



# Classic Model Business

## Objective

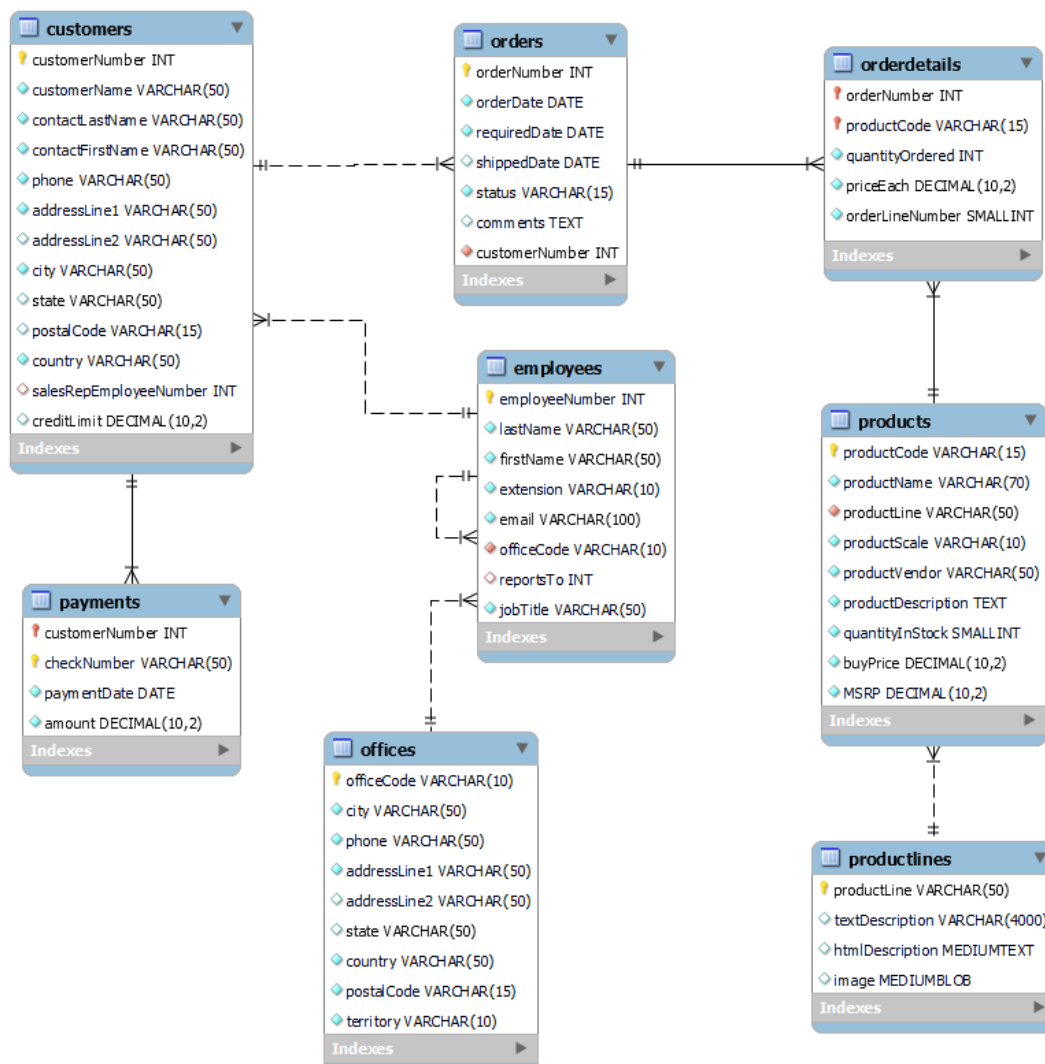


The "Classic Model Business" project's integrated system, featuring relational database management through APIs and a user-friendly UI, is poised to revolutionize the efficiency of day-to-day business operations. This initiative not only streamlines data management but also provides a clear and accessible interface for users to navigate and leverage the functionalities offered by the comprehensive system.

