Classic Model Business

To be developed

**Step1:**

1. All Rest API request and response format must be in JSON.
2. 200, 201, 400, 404, 401, 500, 505 – use appropriate http status code in your response object.
3. Handle the Rest exceptions globally using Rest exception handler for all endpoints.
4. Sample Error Responses are shown in below table, participants to identify error paths for all the Endpoints.
5. Test your Rest Api using Junit and Mockito.
6. Participants should not alter database schema under any circumstances except wherever changes are mentioned explicitly.
7. All GET and POST requests for Employee are secured
8. Alter image column of Product\_lines to URL
9. Remove username & password columns of Employee table instead use separate table for security
10. Add role column (with only 2 values “Admin || NonAdmin”) in Employee table

| **Sr No** | **Endpoints** | **HTTP Verb/Method** | **Description** | **Success Response** | **Error Response** |
| --- | --- | --- | --- | --- | --- |
| 1 | /api/v1/employee/ | POST | Add new Employee object in DB | String: Employee details added successfully |  |
| 2 | /api/v1/employee/ /{employe\_no}/reports\_to/{new\_employee\_no} | PUT | Update employee’s reporting hierarchy | String: details updated Successfully | {“timeStamp” : “ CurrentDate,  “message”: “Employee details not found”,  StatusCode”: “StatusCode”  “} |
| 3 | /api/v1/employee/{role} | PUT | Update the role of employee | Employee details with updated role | {“Timestamp”: “Current Date,  “message”: “Employee details not found”,  Status Code”: “Status Code”  “} |
| 4 | /api/v1/employee/mapToOffice/{office\_code}/ | PUT | Assign Office to employee | employee Object and office assign to him||her (EmployeeOfficeDTO) | {“Timestamp” : “ Current Date,  “message”: “Employee details not found”,  StatusCode”: “StatusCode”  “} |
| 5 | /api/v1/v1/employee/ {employee\_no} | GET | Search Employee by employee Number | Newly added Employee details | {“Timestamp”: “Current Date,  “message”: “Employee details not found”,  Status Code”: “Status Code”  “} |
| 6 | /api/v1/v1/employee/all\_employee\_details | GET | Retrieve all employee Details | Collection of Employee |  |
| 7 | /api/v1/v1/employee/all\_employee\_details/{office\_code} | GET | Retrieve All employee details by officeId | Collection of Employee | {“timeStamp” : “ CurrentDate,  “message”: “Office details not found”,  StatusCode”: “StatusCode”  “} |
| 8 | /api/v1/v1/employee/all\_employee\_details/{city} | GET | Retrieve all employee details works in specific city office | Collection of Employee | {“timeStamp” : “ CurrentDate,  “message”: “Office details not found”,  StatusCode”: “StatusCode”  “} |
| 9 | /api/v1/office | POST | Add Office details | String: office details added successfully |  |
| 10 | /api/v1/office/{office\_code} | GET | Get Office details by office\_code | Office object | {“timeStamp” : “ CurrentDate,  “message”: “Office details not found”,  StatusCode”: “StatusCode”  “} |
| 11 | /api/v1/office/{office\_code}/{phone} | PUT | Update Office phone number | String: office phone number updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Office details not found”,  StatusCode”: “StatusCode”  “} |
| 12 | /api/v1/office/{office\_code} | PUT | Update Office Address | String: office address updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Office details not found”,  StatusCode”: “StatusCode”  “} |
| **13** | **/api/v1/offices/customers/{office\_code}** | GET | Get all customers under given office code | Collection of customers |  |
| 14 | /api/v1/offices**/{city1}/{city2}/{cityN}** | GET | Get office details from provided list of cities different cities | Collection of offices |  |
| 15 | /api/v1/customers/ | POST | Add new Customer Object in DB | String: Record Created Successfully |  |
| 16 | /api/v1/customers/customer\_name/{customer\_name} | GET | Search Customers by customer name | Collection of Customers | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 17 | /api/v1/customers/city/{city} | GET | Search Customers by city | Collection of Customers with address | {“timeStamp” : “ CurrentDate,  “message”: “No Customer Found”,  StatusCode”: “StatusCode”  “} |
