System Implementation

Stock Management system

Report 2 - Part 2

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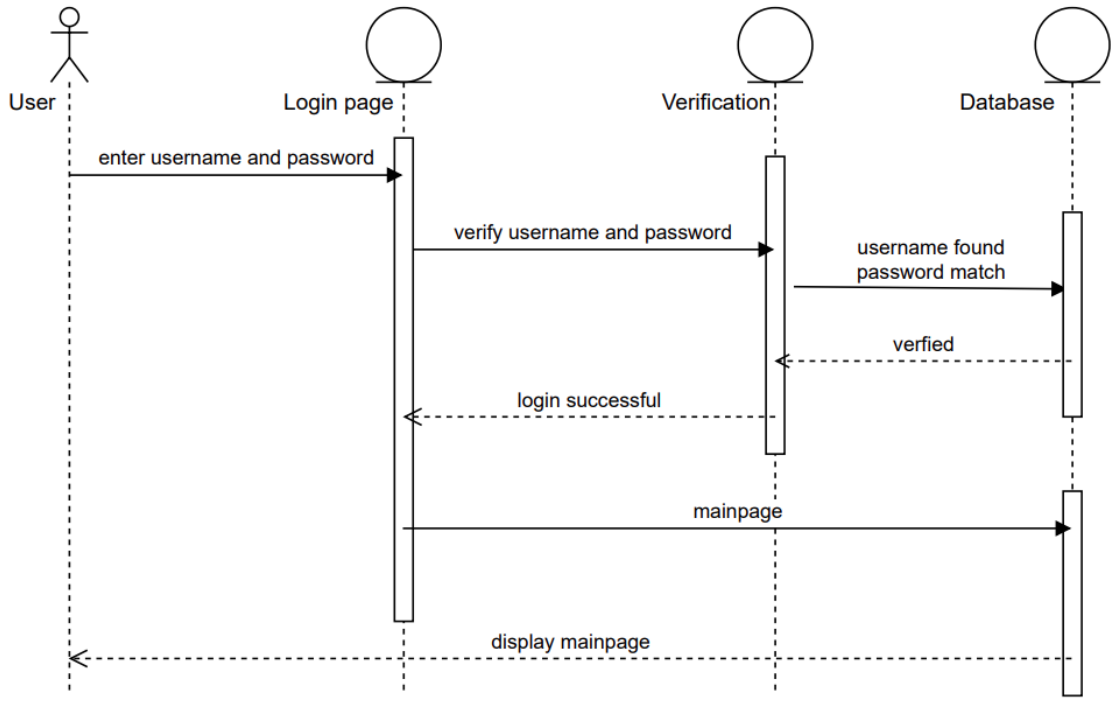
Contents

Section 1: Interaction Diagrams

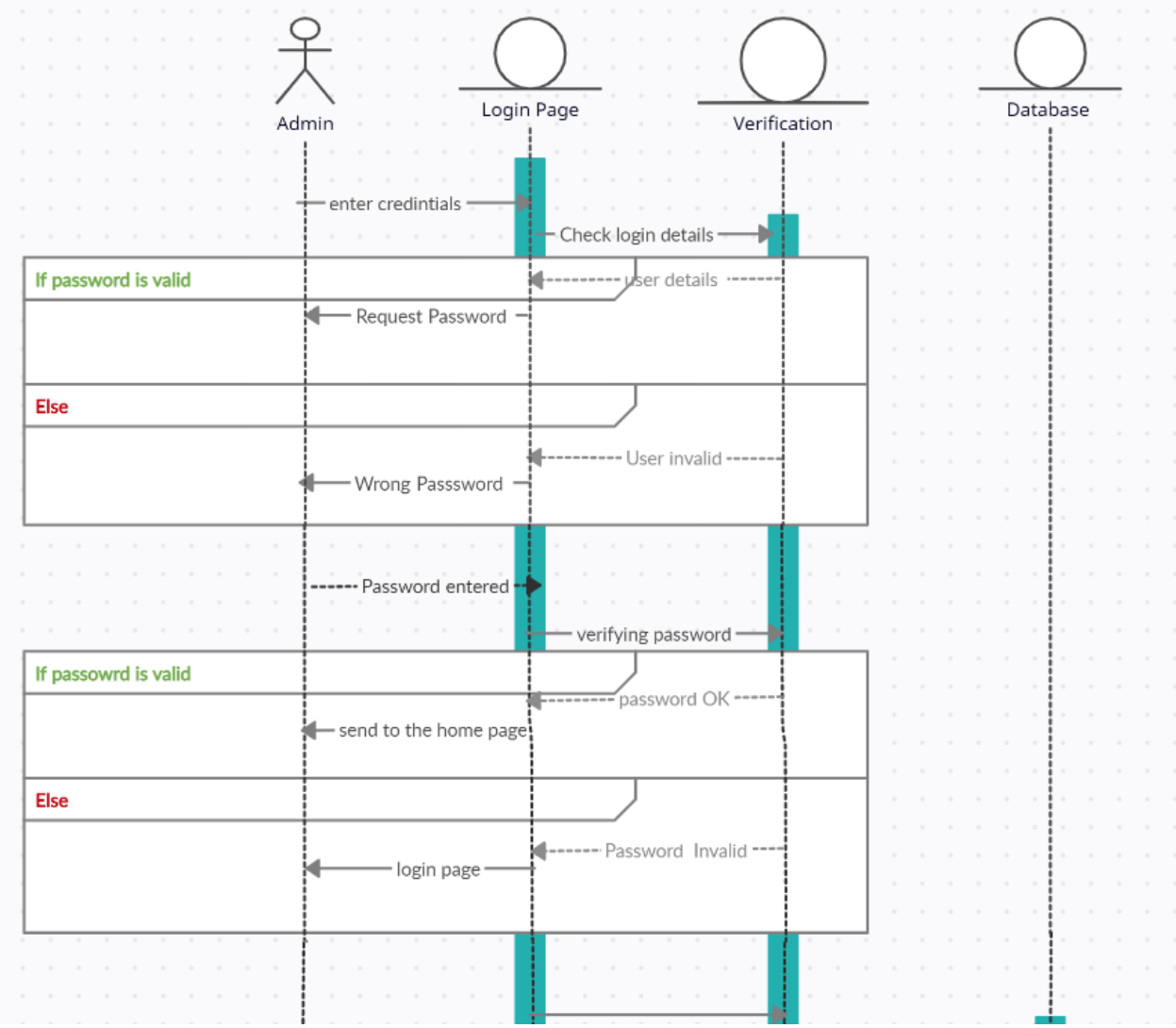
In this session I will provide all the sequence diagrams for the software that I will be implementing.

