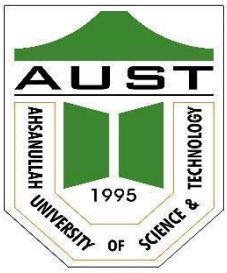


Ahsanullah University of Science & Technology

Department of Computer Science & Engineering

PROJECT REPORT

Course No : CSE3104
Course Title : Database Lab
Date of Submission : 05-10-21
Submitted To : Nazmus Sakib & Munshi Rejwan Ala Muid

Team Name :Tri Ancesstillians
Project Name : Inventory Management

Submitted By-

180204054 - Arman Sakif

180204073 - Md. Rahat Ashik

180204074 - M M Sadman Ibrahim

A *Tri Ancestillians* project

TEAM NAME : *Tri Ancestillians*
TEAM MEMBERS :

- 180204054 - Md. Arman Sakif
- 180204073 - Md. Rahat Ashik
- 180204074 - M M Sadman Ibrahim

PROJECT NAME : Inventory Management System
PROJECT TYPE : Desktop Management System

PROJECT DESCRIPTION : The project is a database management software(desktop application) that manages, Updates, Adds, deletes, searches records. This inventory though can be used on any scenario, but in this semester project it has been used to keep and manage the inventory of a supershop…(mostly like agora, meena bazaar, unimart).

