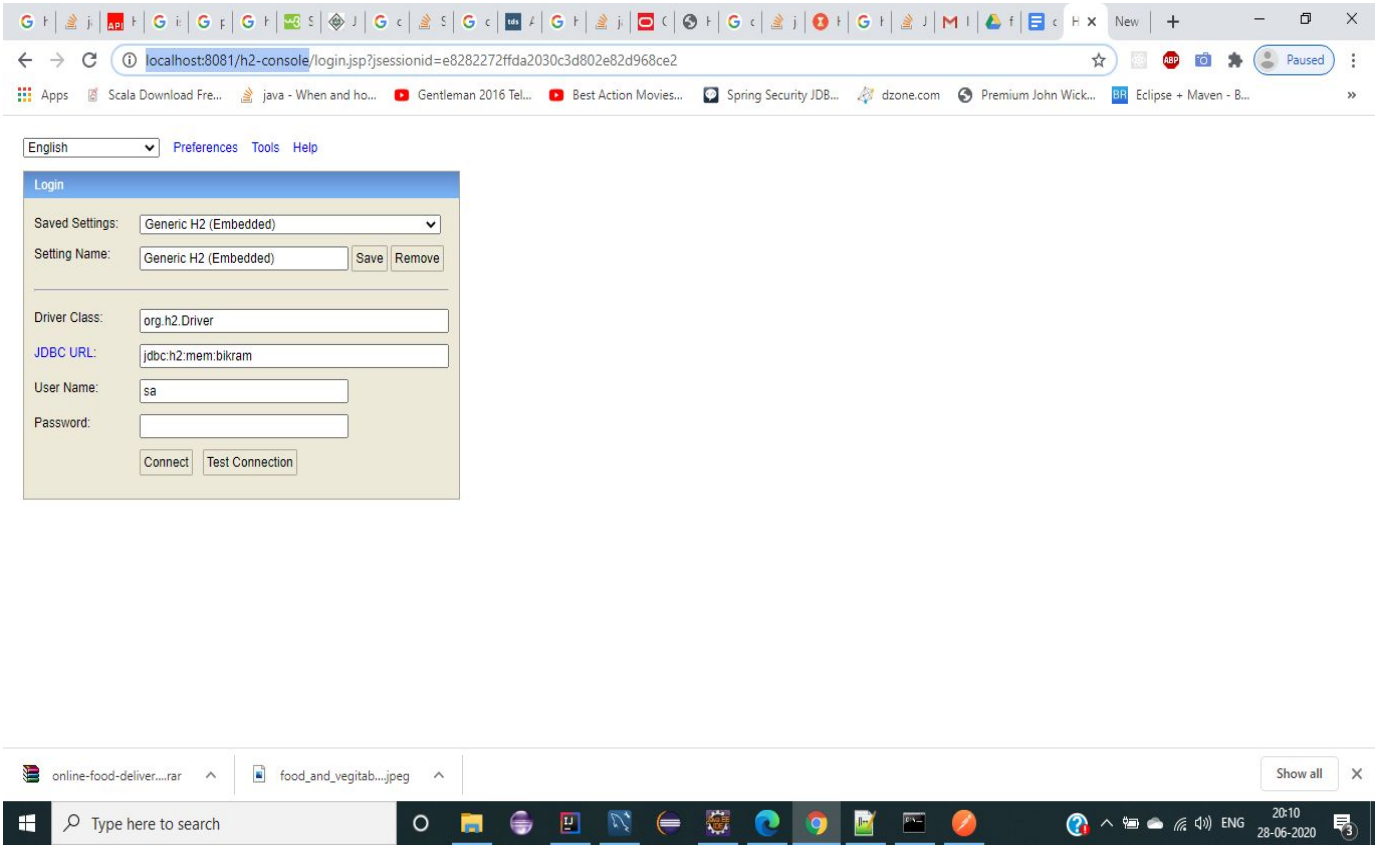
Food Delivery System

TECHNOLOGY:

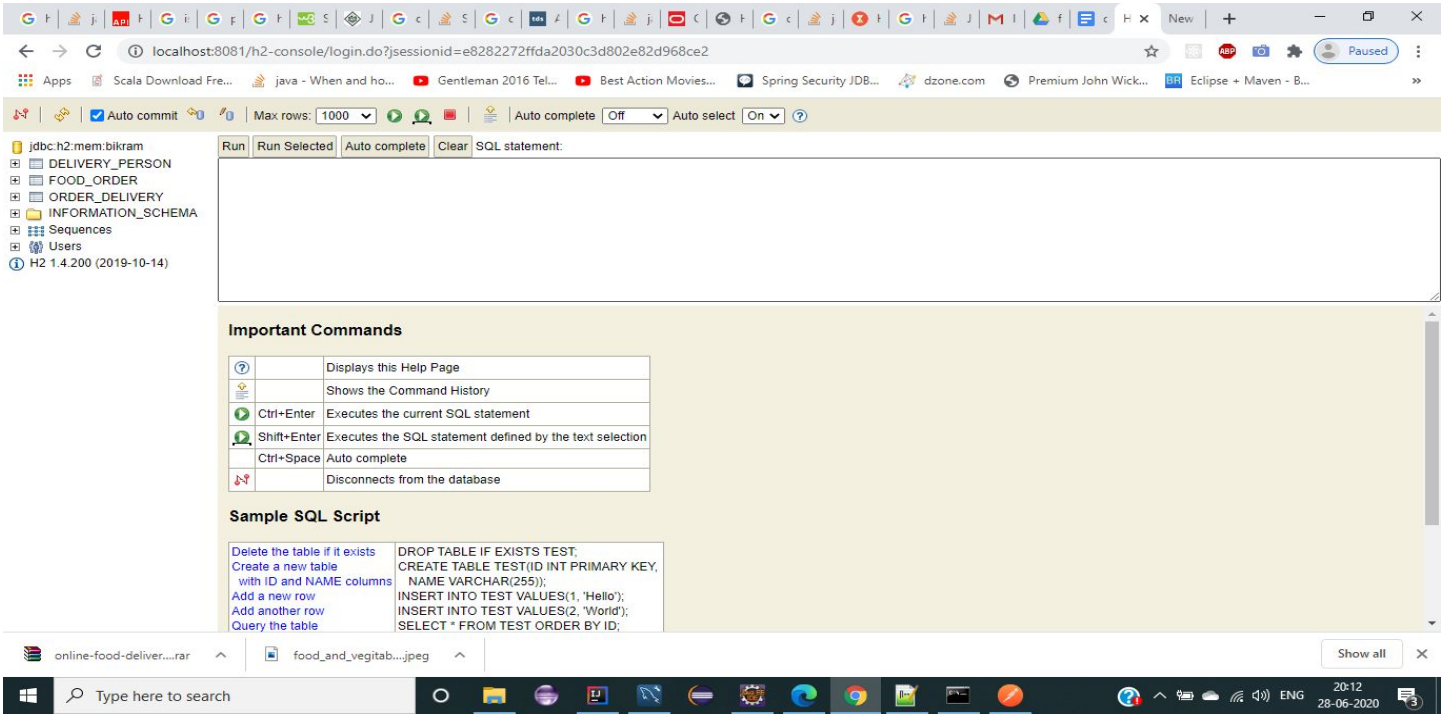
Spring boot with JPA, H2 Database, all the h2 properties are declared in application.properties file.