Login –

Once the user launches the app, a pop up window will display and will let the user enter the username and password, is the user click log in without entering the user name and password, a pop up window will display “Enter user name and password”. When the user successfully enters the username and password that match the one in the DB, the main page for the application and from there the user can chose which page he wants to be on.

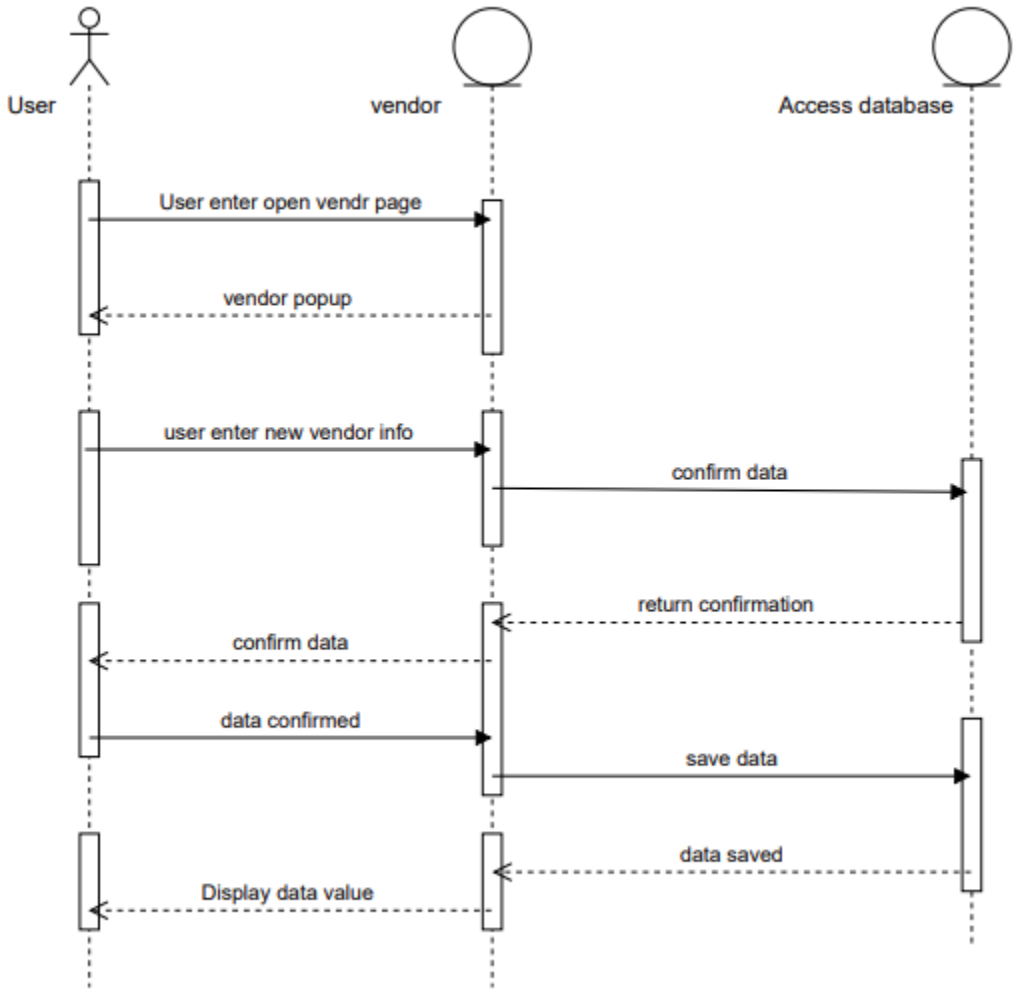


With comments -

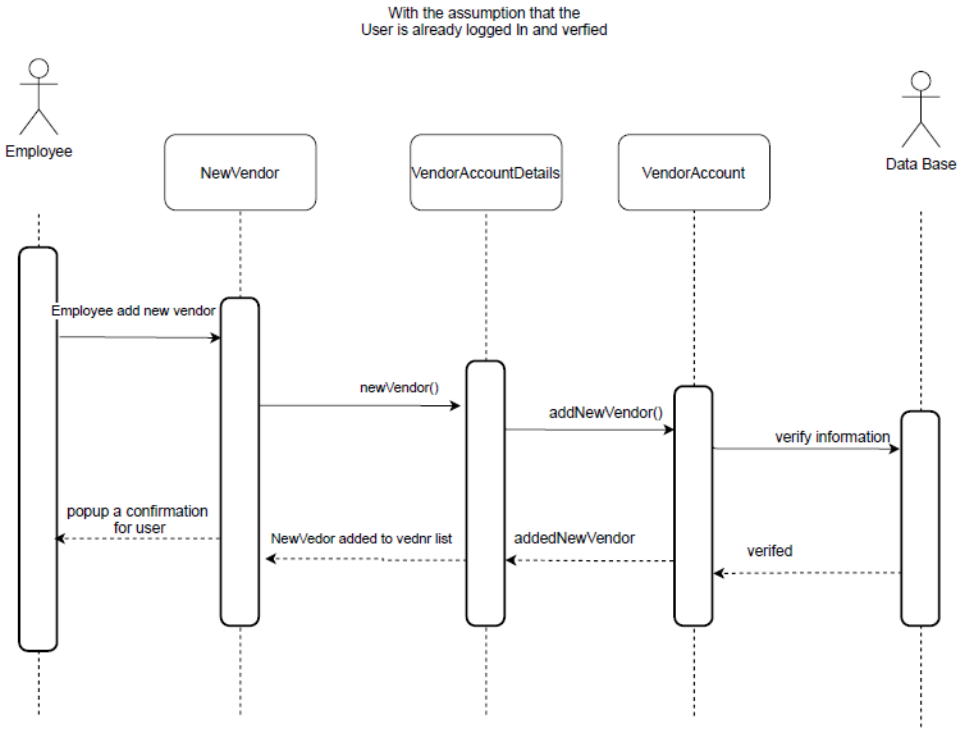


Add New Vendor to the vendor list –

Once the user selects the vendor page from the main page and added the new vendor information into the text field, the user can click the “Add” button. Once click the system to override the info in the database.