## Database schema:

### ▼ ER Diagram

[classicbusinessmodel.mwb](#)



#### ▼ MySQL Script file

[classicbusinessmodel\\_schema.sql](#)

#### Design Guidelines

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

## Rest API Design

All REST API requests and responses follow the JSON format. The project employs standard HTTP status codes (200, 201, 400, 404, 401, 500, 505) appropriately in response objects to convey the outcome of API requests.

## Status Codes

HTTP response codes are used to indicate general classes of success and error.

HTTP Status Quote	Description
200	Successfully processed request.
201	Created
202	Accepted
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

## Endpoints

#### Endpoints (1)

🔗 Path URL	🔧 HTTP Methods	📝 Description	🟢 Success Response
<a href="#">/api/v1/employee/all</a>	GET	<a href="#">Get All Employees</a>	Collector Employee
<a href="#">/api/v1/employee/{employee_no}</a>	GET	<a href="#">Get Employees by employee number</a>	Employee

🔗 Path URL	📡 HTTP Methods	📝 Description	📩 Success Response
<a href="#">/api/v1/employee/office/{office_code}</a>	GET	<a href="#">Get Employees by office_code</a>	Collector Employee
<a href="#">/api/v1/employee/city/{city}</a>	GET	<a href="#">Get Employees by city</a>	Collector Employee
<a href="#">/api/v1/employee/add</a>	POST	<a href="#">Add new Employee</a>	<pre>{   "timeStam 06-08",   "message"   "Employee added successfu }</pre>
<a href="#">/api/v1/employee/update/{employee_number}</a>	PUT	<a href="#">Update Employee by employee_number</a>	<pre>{   "timeStam 06-08",   "message"   "Employee updated successfu }</pre>
<a href="#">/api/v1/employee/{old_employee_number}/reports_to/{new_employee_number}</a>	PUT	<a href="#">Update employee's reporting hierarchy</a>	<pre>{   "timeStam 06-08",   "message"   "Employee updated successfu }</pre>
<a href="#">/api/v1/employee/role/{role}</a>	PUT	<a href="#">Update the role of employee</a>	<pre>{   "timeStam 06-08",   "message"   "Employee updated successfu }</pre>
<a href="#">/api/v1/employee/{employee_number}/map_to_office/{office_code}</a>	PUT	<a href="#">Update Employee office details by office_code and employee_number</a>	<pre>{   "timeStam 06-08",   "message"   "Employee details u successfu }</pre>
<a href="#">/api/v1/employee/delete/{employee_number}</a>	DELETE	<a href="#">Delete Employee by employee_number</a>	<pre>{   "timeStam 06-08",   "message"   "Employee deleted successfu }</pre>
<a href="#">/api/v1/office/all</a>	GET	<a href="#">Get All Offices</a>	Collector Offices.
<a href="#">/api/v1/office/{office_code}</a>	GET	<a href="#">Get Office by office_code</a>	Office Ob
<a href="#">/api/v1/office/{city1}/{city2}/{cityN}</a>	GET	<a href="#">Get office details from provided list of different</a>	Collector Employee