SERVER_PORT : **8081**

To See the H2 console, after running the application,
hit the url → http://localhost:8081/h2-console



Then Provide the JDBC URL : **jdbc:h2:mem:bikram**
And then click **connect.**



REST API FOR ONLINE FOOD DELIVERY

1. **Post API to place an order**

   API URL = http://localhost:8081/api/restaurants/orders

   Request Payload :

```
{
    "restaurantId": "Dominos234",
    "specialNote": "mention my friends Name Rintu",
    "customerContact": "9564425897",
    "items": [
        {
            "itemId": "Pizza23",
            "name": "Chicken Dominar",
            "price": 320,
            "quantity": 2
        },
        {
            "itemId": "Pizza43",
            "name": "Veg Supreme",
            "price": 270,
            "quantity": 2
        }
    ]
}
```

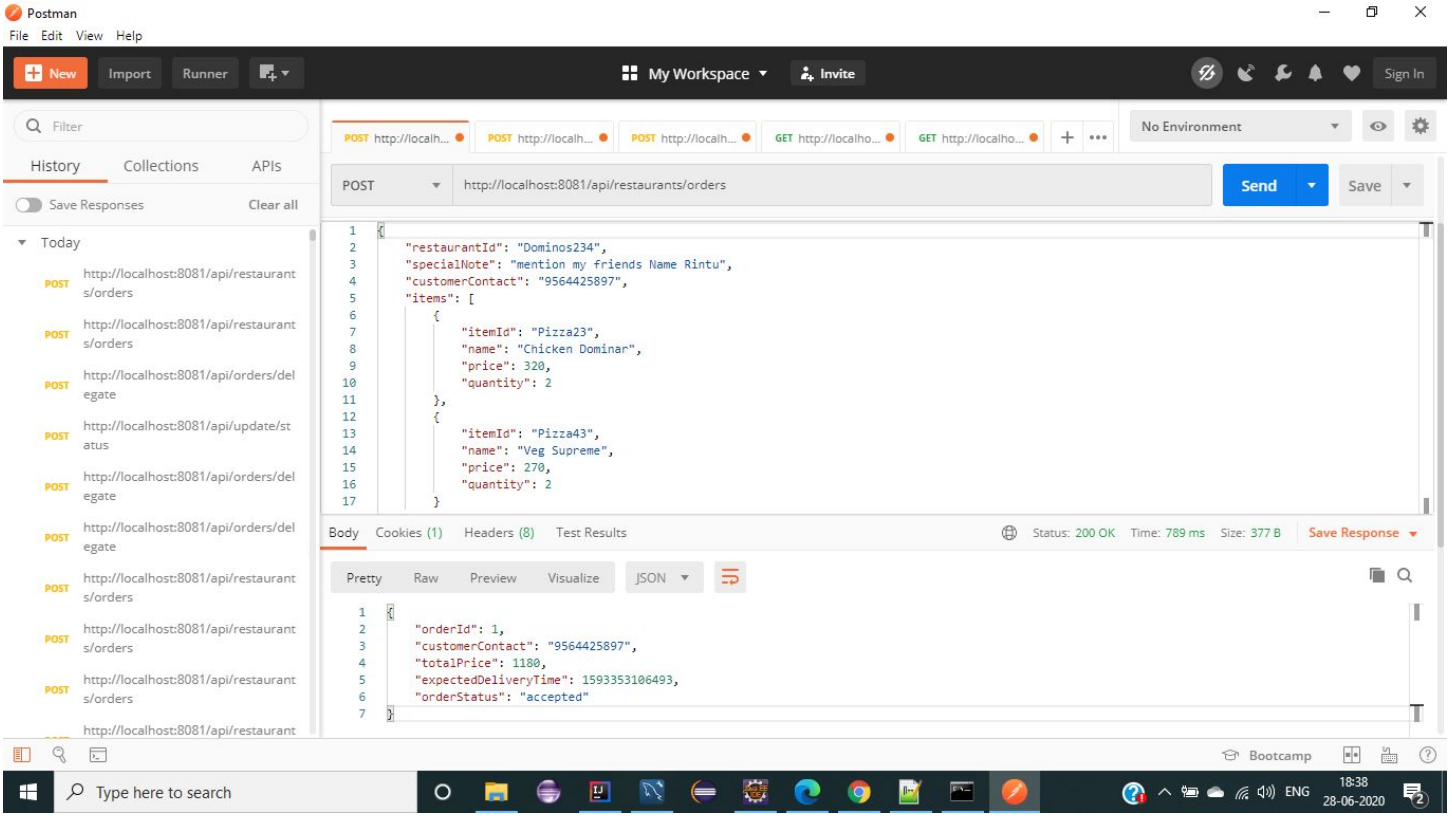
Response :


```
{
    "orderId": 1,
    "customerContact": "9564425897",
   "totalPrice": 1180,
   "expectedDeliveryTime": 1593353106493,
   "orderStatus": "accepted"
}
```