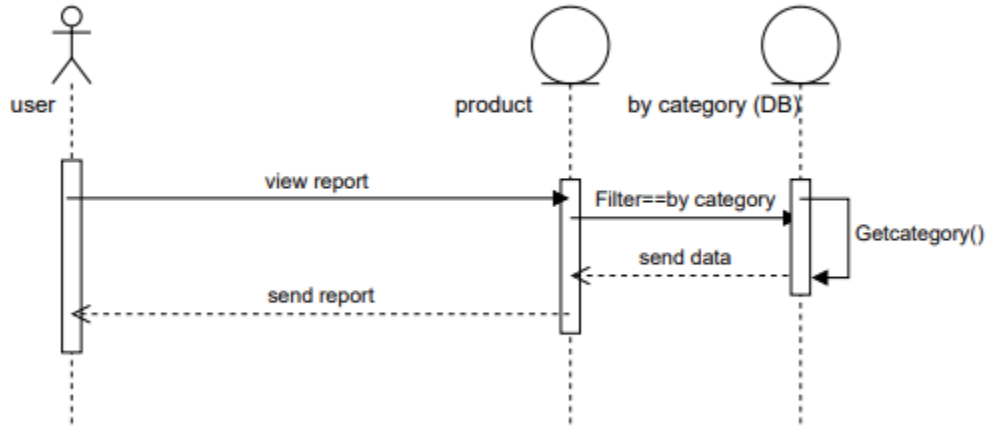


For the employee side –

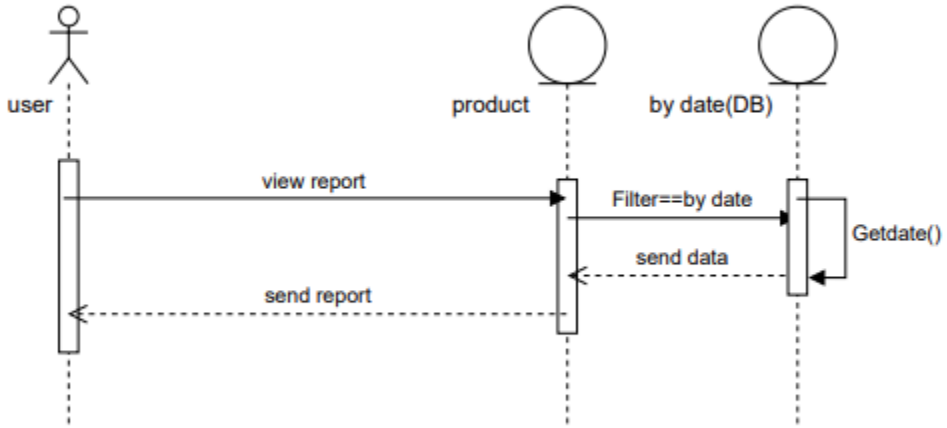


View Inventory (products) –

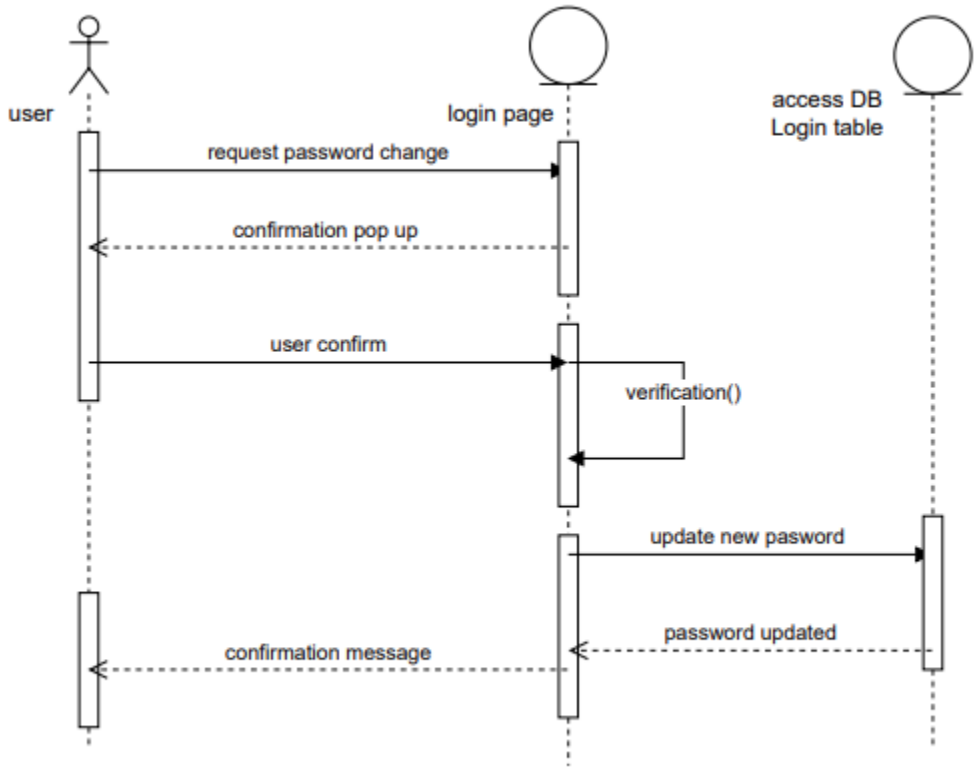
For this request, the user will have to be in the report page, and select the category product, then the user is required to click enter to initiate the process.