🔗 Path URL	🔧 HTTP Methods	📝 Description	🟢 Success Response
		<u>cities</u>	
<u>/api/v1/office/add</u>	POST	<u>Add new Office</u>	<pre>{   "timeStam 06-08",   "message" details a successfu }</pre>
<u>/api/v1/office/{office_code}/{phone_number}</u>	PUT	<u>Update Office with new phone number</u>	<pre>{   "timeStam 06-08",   "message" phone num updated successfu }</pre>
<u>/api/v1/office/update/{office_code}</u>	PUT	<u>Update Office Object</u>	<pre>{   "timeStam 06-08",   "message" details u successfu }</pre>
<u>/api/v1/orderdetails/all</u>	GET	<u>Get All OrderDetails</u>	Collector OrderDet:
<u>/api/v1/orderdetails/{order_number}</u>	GET	<u>Get OrderDetails by order_number</u>	Collector OrderDet:
<u>/api/v1/orderdetails/{order_number}/{product_code}</u>	GET	<u>Get OrderDetails</u>	OrderDet: Object
<u>/api/v1/orderdetails/total_orders/{order_number}</u>	GET	<u>Get Sum of all order by order_number</u>	Sum of OrderDet:
<u>/api/v1/orderdetails/total_sales</u>	GET	<u>Get Total Sales of OrderDetails</u>	Total Sale OrderDet:
<u>/api/v1/orderdetails/add</u>	POST	<u>Add new OrderDetails</u>	<pre>{   "timeStam 06-08",   "message" details a successfu }</pre>
<u>/api/v1/customer/all</u>	GET	<u>Get All Customers</u>	Collector Customer
<u>/api/v1/customer/{customer_number}</u>	GET	<u>Get Customer by customer_number</u>	Customer
<u>/api/v1/customer/office/{office_code}</u>	GET	<u>Get Customers by office_code</u>	Collector Customer

🔗 Path URL	📡 HTTP Methods	📝 Description	🟢 Success Response
<a href="#">/api/v1/customer/customer_name/{customer_name}</a>	GET	<a href="#">Get Customer by customer_name</a>	Customer
<a href="#">/api/v1/customer/sales_rep_employee_number/{sales_rep_employee_number}</a>	GET	<a href="#">Get Customer by sales_rep_employee_number</a>	Customer
<a href="#">/api/v1/customer/city/{city}</a>	GET	<a href="#">Get Customers by city</a>	Collector Customer
<a href="#">/api/v1/customer/country/{country}</a>	GET	<a href="#">Get Customers by country</a>	Collector Customer
<a href="#">/api/v1/customer/phone/{phone}</a>	GET	<a href="#">Get Customers by phone number</a>	Customer
<a href="#">/api/v1/customer/contact_firstname/{contact_firstname}</a>	GET	<a href="#">Get Customers by contact_firstname</a>	Collector Customer
<a href="#">/api/v1/customer/contact_lastname/{contact_lastname}</a>	GET	<a href="#">Get Customers by contact_lastname</a>	Collector Customer
<a href="#">/api/v1/customer/credit_limit/{credit_limit}</a>	GET	<a href="#">Get Customers by credit_limit</a>	Collector Customer
<a href="#">/api/v1/customer/postal_code/{postal_code}</a>	GET	<a href="#">Get Customers by postal_code</a>	Collector Customer
<a href="#">/api/v1/customer/credit_range/{min_credit}/{max_credit}</a>	GET	<a href="#">Get Customers between minimum and maximum credit range</a>	Collector Customer
<a href="#">/api/v1/customer/customer_firstname/{firstname}</a>	GET	<a href="#">Get Customers by firstname</a>	Collector Customer
<a href="#">/api/v1/customer/greater_than/{credit_limit}</a>	GET	<a href="#">Get Customers with credit limit greater than {credit_limit}</a>	Collector Customer
<a href="#">/api/v1/customer/less_than/{credit_limit}</a>	GET	<a href="#">Get Customers with credit limit less than {credit_limit}</a>	Collector Customer
<a href="#">/api/v1/customer/add</a>	POST	<a href="#">Add new Office</a>	{ "timeStam