| 18 | /api/v1/customers/customer\_number/{customer\_number} | GET | Search Customer by customer Number | Customer | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 19 | /api/v1/customers/sales\_rep\_employee\_number /{sales\_rep\_employee\_number } | GET | Search Customers by sales Rep Employee Number | Customer | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 20 | /api/v1/customers/city/{city} | GET | Search Customers by City | Collection of Customers with Address |  |
| 21 | /api/v1/customers/country/{country} | GET | Search Customers by Country | Collection of Customers with Address |  |
| 22 | /api/v1/customers/phone/{phone} | GET | Search Customers by phone number | Customer with Address |  |
| 23 | /api/v1/customers/contact\_firstname/{contact\_firstname} | GET | Search Customers by contact first Name | Collection of Customers with Address |  |
| 24 | /api/v1/customers/contact\_lastname/{contact\_lastname} | GET | Search Customers by contact last Name | Collection of Customers with Address |  |
| 25 | /api/v1/customers /{customer\_number}/{customer\_name} | PUT | Update name of Customer | Customer | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 26 | /api/v1/customers /{customer\_number}/{contact\_lastname} | PUT | Update contact last name of Customer | Customer | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 27 | /api/v1/customers /{customer\_number}/{contact\_firstname} | PUT | Update contact first name of Customer | Customer | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 28 | /api/v1/customer /{customer\_number}/ | PUT | Update address of a customer | String: customer address updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 29 | /api/v1/customers/credit\_limit/{credit\_limt} | GET | Search Customers by credit limit | Collection of Customers |  |
| 30 | /api/v1/customer/postal\_code/{postal\_code} | GET | Search Customers of postal code | Collection of customers |  |
| 31 | /api/v1/customers/credit\_range/{start}/{end} | GET | Get the customers between given range of credit | Collection of customers |  |
| 32 | /api/v1/customers/{pageSize/{pageNo}/{sortBy}/{sortDir} | GET | Get the customers On page ‘pageno’ and in ascending or descending order of given customer attribute | Collection of Customers  200 OK |  |
| 33 | /api/v1/customers /getbyfirstnamelike/{fn} | GET | Search customers by firstname like ‘fn’ | Collection of customers |  |
| 34 | /api/v1/customers /gt/{credit\_limit} | GET | Search customers where credit limit is greater than { creditlimit } | Collection of customers |  |
| 35 | /api/v1/customers /lt/{credit\_limit} | GET | Search customers where credit limit is lower than {credit limit } | Collection of customers |  |
| 36 | /api/v1/customers/{customer\_id}/order\_product\_staffdetails | GET | show all order details with product info of that order, along with staff details who handled that order, for given customer. | Collection of custom object | {“timeStamp” : “ CurrentDate,  “message”: “Customer not found”,  StatusCode”: “StatusCode”  “} |
| 37 | /api/v1/customer/{customer\_id}/paymentdetails | GET | Show Payment details for particular Customer | Collection of Payment Details | {“timeStamp” : “ CurrentDate,  “message”: “Customer not found”,  StatusCode”: “StatusCode”  “} |
| 38 | /api/v1/customers/{customer\_name}/order\_payment\_details | GET | show order details along with payment details for customer say 'Jhon'. | Custom Object Collection | {“timeStamp” : “ CurrentDate,  “message”: “Customer not found”,  StatusCode”: “StatusCode”  “} |
| 39 | /api/v1/payments/ | POST | Add new Payment details for specific customer | String: Payment details added Successfully | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 40 | /api/v1/payments/ update/{customer\_number}/{check\_number} | PUT | Update check number of customer | String: Check number updated Successfully | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 41 | /api/v1/payments/ update/{customer\_number}/{check\_number} | PUT | Update Amount of specific check of customer | String: Payment amount detailsupdated Successfully | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 42 | /api/v1/payments/ /{customer\_number} | GET | search all payment details for specific customer | Customer details and all payment details of customer | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 43 | /api/v1/payments/ /{payment\_date} | GET | Search all payment details by payment date | Payment details of all customers |  |