View product by order date –

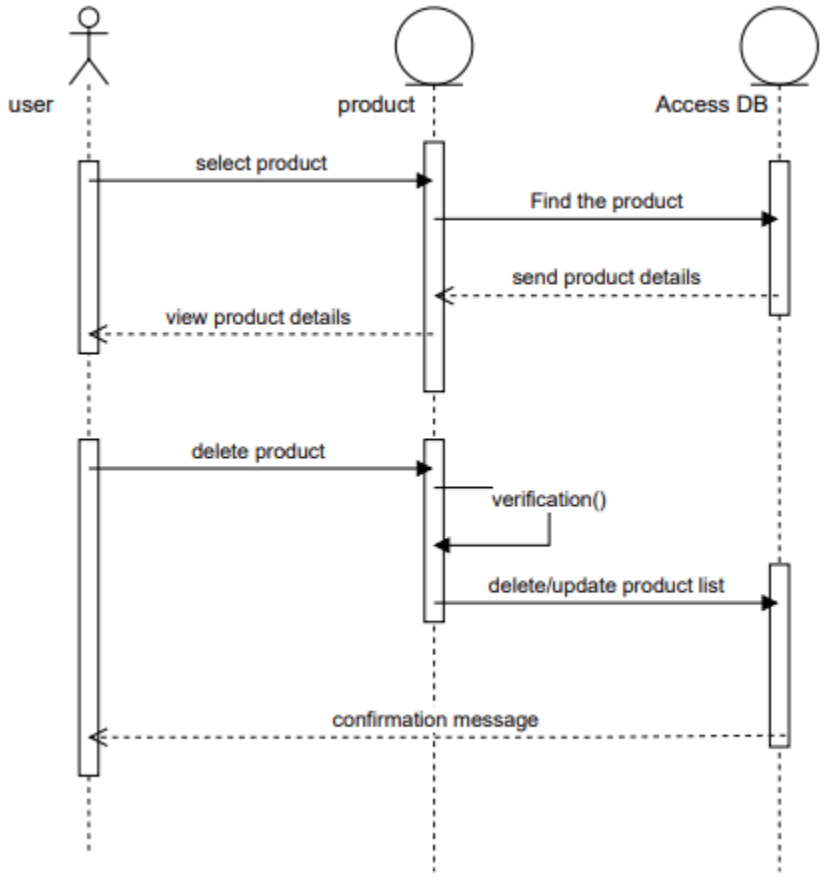


User login password update -



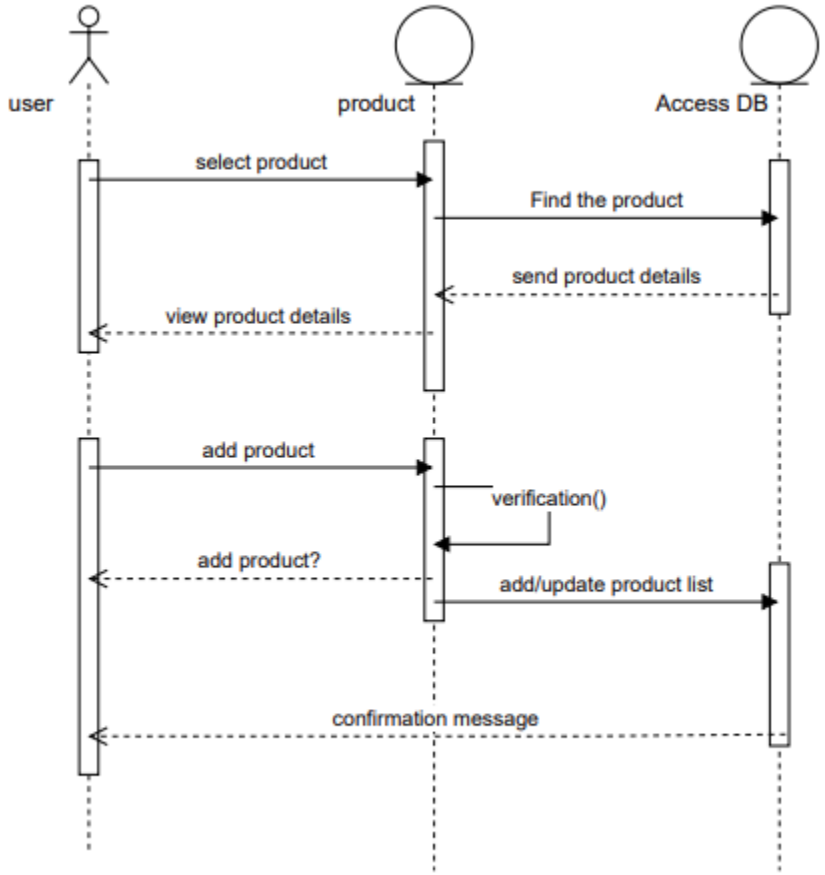
User to be able to Delete product. (With the assumption that the user is already logged in and validated and in the product page.