API Description :

⇒ To place an order, customer will use this API.
⇒ After placed an order the status of the order will be **ACCEPTED**
@param OrderRequest
@return OrderResponse ---> order details
@throws OrderPlacedException

Postman Result:



2. **Post API to delegate an order to a delivery person who is active**

API URL : http://localhost:8081/api/orders/delegate

Request Payload :


```
{
   "orderId" : 1,
  "deliveryPersonId" : 2
}
```


Response :

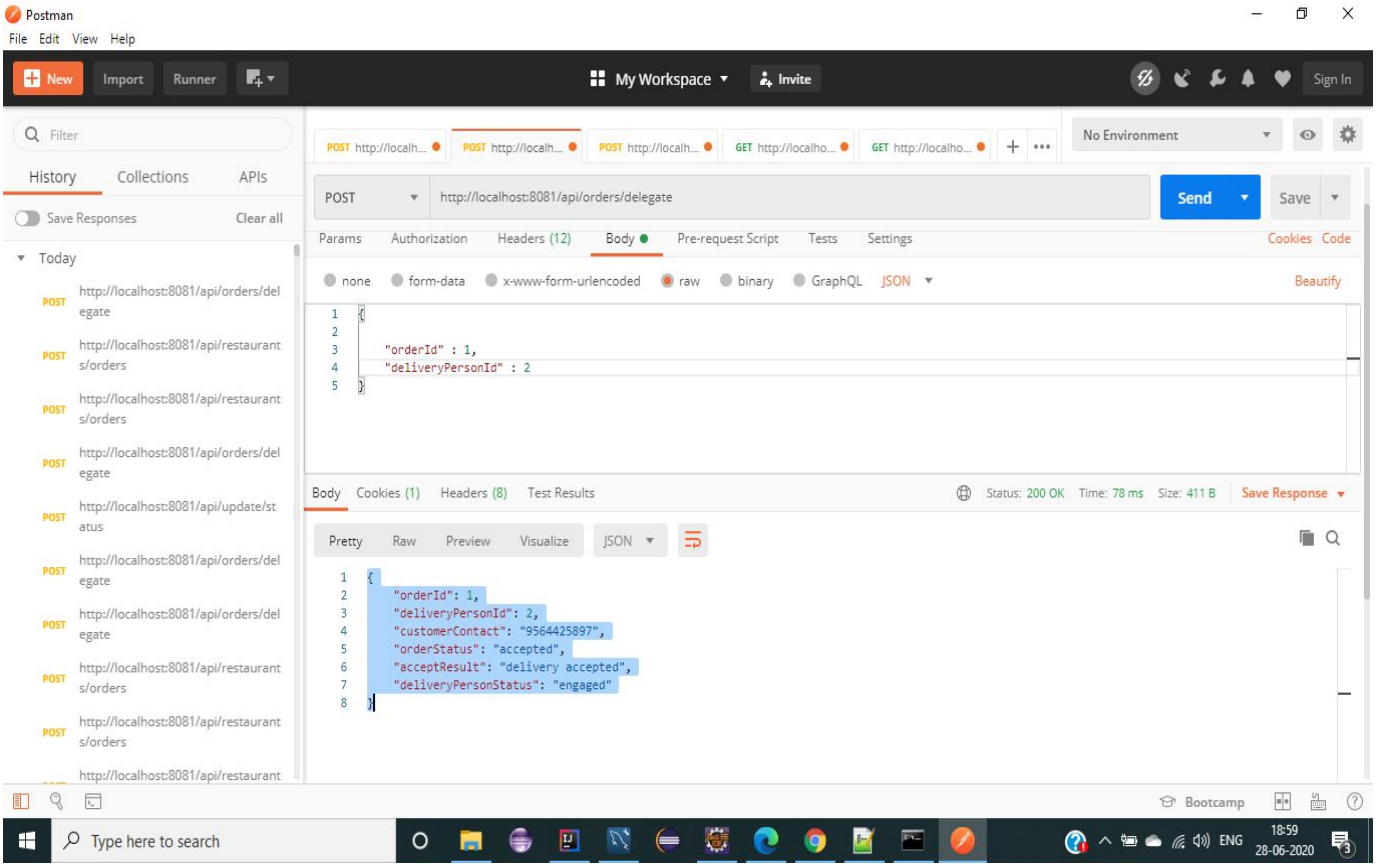

```
{
    "orderId": 1,
    "deliveryPersonId": 2,
    "customerContact": "9564425897",
    "orderStatus": "accepted",
    "acceptResult": "delivery accepted",
    "deliveryPersonStatus": "engaged"
}
```


