**Logo

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**Logo, company name

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**Arab Academy for Science Technology and Maritime Transport**

**College Of Computing and Information Technology**

**Department of Computer Science**

**Al-Rayah (Hyper-Market)**

**Presented by: Mark Mechail, Mostafa Tarek, Ahmed Mohamed, Mohamed Abdullah**

**Presented to: Eng. Tamer Abdellatif**

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**Table 1. Table of Abbreviations**

|  |  |
| --- | --- |
| ID | Identification number |
| BD | Birth date |
| **SSN** | Social security number |

# Cars parked on the side of a street Description automatically generated with medium confidenceChapter 1

Figure 1. Al-Rayah 1

## **Introduction**

### **Brief Explanation:**

Our project is aimed to imitate the Rayah Hyper-Market database including all its aspects, entities and attributes. During the first phase of our project, we gathered data from Rayah’s employees and management team in-order to better our understanding of their systems and databases, during which the following information was acquired.

### **Why the need for a Database?**

A hyper-market is one of the most essential services ever since the dawn of man, markets have always been a factor in daily life. Therefore, to facilitate how markets (or in our case, a hyper-market), databases are needed for multiple reasons, to name a few, they help ease the employees work and allow them to gather data about products and customers more easily which in return adds to customer satisfaction. It also helps by providing more easy-to-access data to the management about their employees which ensures a safer and more reliable environment in the workplace. Overall databases help improve the following aspects: Safety & Security, Data collection, Data accessing and Customer Satisfaction. That’s why databases are essential and that’s the main purpose of our project.

### **The data we collected:**

During our research we figured out that the way they manage their database is by connecting all branches to a single server, that way all promotions and discounts are connected between all branches across the country, we’ve also found out that their database consists of four main entities (tables), and they are:

* Employees
* Departments
* Customers
* Products
* Delivery

# Chapter 2

## **Analyses:**

Each of which carry the data following the topic that titles them. Each of them carry multiple attributes as follows:

### **Employees:**

* EID
* EName
* EEmail
* EAddress
* ESSN
* EDepartment
* A picture containing text, indoor, food, shop

  Description automatically generatedEMarital\_Status

Figure 2. Al-Rayah 2

* EDegree
* EBD
* EMilitary\_Status
* EWorkPermit
* ESalary
* EGender
* EPhoneNumber
* EPosition

### **Departments**:

* DNumber
* DName

### **Customers:**

* CID
* CPhoneNumber
* CName
* CAddress
* CEmail

### **Products**:

* PCode
* PName
* PExpiryDate
* PDepartment
* PPrice
* PStock
* POrigin

### **Invoices**:

* INo
* ITotal
* Icustomer
* IDate
* ITime

### **Delivery**:

* DeNo
* DeTime
* DeDate
* DeInvoice
* DeEmployee\_Id
* DeAddress
* DeContact
* DeCustomer\_Name