Once the user select the product that wants to delete, user can click on “Delete” button to delete the product from the database.

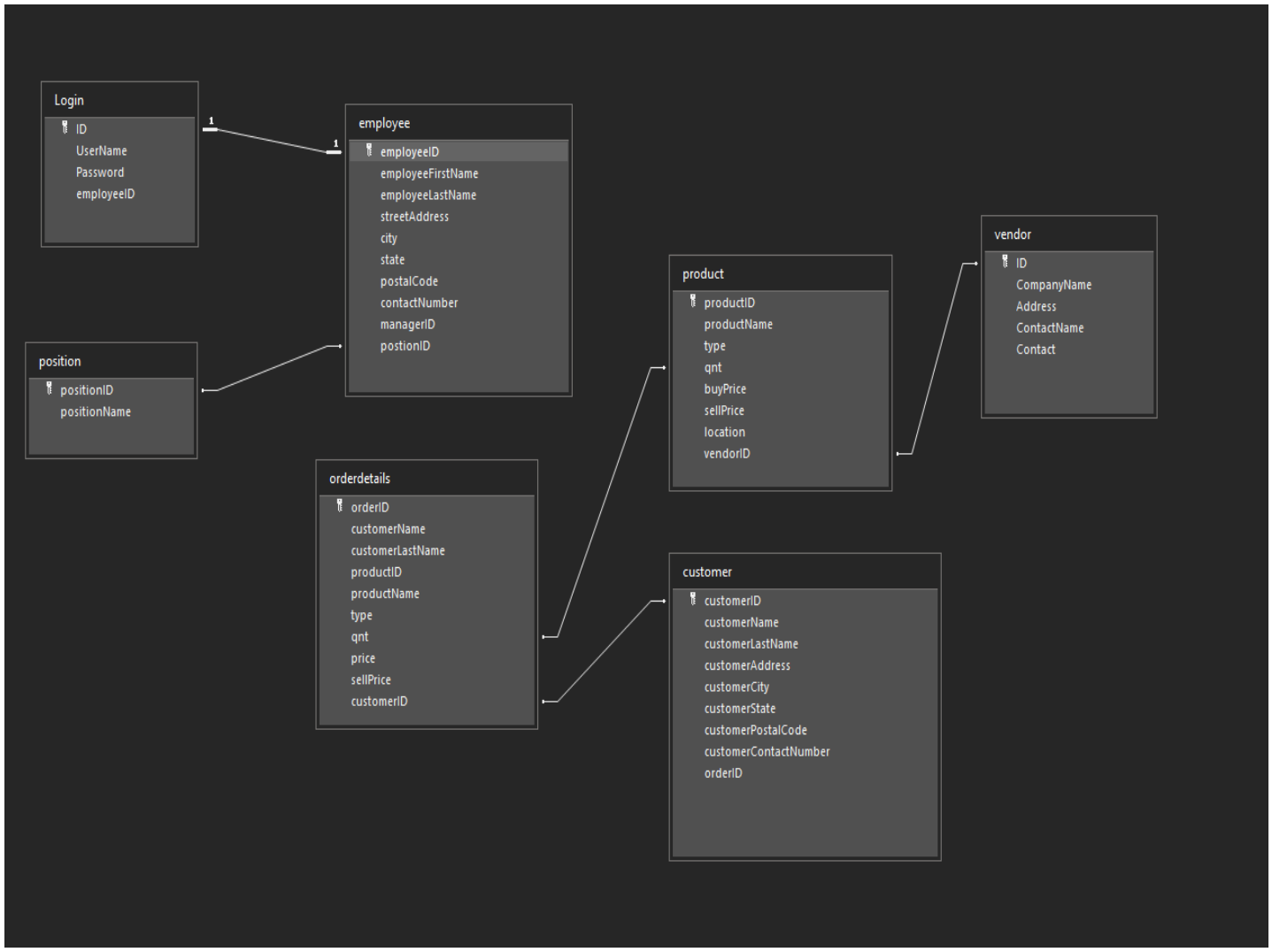


Add new Product-

Once user is on the product page, user can enter the new product details into the text files and click “Add” to add the enter data to the database.