PROJECT IN-DEPTH: In this project inventory Management system , a database concentrated desktop application , we have added many features..
Primary Features Includes :

- ADD RECORD
- UPDATE RECORD
- DELETE RECORD
- MODIFY RECORD
- SEARCH THROUGH RECORDS

We have created a wide range of entities (tables) in the database Inventory Management. The entities which have multiple attributes are as follows:

- Admin_Details
- Employee
- Customer
- Product
- Order_details
- Payment
- Supplier
- Supply

The Tables have a variety of cardinality and contain at least 5-7 or more attributes each. Other than the basic queries such as ADD,UPDATE,DELETE we have a variety of queries to make the search very effective for the users.

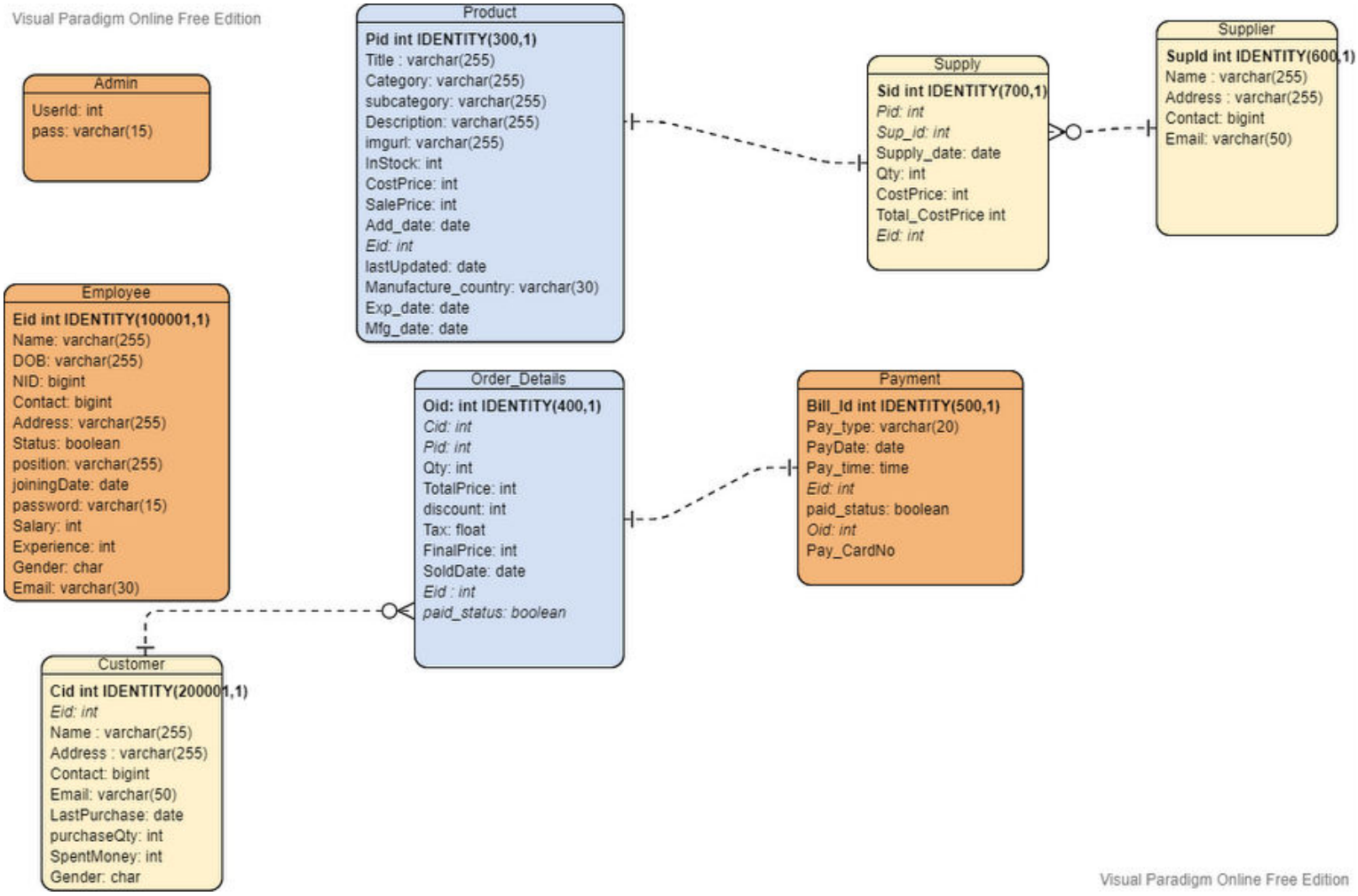
A total of 63++ queries relating only to searching mechanism has been solved and applied in the desktop application properly. Here within the queries we have successfully used the application of complex queries such as **sub-queries, join-operation, aggregate-functions** and many more along with basic queries.