| 44 | /api/v1/payments/ /{check\_number} | GET | Search all payment details by check Number | Payment detail of customer |  |
| 45 | /api/v1/payments/ totalAmount/{customer\_number } | GET | Get total amount of payment made by specific customer | Total amount of Payments | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 46 | /api/v1/payments/customers/{checkno} | GET | Get customers by check no | Collection of customers |  |
| 47 | /api/v1/payments/customers/maxamount | GE**T** | Get customer by max payment amoun**t** | Custome**r** |  |
| 48 | /api/v1/payments/customers/{startPaydate}/{endpaydate} | G**E**T | Get customers done payment in given date ran**g**e | Collection of custome**rs** |  |
| 49 | /api/v1/payments/{payment\_date}/customers | GET | Fetch all customers who paid on given date | Collection of customers | {“timeStamp” : “ CurrentDate,  “message”: “Payment date not available”,  StatusCode”: “StatusCode”  “} |
| 50 | /api/v1/payment/highest\_collection\_office\_details | GET | Fetch Office details with Maximum payment collection | Collection of Offices |  |
| 51 | /api/v1/orders/ | POST | Add new Order object to DB | String: Order Created Successfully | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 52 | /api/v1/orders/ {order\_number}/{shipped\_date} | PUT | Update order shipped- Date | String: Order’s shipped date updated Successfully | {“timeStamp” : “ CurrentDate,  “message”: “Order Details not found”,  StatusCode”: “StatusCode”  “} |
| 53 | /api/v1/orders/ {order\_number} | PUT | Update order status- Date | String: Order status updated Successfully | {“timeStamp” : “ CurrentDate,  “message”: “Order Details not found”,  StatusCode”: “StatusCode”  “} |
| 54 | /api/v1/orders/{customer\_number} | GET | Retrieve all order details of specific customer | Customer and Collection of Order | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 55 | /api/v1/orders/{order\_number} | GET | Search order detail by order number | Order | {“timeStamp” : “ CurrentDate,  “message”: “Order Details not found”,  StatusCode”: “StatusCode”  “} |
| 56 | /api/v1/orders/{order\_date} | GET | Retrieve all order details by order date | Collection of Orders |  |
| 57 | /api/v1/orders/ {required\_date} | GET | Retrieve all order details by required date | Collection of Orders |  |
| 58 | /api/v1/orders/{shipped\_date} | GET | Retrieve all order details by order shipped date | Collection of Orders |  |
| 59 | /api/v1/orders/{status} | GET | Retrieve all order details by order status | Collection of Orders |  |
| 60 | /api/v1/orderdetails/max/price | GET | Get  order details for max price order | Collection of Films |  |
| 61 | /api/v1/orderdetails/count/{attribute} | GET | Get cunt of order details based on given criteria | Count of order details |  |
| 62 | /api/v1/orders/{customer\_number}/{status} | GET | Retrieve all order details by order status for specific customer | Customer and Collection of Orders | {“timeStamp” : “ CurrentDate,  “message”: “Customer Details not found”,  StatusCode”: “StatusCode”  “} |
| 63 | /api/v1/orders/{order\_id}/products | GET | Fetch all product details for given order number | Collection of Products | {“timeStamp” : “ CurrentDate,  “message”: “Order Details not found”,  StatusCode”: “StatusCode”  “} |
| 64 | /api/v1/orders/{order\_id}/product\_names | GET | Fetch all product names for given order number | Collection of Products | {“timeStamp” : “ CurrentDate,  “message”: “Order Details not found”,  StatusCode”: “StatusCode”  “} |
| 65 | /api/v1/order/products | GET | fetch all product details for all orders | Collection of Products |  |
| 66 | /api/v1/orders/{order\_status}/orders | GET | Show all orders with status 'delivered' and they were delivered on same date as that of shipment. | Collection of Oredrs |  |
| 67 | /api/v1/orders/product\_and\_product\_line\_details | GET | show all products with product lines whose order shipment date is 1st Jan 2023 | Collection of Custom Object |  |