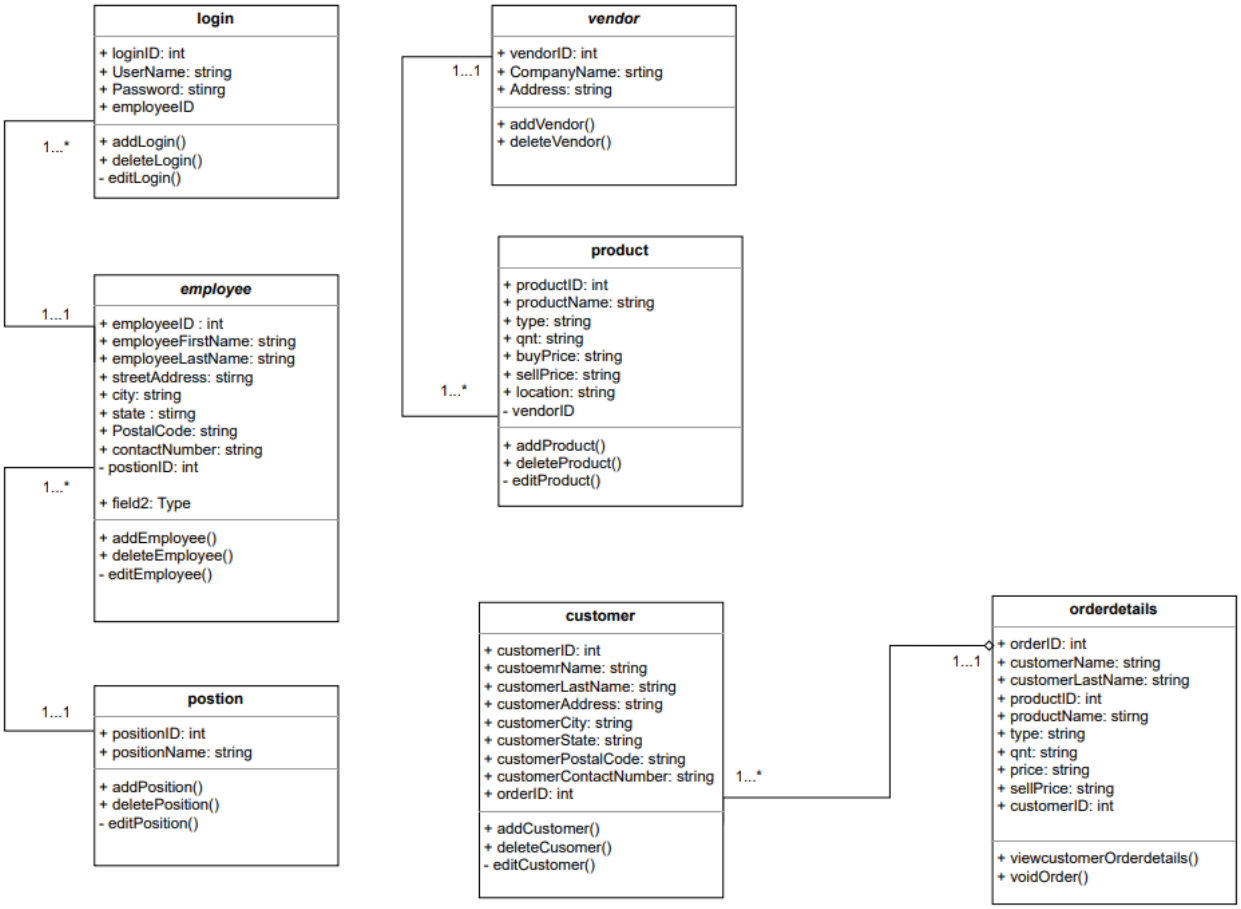


Data base Class diagram -



Section 2: Class Diagram

Inventory Management System Class diagram



Section 3: Typical Use Cases

User Login

Use case Name	*User Login*
Actors	Employee, manager, and Admin
Events	User launch the software User Enter Login info User click Enter
Entry Condition	Server should be running
Exit Condition	If user enter the correct username and password Confirmation popup to confirm logged in User is on the Main Page
Quality Requirements	User must enter correct username and password

Check Inventory (Products)

Use case Name	*Check Inventory*
Actors	Employee, manager, and Admin
Events	User browse to the products page User Enter the products information that wanted to check User click Enter System will search for the product data and then display it for the user
Entry Condition	Server should be running
Exit Condition	If user enter product information that exists in the database User will view the product details
Quality Requirements	User must enter product information that exists in the database

Add Vendor

Use case Name	*Add vendor*
Actors	manager, and Admin
Events	Manager/Admin need to be on the vendor page Manager/Admin need to enter the new vendor information Manager/Admin must click “Add” to add the new information
Entry Condition	Server should be running
Exit Condition	System will pop up a confirmation window that the new vendor is added
Quality Requirements	Manager must file all text fields to add new vendor

Add Employee

Use case Name	*Add employee*
Actors	manager, and Admin
Events	Manager/Admin need to be on the employee page Manager/Admin need to enter the new employee information Manager/Admin must click “Add” to add the new information
Entry Condition	Server should be running
Exit Condition	System will pop up a confirmation window that the new employee is added
Quality Requirements	Manager must file all text fields to add new employee information

Add Manager

Use case Name	*Add Manager*
Actors	Admin
Events	Admin need to be on the manager page Admin need to enter the new manager information Admin must click “Add” to add the new information
Entry Condition	Server should be running
Exit Condition	System will pop up a confirmation window that the new employee is added
Quality Requirements	Admin must file all text fields to add new manager information