API Description:

- To delegate an order to a delivery boy who is active, not engaged, (the status of delivery boy can be **active**, **inactive**, **engaged**) Once an order is delegated to a delivery boy, the status of that delivery boy will be **engaged**.
- If the delivery boy is engaged to deliver a parcel then it will throw an exception saying Delivery boy is already busy, please looks for other shippers.
- If the orderId is already delivered then it will throw an exception saying order is already delivered

@param OrderDeliveryReq
@return OrderDeliveryResponse --- > order delivery details
@throws OrderDelegacyException

POSTMAN RESULT



3. Post API to update the order status (to be used by delivery person)

API URL : http://localhost:8081/api/update/status

Request Payload :

```
{
  "orderId" : 1,
  "orderStatus" : "delivered"
}
```

Response :

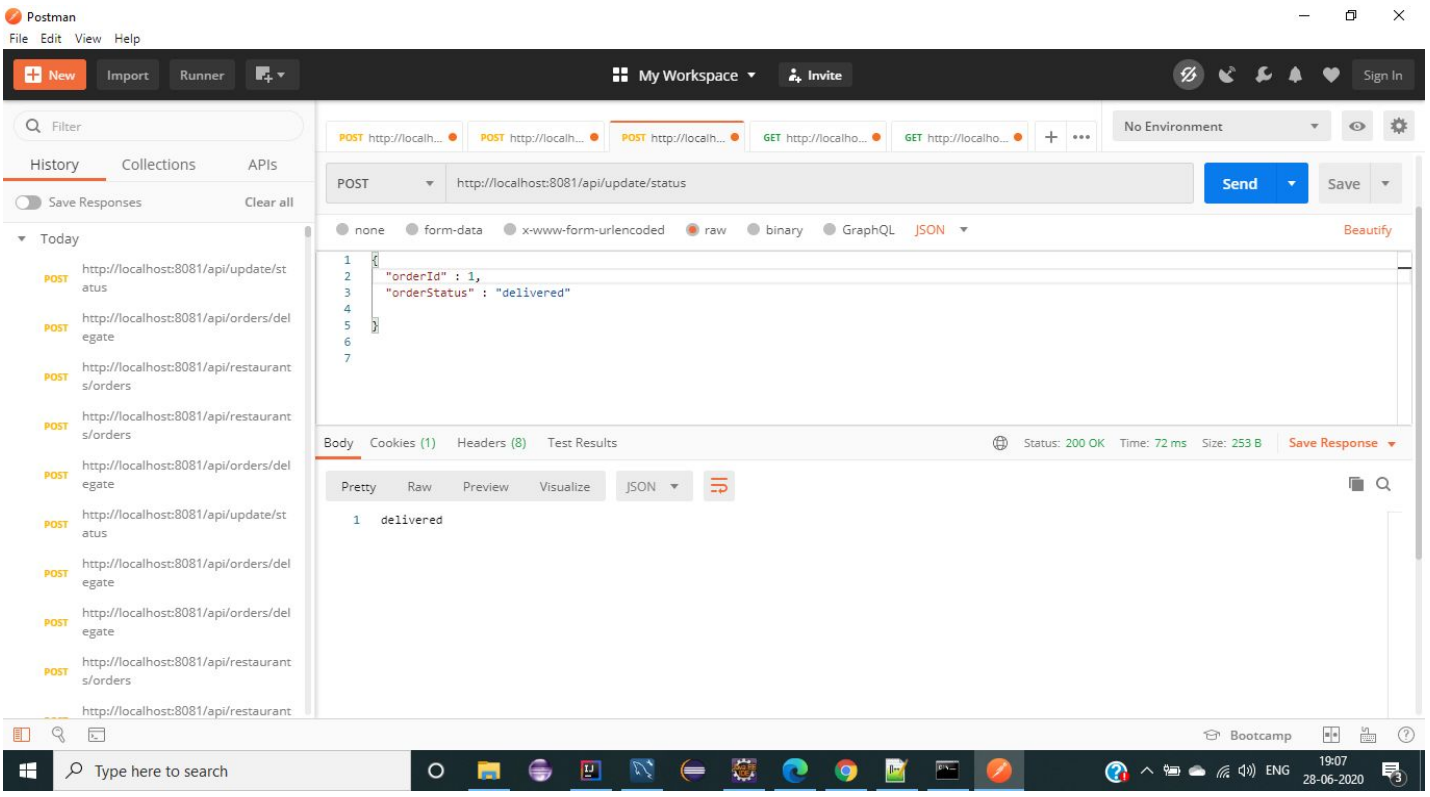
delivered

API Description :

⇒ To update the order status (This API will be used by the delivery boy).
⇒ orderStatus can be any of these (ACCEPTED, PREPARING_FOOD, ON_THE_WAY, DELIVERED).
⇒ Once an order is placed in restaurant, the status of the order will be ACCEPTED.

⇒ Delivery Boy can update the status as PREPARING_FOOD.
⇒ If delivery boy collects order parcel from Restaurant, he can update this as ON_THE_WAY.
⇒ After delivered the parcel to the Customer, delivery boy will update the status as DELIVERED and the status of the delivery boy will be active instead of engaged.
@param DeliveryStatusModel, contains two parameters, orderId, orderStatus
@return String (order status with respect to orderId)
@throws UpdateOrderStatusException

Postman Result :



