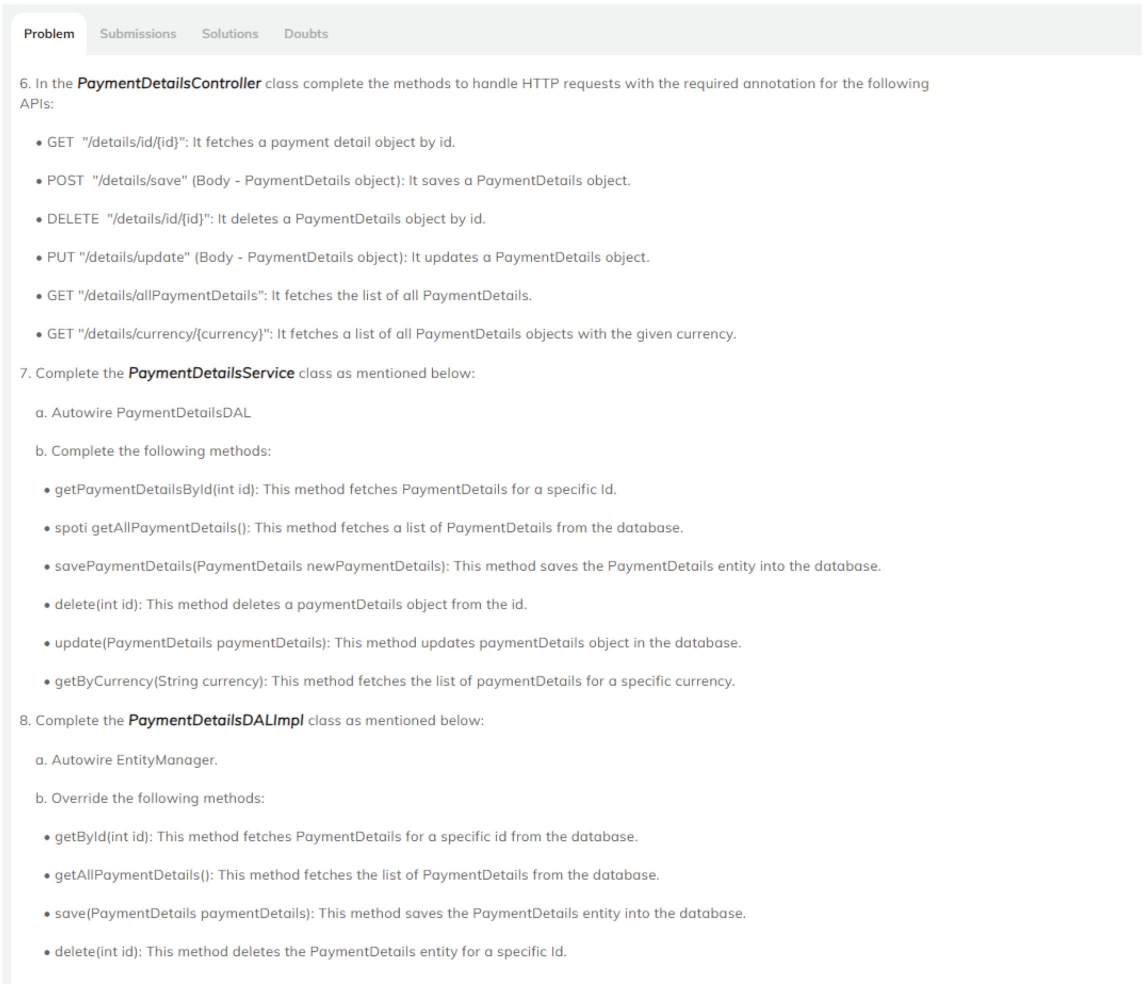
Easy • Score 80/80 Java Advanced java Spring Hibernate

Problem statement

In your current **Payment application**, using One-to-One mapping, you need to introduce a new Payment Details feature allowing users to view additional information about their past transactions.