🔗 Path URL	🔧 HTTP Methods	📝 Description	📩 Success Response
			<pre>{   "timeStamp": "06-08",   "message": "Customer added successfully" }</pre>
<a href="#">/api/v1/customer/update/{customer_number}</a>	PUT	<a href="#">Update Customer by customer_number</a>	<pre>{   "timeStamp": "06-08",   "message": "Customer updated successfully" }</pre>
<a href="#">/api/v1/customer/{customer_number}/{contact_lastname}</a>	PUT	<a href="#">Update Customer's contact lastname</a>	<pre>{   "timeStamp": "06-08",   "message": "Customer lastname updated successfully" }</pre>
<a href="#">/api/v1/customer/{customer_number}/{contact_firstname}</a>	PUT	<a href="#">Update Customer's contact firstname</a>	<pre>{   "timeStamp": "06-08",   "message": "Customer firstname updated successfully" }</pre>
<a href="#">/api/v1/customer/address/{customer_number}</a>	PUT	<a href="#">Update Customer's address</a>	<pre>{   "timeStamp": "06-08",   "message": "Customer updated successfully" }</pre>
<a href="#">/api/v1/payment/all</a>	GET	<a href="#">Get All Payments</a>	Collector Payments
<a href="#">/api/v1/payment/{customer_number}</a>	GET	<a href="#">Get Payment by customer_number</a>	Payment
<a href="#">/api/v1/payment/payment_date/{payment_date}</a>	GET	<a href="#">Get Payment's by payments date</a>	Collector payments
<a href="#">/api/v1/payment/customer_payment_date/{payment_date}</a>	GET	<a href="#">Get Customer's by payments date</a>	Collector Customer
<a href="#">/api/v1/payment/check_number/{check_number}</a>	GET	<a href="#">Get Payment's by check_number</a>	Collector payments
<a href="#">/api/v1/payment/total_amount/{customer_number}</a>	GET	<a href="#">Get total amount of Payments by customer_number</a>	Total amount payments

🔗 Path URL	🔧 HTTP Methods	📝 Description	📡 Success Response
<a href="#">/api/v1/payment/customers/{check_number}</a>	GET	<a href="#">Get Customer's by check number</a>	Collector Customer
<a href="#">/api/v1/payment/max_amount/{amount}</a>	GET	<a href="#">Get Customer by max payment amount</a>	Customer
<a href="#">/api/v1/payment/customers/{startPaydate}/{endpaydate}</a>	GET	<a href="#">Get Customer between start payment date and end payment date</a>	Collector Customer
<a href="#">/api/v1/payment/add</a>	POST	<a href="#">Add new Payment</a>	<pre>{   "timeStamp": "06-08",   "message": "Payment added successfully" }</pre>
<a href="#">/api/v1/payment/check_number/{check_number}/{customer_number}</a>	PUT	<a href="#">Update Payment's check number by customer number</a>	<pre>{   "timeStamp": "06-08",   "message": "number updated successfully" }</pre>
<a href="#">/api/v1/payment/amount/{amount}/{check_number}</a>	PUT	<a href="#">Update Payment's amount by check number</a>	<pre>{   "timeStamp": "06-08",   "message": "updated successfully" }</pre>
<a href="#">/api/v1/orders/all</a>	GET	<a href="#">Get All Orders</a>	Collector Orders.
<a href="#">/api/v1/orders/{order_number}</a>	GET	<a href="#">Get Orders by order number</a>	Orders Ot
<a href="#">/api/v1/orders/{customer_number}</a>	GET	<a href="#">Get Customer's by customer number</a>	Collector Orders.
<a href="#">/api/v1/orders/order_date/{order_date}</a>	GET	<a href="#">Get Orders by order date</a>	Collector Orders.
<a href="#">/api/v1/orders/required_date/{required_date}</a>	GET	<a href="#">Get Orders by required date</a>	Collector Orders.
<a href="#">/api/v1/orders/shipped_date/{shipped_date}</a>	GET	<a href="#">Get Orders by shipped date</a>	Collector Orders.
<a href="#">/api/v1/orders/status/{status}</a>	GET	<a href="#">Get Orders by status</a>	Collector Orders.

