

Unit 10: Homework

Using our EcommerceDB , build a recommendation rest service that takes in a customer as input and returns the item for which a promotion can be offered for that customer.

Your recommendation model can be as simple as finding the most frequently bought item by that customer or anything else you choose.

Turn in your HW with the codebase and a small write-up describing your model.

Just found the most loyal customers by their number of orders. Offer a promotion to customers to how many orders they have made.

```
@app.route('/api/v1.0/getLoyal', methods=['GET'])

def getLoyal():

    global query_result

    try:

        connection = pymysql.connect(

            host='localhost', user='root', passwd='ABCDEF', db='ecommercedb')

        cursor = connection.cursor()

        cursor.execute("select CustomerTable_CustomerID CustomerID , count(*) NumOrders \

            from OrderHeader group by CustomerTable_CustomerID \

            Order By NumOrders Desc;")

        query_result = [dict(line) for line in [zip(

            [column[0] for column in cursor.description], row) for row in cursor.fetchall()]]

    except Exception as e:

        print("Error [%r]" % (e))
```

```
# sys.exit(1)
```

```
finally:
```

```
if cursor:
```

```
    cursor.close()
```

```
# Return the list of actors as a json object
```

```
return jsonify({'Most Loyal Customers': query_result})
```

127.0.0.1:5000/api/v1.0/getLoyal

ed	
JSON	Raw Data Headers
Save	Copy Collapse All Expand All
▼ Most Loyal Customers:	
▼ 0:	
CustomerID:	50
NumOrders:	160
▼ 1:	
CustomerID:	40
NumOrders:	158
▼ 2:	
CustomerID:	49
NumOrders:	156
▼ 3:	
CustomerID:	42
NumOrders:	155
▼ 4:	
CustomerID:	43
NumOrders:	150
▼ 5:	
CustomerID:	41
NumOrders:	148
▼ 6:	
CustomerID:	45
NumOrders:	145
▼ 7:	
CustomerID:	46
NumOrders:	145
▼ 8:	
CustomerID:	44
NumOrders:	144
▼ 9:	
CustomerID:	47
NumOrders:	143