Delete product

Use case Name	*Delete Product*
Actors	manager, and Admin
Events	Manager/Admin need to be on the product page Manager/Admin to location/select the product info Manager/Admin must click “Delete” to delete product information
Entry Condition	Server should be running
Exit Condition	System will pop up a confirmation window that the new employee is deleted
Quality Requirements	Manager must file all text fields to delete product from the database

Delete Employee

Use case Name	*Delete Employee*
Actors	manager, and Admin
Events	Manager/Admin need to be on the employee page Manager/Admin to location/select the employee info Manager/Admin must click “Delete” to delete the employee information
Entry Condition	Server should be running
Exit Condition	System will pop up a confirmation window that the new employee is deleted

Quality Requirements	Manager must file all text fields to delete employee from the database

Delete Vendor

Use case Name	*Delete Vendor*
Actors	manager, and Admin
Events	Manager/Admin need to be on the vendor page Manager/Admin to location/select vendor info Manager/Admin must click “Delete” to delete vendor information
Entry Condition	Server should be running
Exit Condition	System will pop up a confirmation window that vednorXX is deleted
Quality Requirements	Manager must file all text fields to delete vednorXX from the database

Section 4: Data Types

Login –

+ loginID: int

+ UserName: string

+ Password: string

+ employeeID

Operation –

+ addLogin()

+ deleteLogin()

- editLogin()

Employee –

+ employeeID : int

+ employeeFirstName: string

+ employeeLastName: string

+ streetAddress: stirng

+ city: string

+ state : stirng

+ PostalCode: string

+ contactNumber: string

- postionID: int

Operation –

+ addEmployee()

+ deleteEmployee()

- editEmployee()

Position –

+ positionID: int

+ positionName: string

Operation –

+ addPosition()

+ deletePosition()

- editPosition()

Vendor –

+ vendorID: int

+ CompanyName: srting

+ Address: string

Operation –

+ addVendor()

+ deleteVendor()

Product –

+ productID: int

+ productName: string

+ type: string + qnt: string

+ buyPrice: string

+ sellPrice: string

+ location: string

- vendorID

Operation –

+ addProduct()

+ deleteProduct()

- editProduct()

Customer –

+ customerID: int

+ custoemrName: string

+ customerLastName: string

+ customerAddress: string

+ customerCity: string

+ customerState: string

+ customerPostalCode: string

+ customerContactNumber: string

+ orderID: in

Operation –

+ addCustomer()

+ deleteCusomer()

- editCustomer()

Order details –

+ orderID: int

+ customerName: string

+ customerLastName: string

+ productID: int

+ productName: stirng

+ type: string

+ qnt: string

+ price: string

+ sellPrice: string

+ customerID: int

Operation –

+ viewcustomerOrderdetails()

+ voidOrder()

