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Week 4 AssessmentQuestion:
```
I.Project template is provided .

Need to
implement
1.RestControlle
r
2.ProductServic
e
3.ProductDao with one custom query
```
• Create ProductNotFoundException in com.verizon.exeption

```
packagePerform All 1. void AddProduct(),

                         •    List<Product> GetAllProducts(),
                         •    Product GetProductById(Integer id)
throwsProductNotFoundException
                •   List<Product>
GetAllProductsBetweenPrice(Integerlow,Integer high);
                         •    void UpdateProduct(Integer
id,Productproduct)throws ProductNotFoundException
                         •    void DeleteProduct(Integer
id)throwsProductNotFoundException


submit project source code in Zip format

Send screenshots of postman for all above operations in Word doc.
```
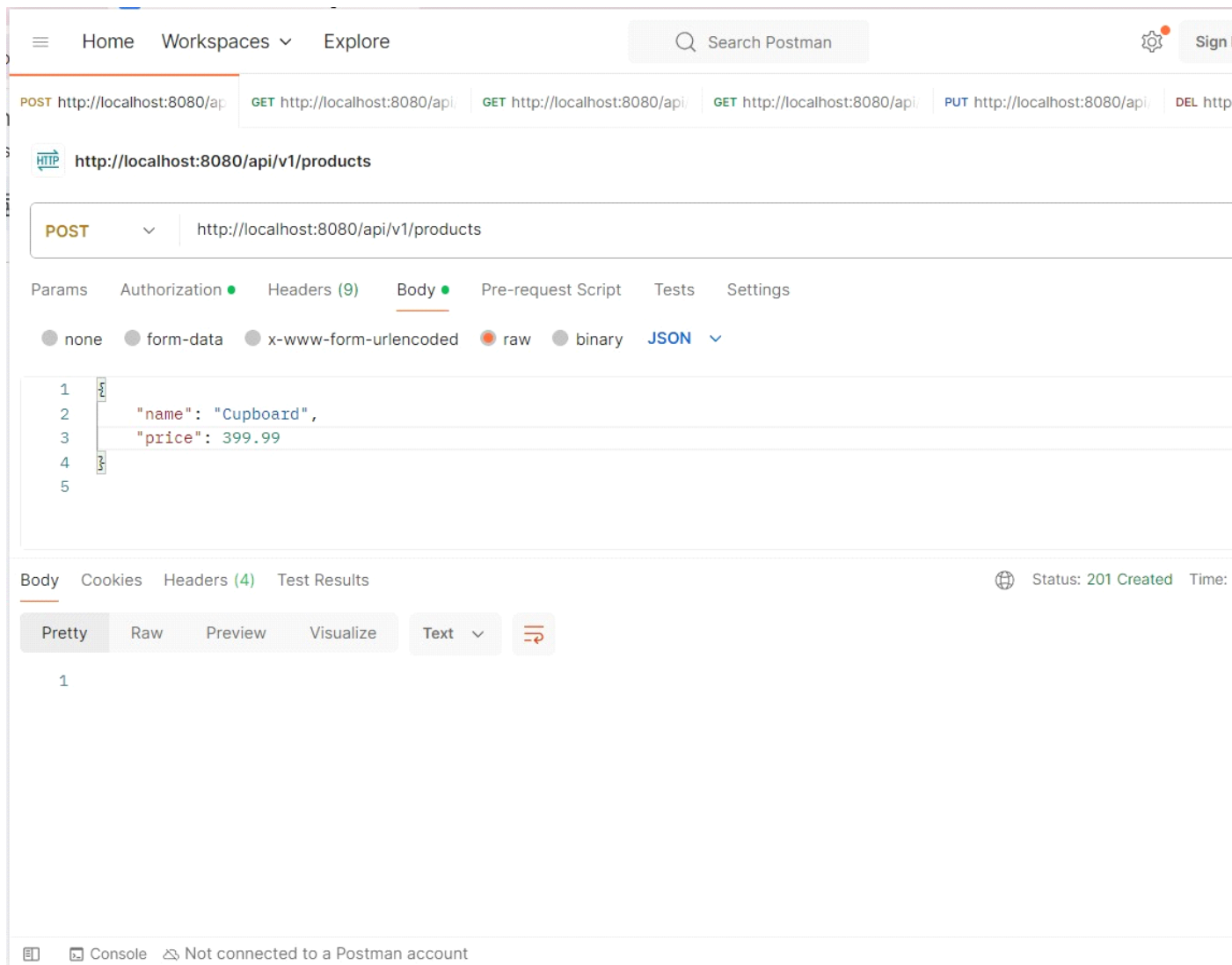
Screenshots of Postman Implementations:

POST http://localhost:8080/ap   GET http://localhost:8080/api   GET http://localhost:8080/api   GET http://localhost:8080/api   PUT http://localhost:8080/api   DEL http

HTTP   **http://localhost:8080/api/v1/products**

POST ⌄	http://localhost:8080/api/v1/products

Params   Authorization ●   Headers (9)   Body ●   Pre-request Script   Tests   Settings

⚪ none   ⚪ form-data   ⚪ x-www-form-urlencoded   🔴 raw   ⚪ binary   **JSON** ⌄

```
1  {
2      "name": "Cupboard",
3      "price": 399.99
4  }
5
```

Body   Cookies   Headers (4)   Test Results   🌐   Status: **201 Created**   Time:

Pretty   Raw   Preview   Visualize   Text ⌄   ⇥

```
1
```

📑   ⟩_ Console   ⚠ Not connected to a Postman account

Insertion of a product into database:

POST http://localhost:8080/ap   GET http://localhost:8080/api   GET http://localhost:8080/api   GET http://localhost:8080/api   PUT http://localhost:8080/api   DEL http://loc

🔲 **http://localhost:8080/api/v1/products**

GET ⌄   http://localhost:8080/api/v1/products

Params   Authorization   Headers (6)   Body   Pre-request Script   Tests   Settings

Query Params

	Key	Value
	Key	Value

Body   Cookies   Headers (5)   Test Results   🌐   Status: 200 OK   Time: 14 m

Pretty   Raw   Preview   Visualize   JSON ⌄   ⤓

```json
10          "price": 119.99
11      },
12      {
13          "id": 5,
14          "name": "Bed",
15          "price": 299.99
16      },
17      {
18          "id": 6,
19          "name": "Bean Bag",
20          "price": 99.99
21      },
22      {
23          "id": 8,
24          "name": "Cupboard",
25          "price": 399.99
```

Retrieving All products from database:

Retrieving product with a specific ID. Example ID = 3:

POST http://localhost:8080/ap   GET http://localhost:8080/api   GET http://localhost:8080/api   GET http://localhost:8080/api   PUT http://localhost:8080/api   DEL http://loc

http://localhost:8080/api/v1/products/2

| GET ⌄ | http://localhost:8080/api/v1/products/2 |

Params   Authorization   Headers (6)   Body   Pre-request Script   Tests   Settings

Query Params

Key	Value
Key	Value

Body   Cookies   Headers (5)   Test Results   Status: 404 Not Found   Time: 12 m

Pretty   Raw   Preview   Visualize   JSON ⌄

```
1  {
2      "status": 404,
3      "error": "Not Found",
4      "message": "Product not found with ID: 2",
5      "path": "/api/v1/products"
6  }
```

- ProductNotFoundException:

POST http://localhost:8080/ap   GET http://localhost:8080/api   GET http://localhost:8080/api   **GET** http://localhost:8080/api   PUT http://localhost:8080/api   DEL http://loc

HTTP **http://localhost:8080/api/v1/products/price?low=100&high=300**

| GET ∨ | http://localhost:8080/api/v1/products/price?low=100&high=300 |

Params ●   Authorization   Headers (6)   Body   Pre-request Script   Tests   Settings

Query Params

	Key	Value

Body   Cookies   Headers (5)   Test Results   🌐 Status: 200 OK   Time: 8 m

| Pretty | Raw | Preview | Visualize | JSON ∨ | ⇄ |

```
1   [
2       {
3           "id": 3,
4           "name": "Table",
5           "price": 249.99
6       },
7       {
8           "id": 4,
9           "name": "Chair",
10          "price": 119.99
11      },
12      {
13          "id": 5,
14          "name": "Bed",
15          "price": 299.99
16      }
```

● 📖 🗔 Console ⚠ Not connected to a Postman account

Retrieving products between a specific price range. The price is passed as query parameters in this case.

-
Updating a specific product, using productID. In this case we update the product with ID 3:
Before updating:

Performing Update operation:

POST http://localhost:8080/ap　GET http://localhost:8080/api　GET http://localhost:8080/api　GET http://localhost:8080/api　PUT http://localhost:8080/api　DEL http://lo

HTTP **http://localhost:8080/api/v1/products/3**

| PUT ⌄ | http://localhost:8080/api/v1/products/3 |

Params　Authorization　Headers (8)　Body ●　Pre-request Script　Tests　Settings

○ none　○ form-data　○ x-www-form-urlencoded　⦿ raw　○ binary　JSON ⌄

```
1  {
2      "name": "Dining Table",
3      "price": 349.99
4  }
5
```