The queries relating only to search are as follows (Excluding ADD,DELETE,MODIFY) record :

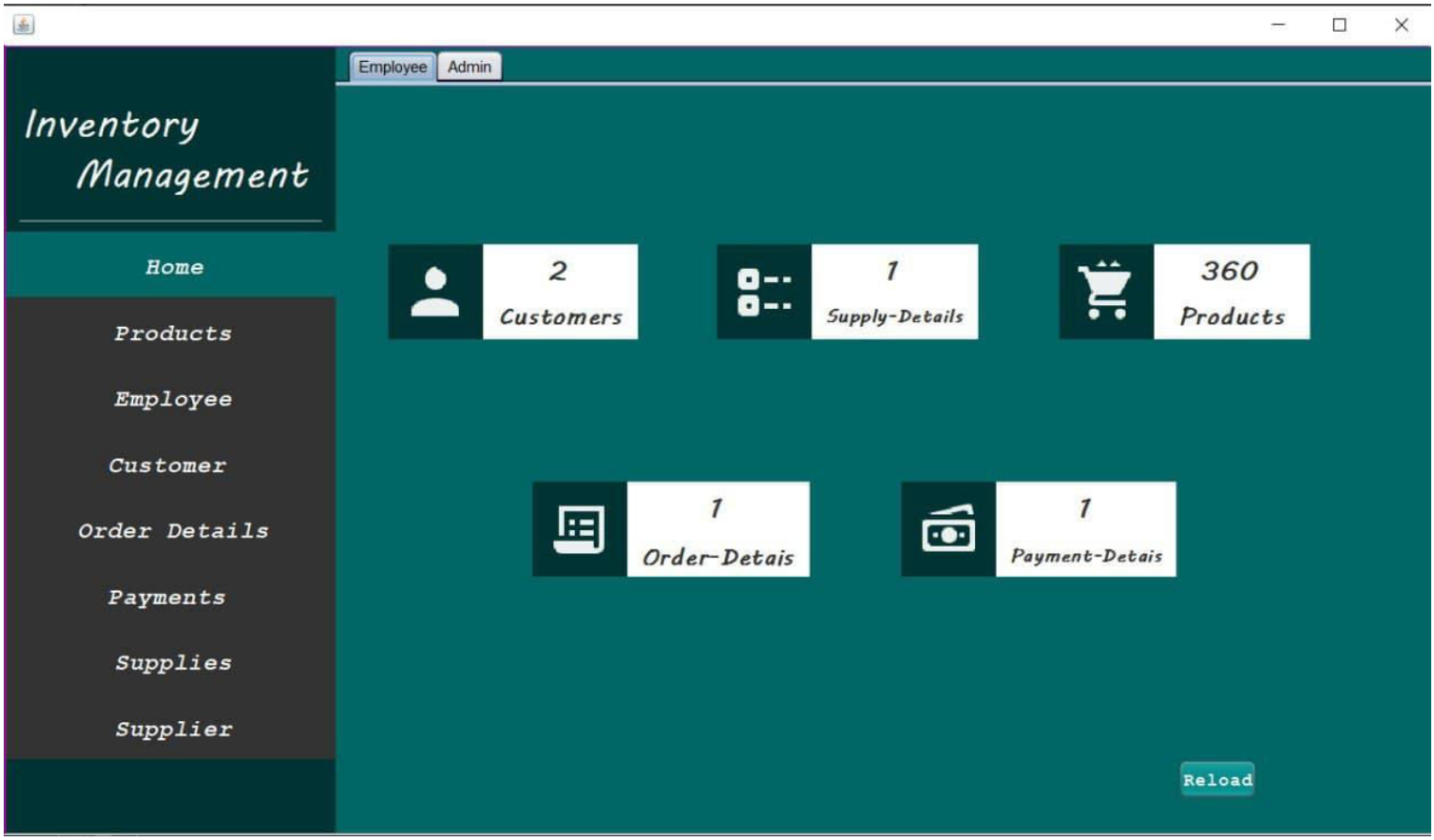
1. How many goods were sold on Specific date ?
2. How many goods were sold on Specific month ?
3. How many goods were sold on Specific year ?
4. How many goods were sold on From YYYY-MM-DD to YYYY-MM-DD ?
5. Income from dd/mm/yyyy to dd/mm/yyyy.
6. Profit from dd/mm/yyyy to dd/mm/yyyy.
7. Select Employees according to :
    a. Salary
    b. Experience (in months)
    c. Address
    d. Gender (M/F)
    e. Status (employed/fired)
    f. Position (Manager/ Salesperson/ Cashier)
8. Show all Customers :
    a. In a particular area x
    b. Handled by particular employee (eid)
    c. Who spent more than xx bdt
    d. Who bought more than x qty of items
    e. Who didn’t buy something from xDate - yDate
    f. Who bought something from xDate-yDate
9. Search a customer by:
    a. Cid
    b. Phone number
    c. Email
    d. Name
10. Which items will expire in x days?
11. Which items will expire in less x days?
12. Search an order with :
    a. order ID
    b. Eid
    c. Customer name
    d. Customer phone number
    e. Cid