▼ **Tasks:-**

1. Create the *PaymentDetails* entity class with following attributes:
   - int id
   - String creditAccount
   - String debitAccount
   - Integer amount
   - String currency
   - Payment payment (One To One mapping)
2. In the payment entity add the below attribute:
   - PaymentDetails paymentDetails (One To One)
3. Since a single **payment detail** is linked with only a single **payment** account, create a one-to-one mapping between the *Payment* and *PaymentDetails* classes.
4. Add the below API in the **PaymentController** class:
   - GET "/payment/currency/{currency}" (@PathVariable String currency): It fetches the list of all payments by the given currency.
5. In the PaymentService class add the implementation for the below method:
   - getAllPaymentsByCurrency(String currency): This method returns the list of payments by the given currency.
   - It only accepts the following currency in any format i.e. LowerCase/UpperCase.
   - "INR","Rupee","Dollar","Yen","Pound","USD".
   - It throws an InvalidInputException if a currency different from above is received.
6. In the ***PaymentDetailsController*** class complete the methods to handle HTTP requests with the required annotation for the following APIs:



6. In the ***PaymentDetailsController*** class complete the methods to handle HTTP requests with the required annotation for the following APIs:
   - GET "/details/id/{id}": It fetches a payment detail object by id.
   - POST "/details/save" (Body - PaymentDetails object): It saves a PaymentDetails object.
   - DELETE "/details/id/{id}": It deletes a PaymentDetails object by id.
   - PUT "/details/update" (Body - PaymentDetails object): It updates a PaymentDetails object.
   - GET "/details/allPaymentDetails": It fetches the list of all PaymentDetails.
   - GET "/details/currency/{currency}": It fetches a list of all PaymentDetails objects with the given currency.
7. Complete the **PaymentDetailsService** class as mentioned below:

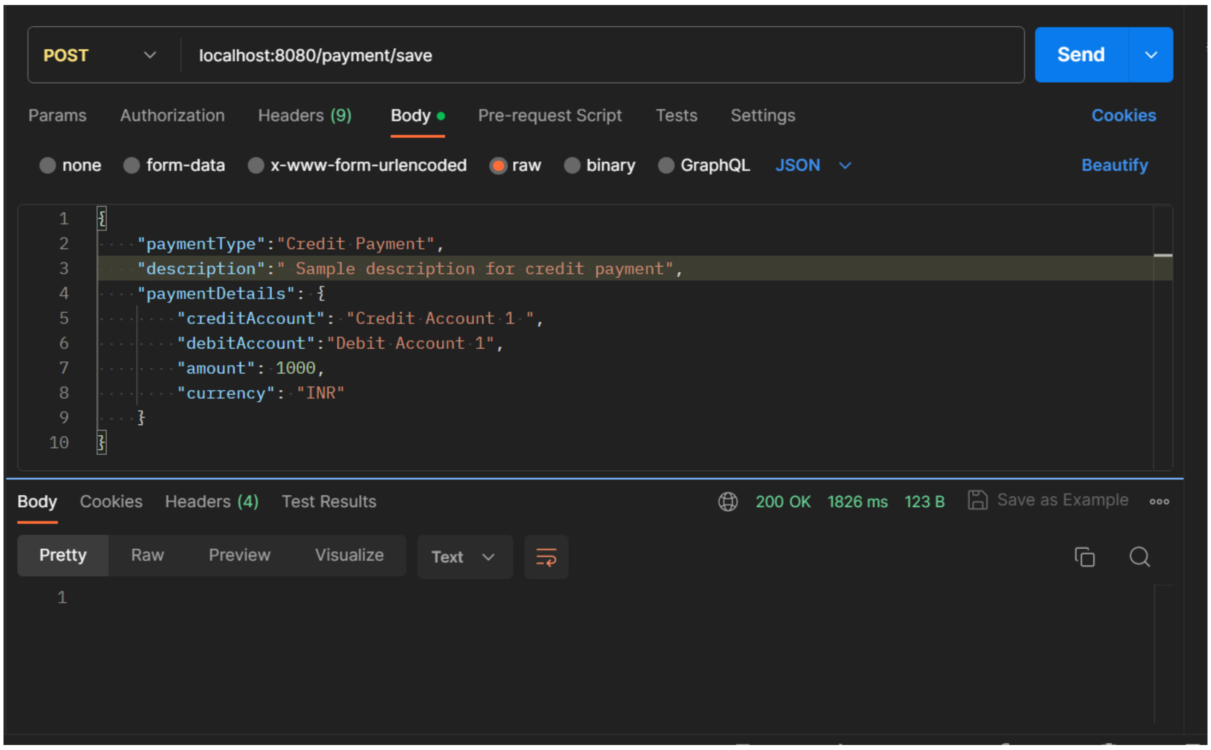
   a. Autowire PaymentDetailsDAL

   b. Complete the following methods:
   - getPaymentDetailsById(int id): This method fetches PaymentDetails for a specific Id.
   - spoti getAllPaymentDetails(): This method fetches a list of PaymentDetails from the database.
   - savePaymentDetails(PaymentDetails newPaymentDetails): This method saves the PaymentDetails entity into the database.
   - delete(int id): This method deletes a paymentDetails object from the id.
   - update(PaymentDetails paymentDetails): This method updates paymentDetails object in the database.
   - getByCurrency(String currency): This method fetches the list of paymentDetails for a specific currency.
8. Complete the ***PaymentDetailsDALImpl*** class as mentioned below:

   a. Autowire EntityManager.

   b. Override the following methods:
   - getById(int id): This method fetches PaymentDetails for a specific id from the database.
   - getAllPaymentDetails(): This method fetches the list of PaymentDetails from the database.
   - save(PaymentDetails paymentDetails): This method saves the PaymentDetails entity into the database.
   - delete(int id): This method deletes the PaymentDetails entity for a specific Id.

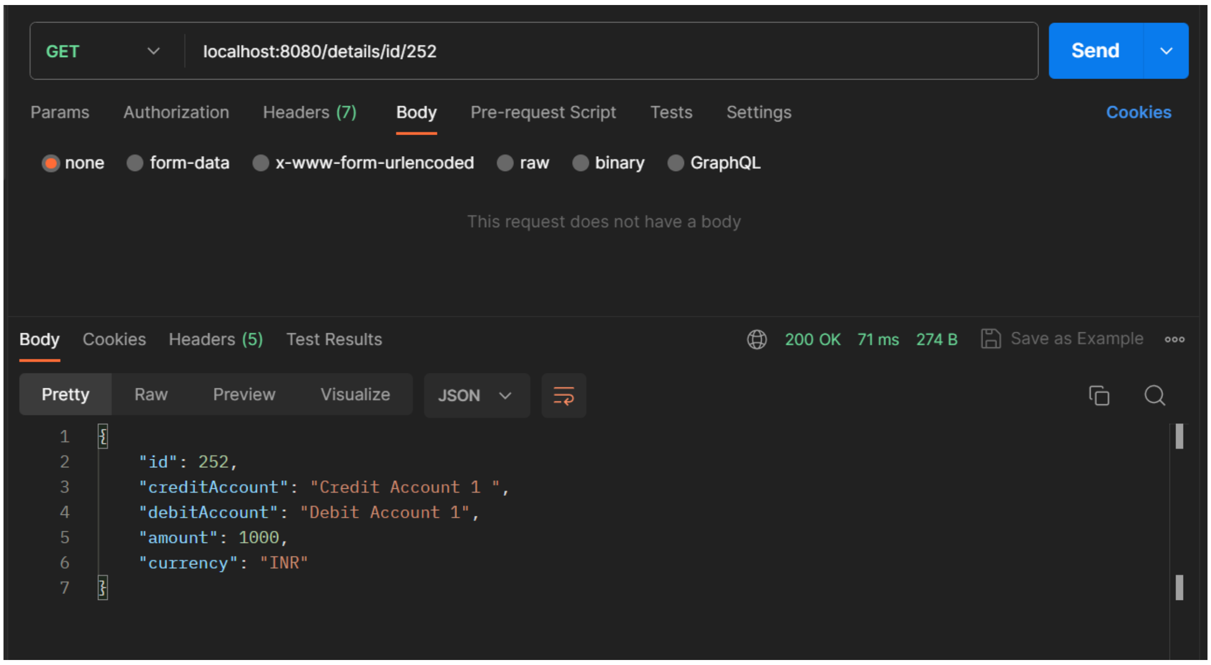
Output:



localhost:8080/payment/save

```
{
    "paymentType":"Credit Payment",
    "description":" Sample description for credit payment",
    "paymentDetails": {
        "creditAccount": "Credit Account 1 ",
        "debitAccount":"Debit Account 1",
        "amount": 1000,
        "currency": "INR"
    }
}
```

200 OK 1826 ms 123 B



localhost:8080/details/id/252

This request does not have a body

200 OK 71 ms 274 B

```
{
    "id": 252,
    "creditAccount": "Credit Account 1 ",
    "debitAccount": "Debit Account 1",
    "amount": 1000,
    "currency": "INR"
}
```