🔗 Path URL	🔧 HTTP Methods	📝 Description	🟢 Success Response
<a href="#">/api/v1/orders/{customer_number}/{status}</a>	GET	<a href="#">Get Orders by customer number and status</a>	Collection Orders.
<a href="#">/api/v1/orders/products_details/{order_number}</a>	GET	<a href="#">Get Products by order number</a>	Collection Product.
<a href="#">/api/v1/orders/products_shipped_details</a>	GET	<a href="#">Get Products where order status is "shipped"</a>	Collection Product.
<a href="#">/api/v1/orders/add</a>	POST	<a href="#">Add new Orders</a>	{ "timeStamp": "2023-06-08", "message": "Order details added successfully" }
<a href="#">/api/v1/orders/{order_number}/{shipped_date}</a>	PUT	<a href="#">Update Orders shipped_date by order number</a>	{ "timeStamp": "2023-06-08", "message": "Shipped date updated successfully" }
<a href="#">/api/v1/orders/{order_number}/{status}</a>	PUT	<a href="#">Update Orders status by order number</a>	{ "timeStamp": "2023-06-08", "message": "Order status updated successfully" }
<a href="#">/api/v1/product/all</a>	GET	<a href="#">Get All Products</a>	Collection Product.
<a href="#">/api/v1/product/{product_code}</a>	GET	<a href="#">Get Product by product code</a>	Product C
<a href="#">/api/v1/product/name/{product_name}</a>	GET	<a href="#">Get Product by product name</a>	Product C
<a href="#">/api/v1/product/scale/{product_scale}</a>	GET	<a href="#">Get Product by product scale</a>	Collection Product.
<a href="#">/api/v1/product/vendor/{product_vendor}</a>	GET	<a href="#">Get Product by product vendor</a>	Collection Product.
<a href="#">/api/v1/product/total_ordered_qty/{product_code}</a>	GET	<a href="#">Get Total Ordered Quantity</a>	Total Order Quantity



🔗 Path URL	🔧 HTTP Methods	📝 Description	📡 Success Response
<a href="#">/api/v1/product/total_sale/{product_code}</a>	GET	<a href="#">Get total sales by product code</a>	Total sale for given
<a href="#">/api/v1/product/total_sale/{product_code}</a>	GET	<a href="#">Get total sales by product code</a>	Total sale for given
<a href="#">/api/v1/product/total_sale/{product_code}</a>	GET	<a href="#">Get total sales by product code</a>	Total sale for given
<a href="#">/api/v1/product/add</a>	POST	<a href="#">Add new Product</a>	{ "timeStam 06-08", "message" "Product added successfu }
<a href="#">/api/v1/product/{product_code}/{buy_price}</a>	PUT	<a href="#">Update Product's Buy Price</a>	{ "timeStam 06-08", "message" "Product updated successfu }
<a href="#">/api/v1/product/update_quantity/{product_code}/{quantity_in_stock}</a>	PUT	<a href="#">Update Product's quantity in stock</a>	{ "timeStam 06-08", "message" "Quantity details u successfu }
<a href="#">/api/v1/product/msrp/{product_code}/{msrp}</a>	PUT	<a href="#">Update Product's MSRP</a>	{ "timeStam 06-08", "message" "details u successfu }
<a href="#">/api/v1/product/vendor/{product_code}/{product_vendor}</a>	PUT	<a href="#">Update Product's vendor</a>	{ "timeStam 06-08", "message" "details u successfu }
<a href="#">/api/v1/product/name/{product_code}/{product_name}</a>	PUT	<a href="#">Update Product's Product name</a>	{ "timeStam 06-08", "message" "Product details u successfu }
<a href="#">api/v1/product/scale/{product_code}/{product_scale}</a>	PUT	<a href="#">Update Product's Product Scale</a>	{ "timeStam 06-08", "message" "Product details u

🔗 Path URL	🔧 HTTP Methods	📝 Description	🟢 Success Response
			<pre>successfu }</pre>
<a href="#">/api/v1/productlines/all</a>	GET	<a href="#">Get All ProductLines</a>	Collection ProductLi
<a href="#">/api/v1/productlines/add</a>	POST	<a href="#">Add new ProductLines</a>	<pre>{   "timeStam 06-08",   "message"   "ProductL details a successfu }</pre>