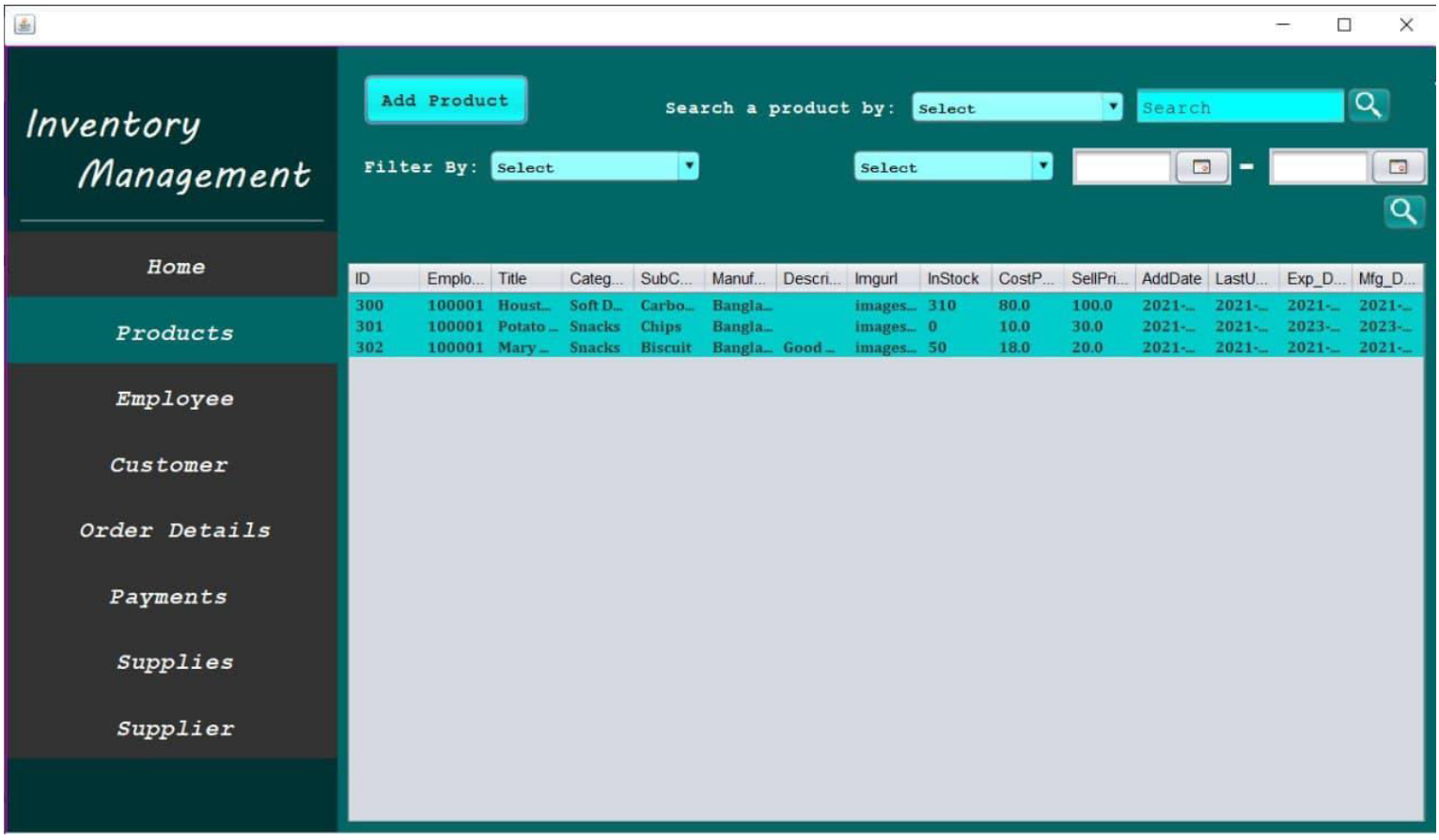
13. Select Orders:
    a. Which have payments due
    b. With unitPrice(product.Saleprice) higher than x bdt
    c. With totalPrice higher than x bdt
    d. Which have discount
    e. Which do not have discount
    f. Sold between xDate - yDate
    g. Qty more than x items
    h. Handled by particular Employee (Eid)
    i. Handled by particular Employee (iEmployee name)
14. Search a particular Product:
    a. Pid
    b. Product Title
    c. Imgurl
15. Select products based on :
    a. Country of manufacture
    b. Category
    c. Sub -category
    d. Input by a particular employee (Eid)
    e. Added on a particular date
    f. Added between xDate-yDate
    g. Expires within a week/month
    h. In stock
    i. Not in stock
    j. Less than x items in stock
    k. SalePrice less/higher than x bdt
    l. Supplied by particular supplier (Sid)
    m. Highest sold product
    n. Sold between xDate-yDate
16. Search a payment by:
    a. Bill_id
    b. Payment date & time
17. Show all payments which :
    a. Are paid (paid status)
    b. Aren’t paid
    c. Are between xDate-yDate
    d. Handled by particular Employee (Eid)
    e. Paid through card
    f. Paid through cash