Section 5: System Architecture

Architecture Breakdown

Front End: -

Visual Studio 2019 – Front end IDE

- End user GUI design
- Datebase Modelling
- Control Design

Back End: -

Microsoft Access 356 – for DB

Tables -

- Login
- Employee
- Position
- Vendor
- Product
- Customer
- Order details

Hardware Minimum requirement

Processor – Intel Core i3, 2.0 GHz or higher

RAM – 2GB of RAM

Network Interface card

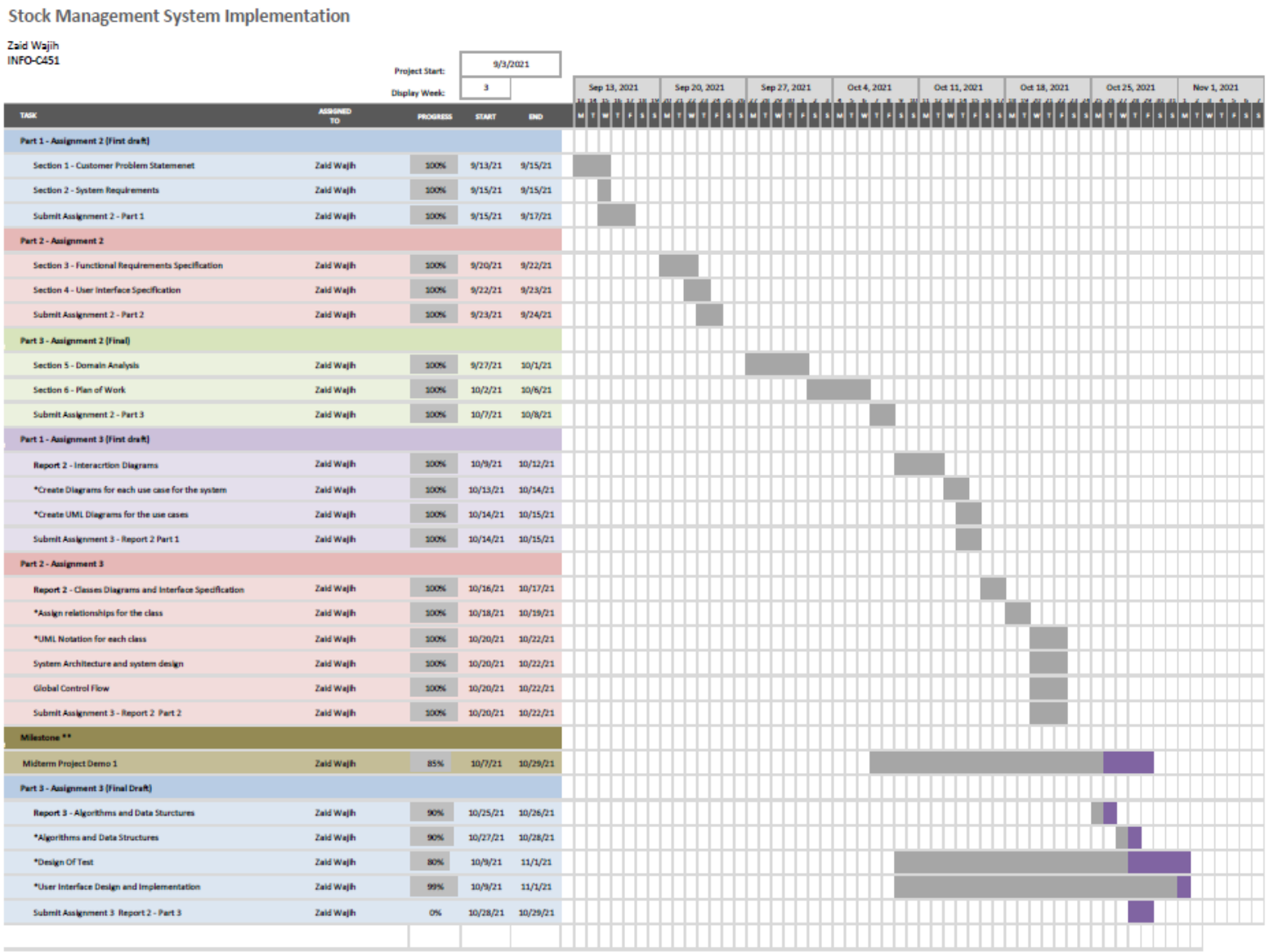
Hard Drive – 1 GB

Software Requirements

OS – Windows 10
Framework - .NET framework SP 3.0
Microsoft Access 365

Section 6: Project Management

In this project, a system must be designed to support connectivity with a database management system that will store and keep all records for the system. The software application to be made consists of at least main business functions and meet all business requirements. The application will involve basic e-commerce activities, such as employee, manager login, browsing between products, and buy/sell activities. The entire system must be developed in (C#) to be easy to maintain and extend. Below is the project plan for each implementation section for the project.



TASK	ASSIGNED TO	PROGRESS	START	END
Part 1 - Assignment 2 (First draft)				
Section 1 - Customer Problem Statemenet	Zaid Wajih	100%	9/13/21	9/15/21
Section 2 - System Requirements	Zaid Wajih	100%	9/15/21	9/15/21
Submit Assignment 2 - Part 1	Zaid Wajih	100%	9/15/21	9/17/21
Part 2 - Assignment 2				
Section 3 - Functional Requirements Specification	Zaid Wajih	100%	9/20/21	9/22/21
Section 4 - User Interface Specification	Zaid Wajih	100%	9/22/21	9/23/21
Submit Assignment 2 - Part 2	Zaid Wajih	100%	9/23/21	9/24/21
Part 3 - Assignment 2 (Final)				
Section 5 - Domain Analysis	Zaid Wajih	100%	9/27/21	10/1/21
Section 6 - Plan of Work	Zaid Wajih	100%	10/2/21	10/6/21
Submit Assignment 2 - Part 3	Zaid Wajih	100%	10/7/21	10/8/21
Part 1 - Assignment 3 (First draft)				
Report 2 - Interacrtion Diagrams	Zaid Wajih	100%	10/9/21	10/12/21
*Create Diagrams for each use case for the system	Zaid Wajih	100%	10/13/21	10/14/21
*Create UML Diagrams for the use cases	Zaid Wajih	100%	10/14/21	10/15/21
Submit Assignment 3 - Report 2 Part 1	Zaid Wajih	100%	10/14/21	10/15/21
Part 2 - Assignment 3				
Report 2 - Classes Diagrams and Interface Specification	Zaid Wajih	100%	10/16/21	10/17/21
*Assign relationships for the class	Zaid Wajih	100%	10/18/21	10/19/21
*UML Notation for each class	Zaid Wajih	100%	10/20/21	10/22/21
System Architecture and system design	Zaid Wajih	100%	10/20/21	10/22/21
Global Control Flow	Zaid Wajih	100%	10/20/21	10/22/21
Submit Assignment 3 - Report 2 Part 2	Zaid Wajih	100%	10/20/21	10/22/21
Milestone **				
Midterm Project Demo 1	Zaid Wajih	85%	10/7/21	10/29/21
Part 3 - Assignment 3 (Final Draft)				
Report 3 - Algorithms and Data Sturctures	Zaid Wajih	90%	10/25/21	10/26/21
*Algorithms and Data Structures	Zaid Wajih	90%	10/27/21	10/28/21
*Design Of Test	Zaid Wajih	80%	10/9/21	11/1/21
*User Interface Design and Implementation	Zaid Wajih	99%	10/9/21	11/1/21
Submit Assignment 3 Report 2 - Part 3	Zaid Wajih	0%	10/28/21	10/29/21

References

I used the below website to get the templet for the project plan.

Smartsheet. (2021). *Powerful Project Planning Software*.

https://www.smartsheet.com/s/project-planning?s=1&c=3&m=461&a=356234702625&k=excel%20project%20plan%20template&mtp=e&adp=&net=g&dev=c&devm=&plc=&ds_rl=1286294&exp=&gclid=Cj0KCQiAy4eNBhCaARIsAFDVtI2si_sPHA3rA9Ue4_VrSg0c28IJDyMvefa761nLQFgh_8SODumvbJUaAkJFEALw_wcB&gclsrc=aw.ds