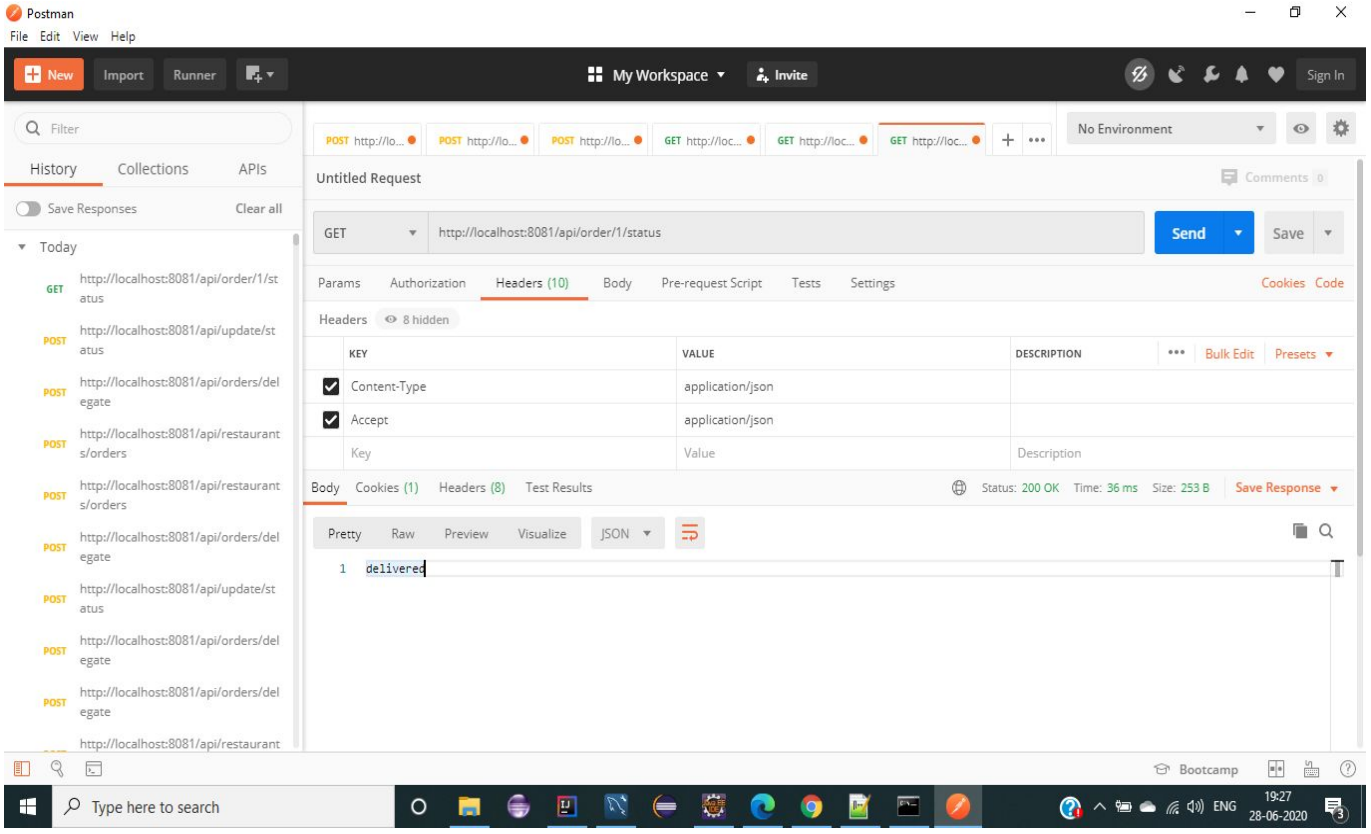
4. GET API to get the status of an order

API URL : http://localhost:8081/api/order/{orderId}/status
If orderId 1
Then
http://localhost:8081/api/order/1/status

Response :
delivered

API Description :
To get the order status
@param orderId
@return String → order status with respect to orderId
@throws OrderNotFoundException

Postman Result :



5. GET API to get list of active delivery person details

API URL : http://localhost:8081/api/delivery/active/details

Response :