Body　Cookies　Headers (3)　Test Results　　　　　🌐　Status: **204 No Content**　Time: 18

Pretty　Raw　Preview　Visualize　　Text ⌄　　⇄

```
1
```

POST http://localhost:8080/ap   GET http://localhost:8080/api   **GET http://localhost:8080/api**   GET http://localhost:8080/api   PUT http://localhost:8080/api   DEL http:

🔲 **http://localhost:8080/api/v1/products/3**

| GET ⌄ | http://localhost:8080/api/v1/products/3 |

Params   Authorization   Headers (6)   Body   Pre-request Script   Tests   Settings

Query Params

	Key	Value
	Key	Value

Body   Cookies   Headers (5)   Test Results   🌐 Status: 200 OK   Time: 1

| Pretty | Raw | Preview | Visualize | JSON ⌄ | ⤵ |

```
1  {
2      "id": 3,
3      "name": "Dining Table",
4      "price": 349.99
5  }
```

After update operation:

HTTP http://localhost:8080/api/v1/products/2

| PUT ⌄ | http://localhost:8080/api/v1/products/2 |

Params   Authorization   Headers (8)   Body ●   Pre-request Script   Tests   Settings

⚪ none   ⚪ form-data   ⚪ x-www-form-urlencoded   🔴 raw   ⚪ binary   **JSON** ⌄

```
1  {
2      "name": "Dining Table",
3      "price": 349.99
4  }
5
```

Body   Cookies   Headers (5)   Test Results   🌐   Status: 404 Not Found   Time: 12 ms   S

Pretty   Raw   Preview   Visualize   JSON ⌄   ⇥

```
1  {
2      "status": 404,
3      "error": "Not Found",
4      "message": "Product not found with ID: 2",
5      "path": "/api/v1/products"
6  }
```

Trying to update a product with a productID that doesn't exist in the database:

• Deleting a product successfully:

```
12    {
13        "id": 5,
14        "name": "Bed",
15        "price": 299.99
16    },
17    {
18        "id": 6,
19        "name": "Bean Bag",
20        "price": 99.99
21    },
22    {
23        "id": 8,
24        "name": "Cupboard",
25        "price": 399.99
26    }
27  ]
```

All the products before deleting a product with ID 8:

Performing Delete Operation:

POST http://localhost:8080/ap GET http://localhost:8080/api GET http://localhost:8080/api GET http://localhost:8080/api PUT http://localhost:8080/api DEL http://localh

HTTP **http://localhost:8080/api/v1/products/8**

DELETE ⌄ | http://localhost:8080/api/v1/products/8

Params Authorization Headers (6) Body Pre-request Script Tests Settings

Query Params

	Key	Value
	Key	Value

Body Cookies Headers (3) Test Results 🌐 Status: **204 No Content** Time: **19 ms**

Pretty Raw Preview Visualize Text ⌄ ⇥

1

POST http://localhost:8080/ap | GET http://localhost:8080/api/ | GET http://localhost:8080/api | GET http://localhost:8080/api/ | PUT http://localhost:8080/api | DEL h

HTTP **http://localhost:8080/api/v1/products**

| GET ˅ | http://localhost:8080/api/v1/products |

Params   Authorization   Headers (6)   Body   Pre-request Script   Tests   Settings

Query Params

	Key	Value
	Key	Value

Body   Cookies   Headers (5)   Test Results   🌐 Status: 200 OK   Tim

| Pretty | Raw | Preview | Visualize | JSON ˅ | ⇄ |

```
 7         {
 8             "id": 4,
 9             "name": "Chair",
10             "price": 119.99
11         },
12         {
13             "id": 5,
14             "name": "Bed",
15             "price": 299.99
16         },
17         {
18             "id": 6,
19             "name": "Bean Bag",
20             "price": 99.99
21         }
22     ]
```

Now displaying all the products in the database:

Trying to delete a product with a productID that doesn't exist in the database:

POST http://localhost:8080/ap| GET http://localhost:8080/api   GET http://localhost:8080/api   GET http://localhost:8080/api   PUT http://localhost:8080/api   DEL http://

HTTP **http://localhost:8080/api/v1/products/8**

| DELETE ∨ | http://localhost:8080/api/v1/products/8 |

Params   Authorization   Headers (6)   Body   Pre-request Script   Tests   Settings

Query Params

	Key	Value
	Key	Value

Body   Cookies   Headers (5)   Test Results   ⊕ Status: 404 Not Found   Time: 1

Pretty   Raw   Preview   Visualize   JSON ∨   ⇥

```
1  {
2      "status": 404,
3      "error": "Not Found",
4      "message": "Product not found with ID: 8",
5      "path": "/api/v1/products"
6  }
```

**THANK
YOU**