PROJECT ER DIAGRAM :

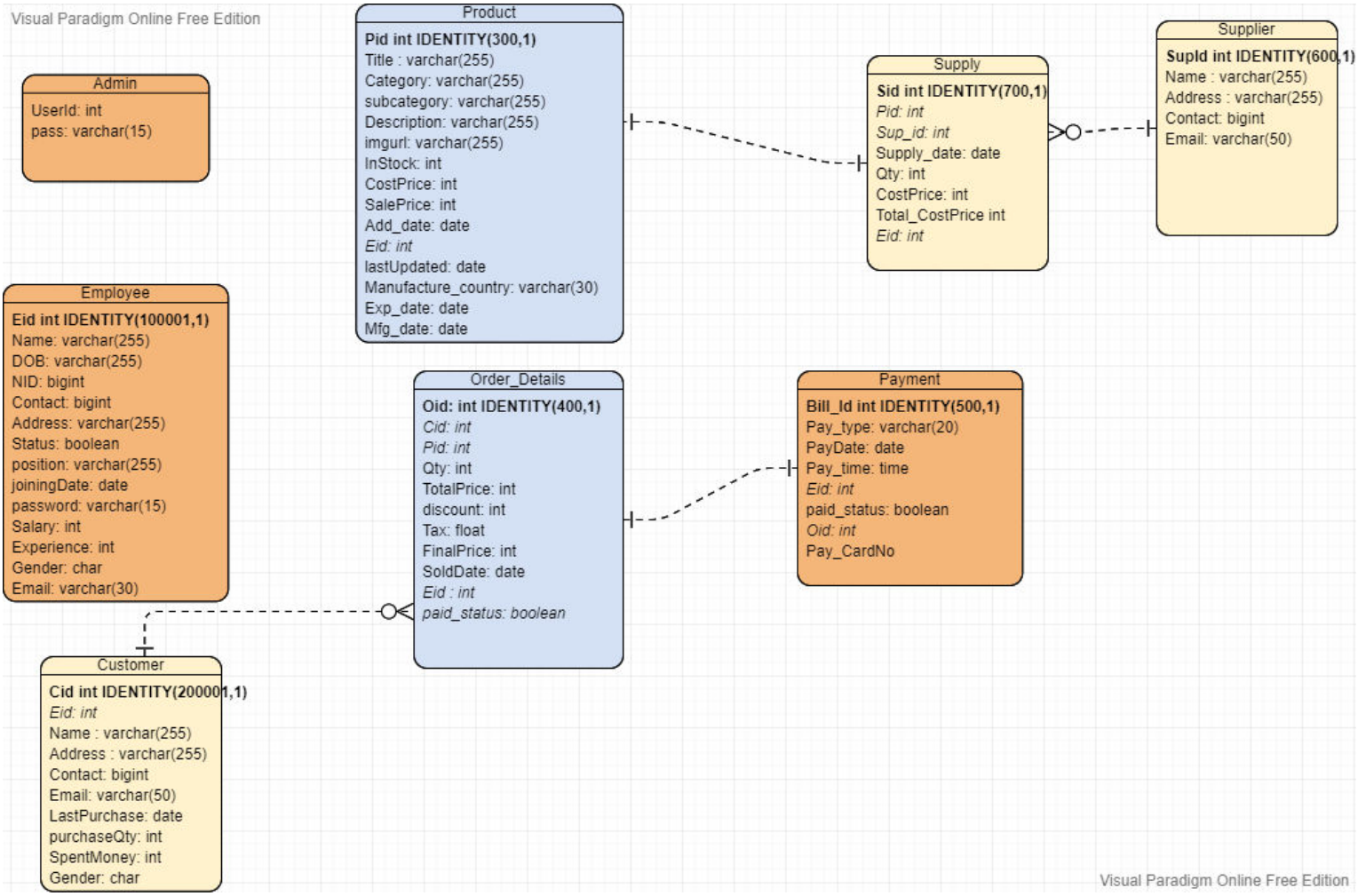


PROJECT UI :


Employee
Admin
Inventory Management
Home
Products
Employee
Customer
Order Details
Payments
Supplies
Supplier
2
Customers
1
Supply-Details
360
Products
1
Order-Detais
1
Payment-Detais
Reload


Inventory Management
Add Product
Search a product by:
Select
Search
Filter By:
Select
Select
Home
Products
Employee
Customer
Order Details
Payments
Supplies
Supplier
ID
Emplo...
Title
Categ...
SubC...
Manuf...
Descri...
Imgurl
InStock
CostP...
SellPri...
AddDate
LastU...
Exp_D...
Mfg_D...
300 100001 Houst... Soft D... Carbo... Bangla... images... 310 80.0 100.0 2021-... 2021-... 2021-... 2021-...
301 100001 Potato ... Snacks Chips Bangla... images... 0 10.0 30.0 2021-... 2021-... 2023-... 2023-...
302 100001 Mary ... Snacks Biscuit Bangla... Good ... images... 50 18.0 20.0 2021-... 2021-... 2021-... 2021-...

PROJECT RELATIONAL SCHEMA :



PROJECT TECHNOLOGIES USED:

- **Microsoft SQL Server 2014 / 2019**
- **NetBeans IDE 8.2 / 12**

We have used Microsoft SQL Server to primarily write, solve and text all the possible queries. The we have used Netbeans 8.2/12 to convert the SQL queries to java code. All the queries after converting to java code were run in the IDE console to check if every code is working properly.. Then the code had been integrated in the UI we have designed for this project.

PROJECT DURATION: APPROX 4 WEEKS