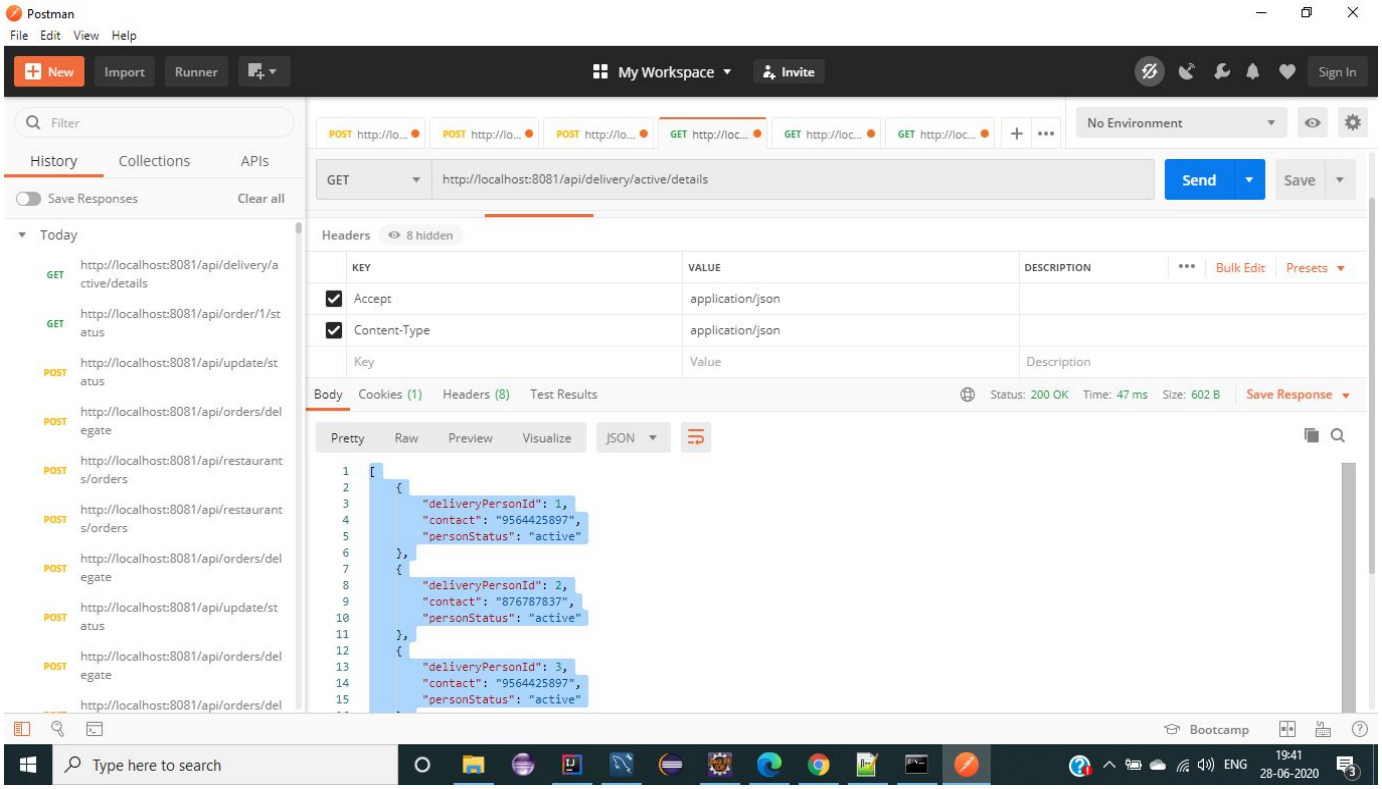

```
[
    {
        "deliveryPersonId": 1,
        "contact": "9564425897",
        "personStatus": "active"
    },
    {
        "deliveryPersonId": 2,
        "contact": "876787837",
        "personStatus": "active"
    },
```

```
        {
            "deliveryPersonId": 3,
            "contact": "9564425897",
            "personStatus": "active"
        },
        {
            "deliveryPersonId": 4,
            "contact": "7406674393",
            "personStatus": "active"
        },
        {
            "deliveryPersonId": 5,
            "contact": "956442556",
            "personStatus": "active"
        }
]
```


API Description

To get the list of active delivery persons details.
The status of delivery person can be active, inactive, engaged.
@param no parameter
@return List<DeliveryPersonDetails> → list active of delivery persons details.
@throws DeliveryManRetrievalException

Postman Result :



6. **GET API to get the state of a delivery person.**
   The state of the delivery person can be active, inactive, engaged.

   API URL : http://localhost:8081/api/delivery/{deliveryPersonId}/state

   If deliveryPersonId = 5

   Then, **http://localhost:8081/api/delivery/5/state**

   Response :


```
{
    "deliveryPersonId": 5,
    "personStatus": "engaged",
    "orderTime": 1593346296423,
    "expectedDeliveryTime": 1593349896423,
    "orderId": 3,
    "timeLeftToDeliver": "00:52:06",
    "message": null
}
```


   *The message field will be **"Delivery will take more than usual time"** if it exceeds expected delivery time otherwise null.

API Description :

⇒ To get the state of a delivery person.
⇒ If the state of delivery person is active or inactive then simply return the id and status as active.
⇒ If the state of delivery person is engaged then it will return orderID, he is delivering and the time left to deliver.
⇒ If the expected delivery time is already over, then an user message will be displayed as "**Delivery will take more than usual time**"

@param no parameter
@return List<DeliveryPersonDetails> → list active of delivery persons details.
@throws DeliveryManRetrievalException

Postman Result :