| 68 | /api/v1/orderdetails/ | POST | Add order details | String: Record Created Successfully | If stock of ordered product is less than  qty orederd ,then raise Exception -InsufficientStockException |
| 69 | /api/v1/orderdetails/ /{order\_number}/{product\_code}/ {quantity\_orderd } | PUT | Update quantity of ordered product | String: product Quantity updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Order Details not found”,  StatusCode”: “StatusCode”  “} |
| 70 | /api/v1/orderdetails/ /{order\_number} | GET | search order details by order number | Order Details and Collection of Product | {“timeStamp” : “ CurrentDate,  “message”: “Order Details not found”,  StatusCode”: “StatusCode”  “} |
| 71 | /api/v1/orderdetails/ /{order\_number} | GET | Retrieve total of specific order | String : specific order total amount | {“timeStamp” : “ CurrentDate,  “message”: “Order Details not found”,  StatusCode”: “StatusCode”  “} |
| 72 | /api/v1/orderdetails/ total\_sale | Get | Fetch total sale of all orders | Total sale done |  |
| 73 | /api/v1/products/ | POST | Add new Product object into DB | String: product details added successfully |  |
| 74 | /api/v1/products/ /{poduct\_code}/{buy\_price} | PUT | Update buy price of specific product | String product’s buy price updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 75 | /api/v1/products/ /{product\_code}/{quantity\_in\_stock} | PUT | Update Quantity in Stock for specific product | String product’s quantity updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 76 | /api/v1/products/ /{product\_code}/{msrp} | PUT | Update MSRP in of specific product | String: product’s MSRP updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 77 | /api/v1/products/ /{product\_code}/{product\_vendor} | PUT | Update vendor of specific product | String: product’s vendor updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 78 | /api/v1/products/ /{product\_code}/{produc\_scale} | PUT | Update scale of specific product | String: product’s scale updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 79 | /api/v1/products/ /{product\_code}/{product\_name} | PUT | Update name of specific product | String: product’s scale updated successfully | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 80 | /api/v1/products/{product\_code} | GET | Search Product Details by product\_code | Product Object | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 81 | /api/v1/products/{product\_name} | GET | Search Product Details by product name | Product Object |  |
| 82 | /api/v1/products/{product\_scale} | GET | Search Product Details by product scale | Collection Product Object |  |
| 83 | /api/v1/products/{product\_vendor} | GET | Search Product Details by product vendor | Collection Product Object |  |
| 84 | /api/v1/products/{product\_vendor} | GET | Search Product Details by product vendor | Collection Product Object |  |
| 85 | /api/v1/product/{product\_code}/total\_oredered\_qty | GET | fetch total ordered quantity for particular product | Total quantity ordered | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 86 | /api/v1/product/{product\_code}/total\_sale | GET | fetch total sale for particular product | Total sale amount for given product | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 87 | /api/v1/product/total\_sale | GET | fetch total sale for each product | Total sale amount for each product | {“timeStamp” : “ CurrentDate,  “message”: “Product Details not found”,  StatusCode”: “StatusCode”  “} |
| 88 | api/product/product\_details | GET | show products which is highly demanded by customers | Collection of Products |  |
| 89 | /api/v1/product\_lines/ | POST | Add new Product line object into DB | String: product line details added successfully |  |
| 90 | /api/v1/product\_lines/product\_line /{product\_line}/text\_description/ {text\_description} | PUT | Update text\_description in of specific product\_line | String: product’s MSRP updated successfully | {“timeStamp”: “ Current Date,  “message”: “Product Details not found”,  StatusCode”: “Status Code”  “} |
| 91 | /api/v1/product\_lines/ text\_description /{text\_description} | GET | Search Product\_line details by text description | Collection of ProductLines | {“timeStamp”: “ Current Date,  “message”: “Product Details not found”,  StatusCode”: “Status Code”  “} |