# Chapter 3

## **Design**:

### **1.munaully ERD:**

Figure 3 Al-Rayah ERD

### **2. Computerized ERD**

**Diagram, schematic

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Figure 4 Al-Rayah ERD2

### **3. manually Mapping**

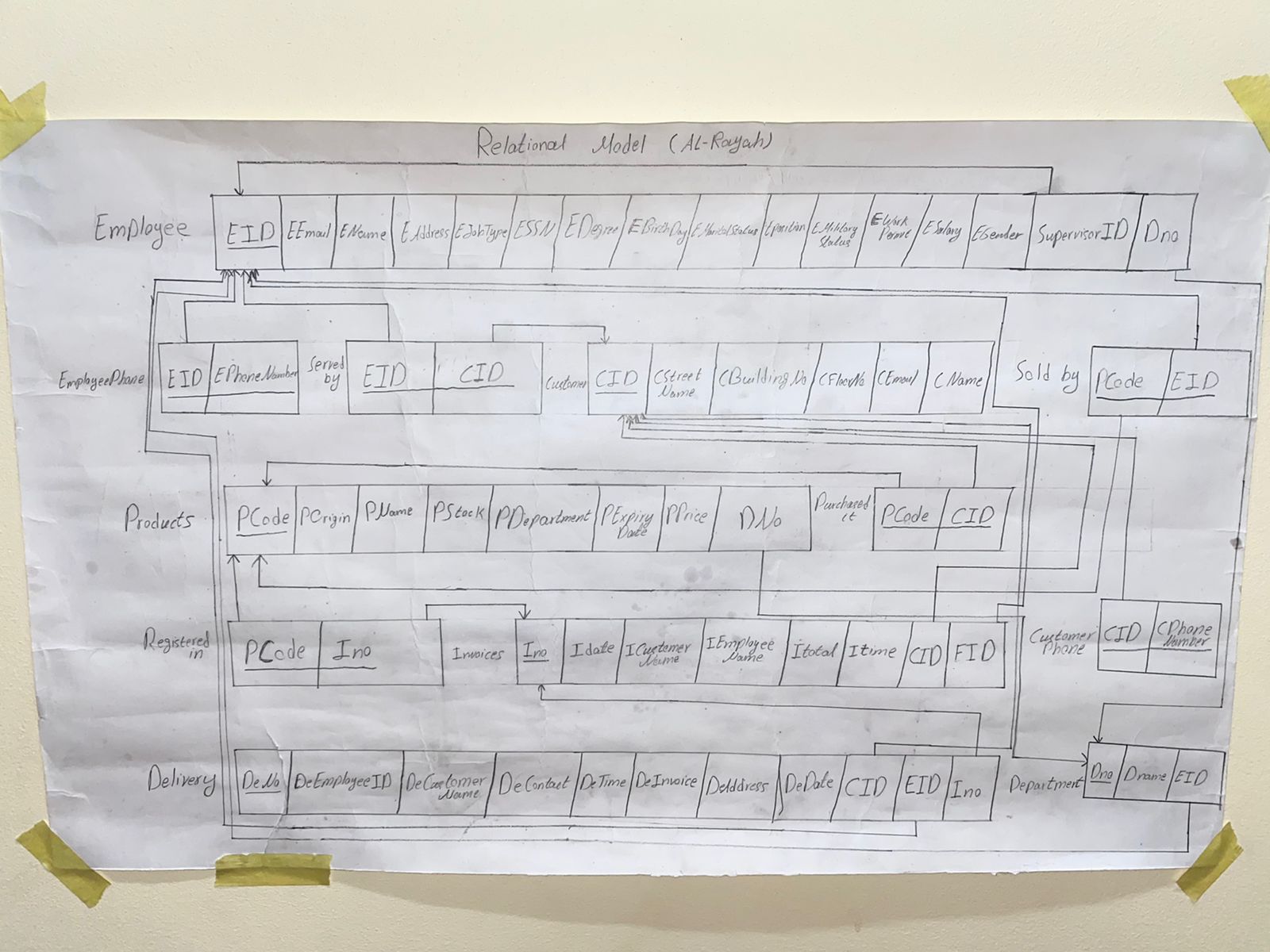


Figure 5 Al-Rayah Mapping 1

### 4. **Computerized mapping**

Diagram

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Figure 6 Al-Rayah Mapping 2

# Chapter 4

## Implementation:

### 1-Insertion , selection and Gui for data

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Al-Rayah 7- insertion

A screenshot of a computer

Description automatically generated

Al-Rayah 8-selection

A screenshot of a computer

Description automatically generated

Al-Rayah 9-selection

A screenshot of a computer

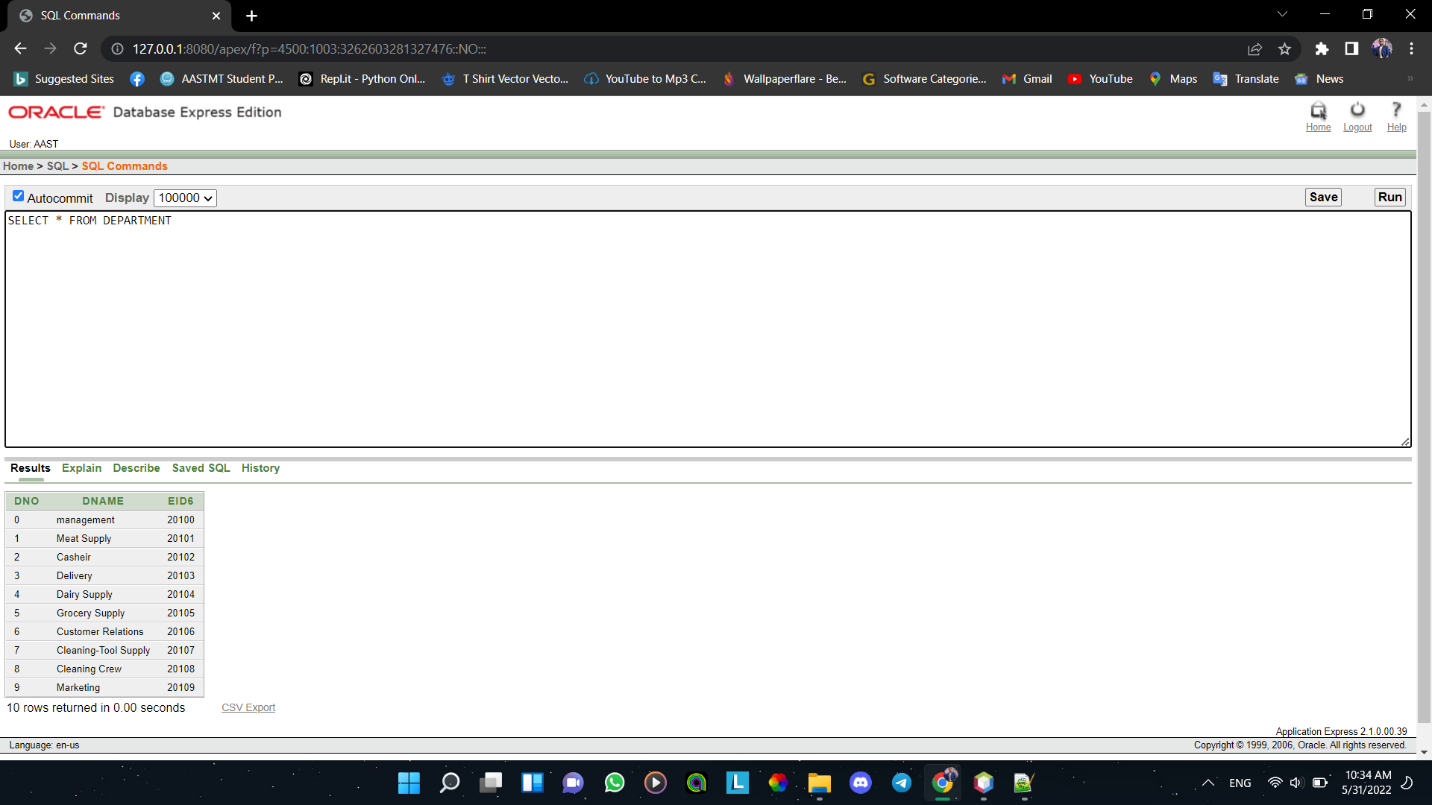
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Al-Rayah 10-selection

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Al-Rayah 11-selection



Al-Rayah 12-selection

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Al-Rayah 15-selection

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Al-Rayah 16-selection

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A screenshot of a computer

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Al-Rayah 17-selection

A screenshot of a computer

Description automatically generated

Al-Rayah 18-selection

Graphical user interface, text

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Al-Rayah 19-selection

A screenshot of a computer

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Al-Rayah 20-selection

A screenshot of a computer

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Al-Rayah 21-selection

A screenshot of a computer

Description automatically generated

Al-Rayah 22-selection

Graphical user interface, text

Description automatically generated

Al-Rayah 23-selection

Graphical user interface, text

Description automatically generated

Al-Rayah 24-selection

Graphical user interface, text, application

Description automatically generated

Al-Rayah 25-selection

A screenshot of a computer

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Al-Rayah 26-insertion

A screenshot of a computer

Description automatically generated

Al-Rayah 27-insertion

A screenshot of a computer

Description automatically generated

Al-Rayah 28-insertion

A screenshot of a computer

Description automatically generated

Al-Rayah 29-insertion

A screenshot of a computer

Description automatically generated

Al-Rayah 30-insertion

A screenshot of a computer

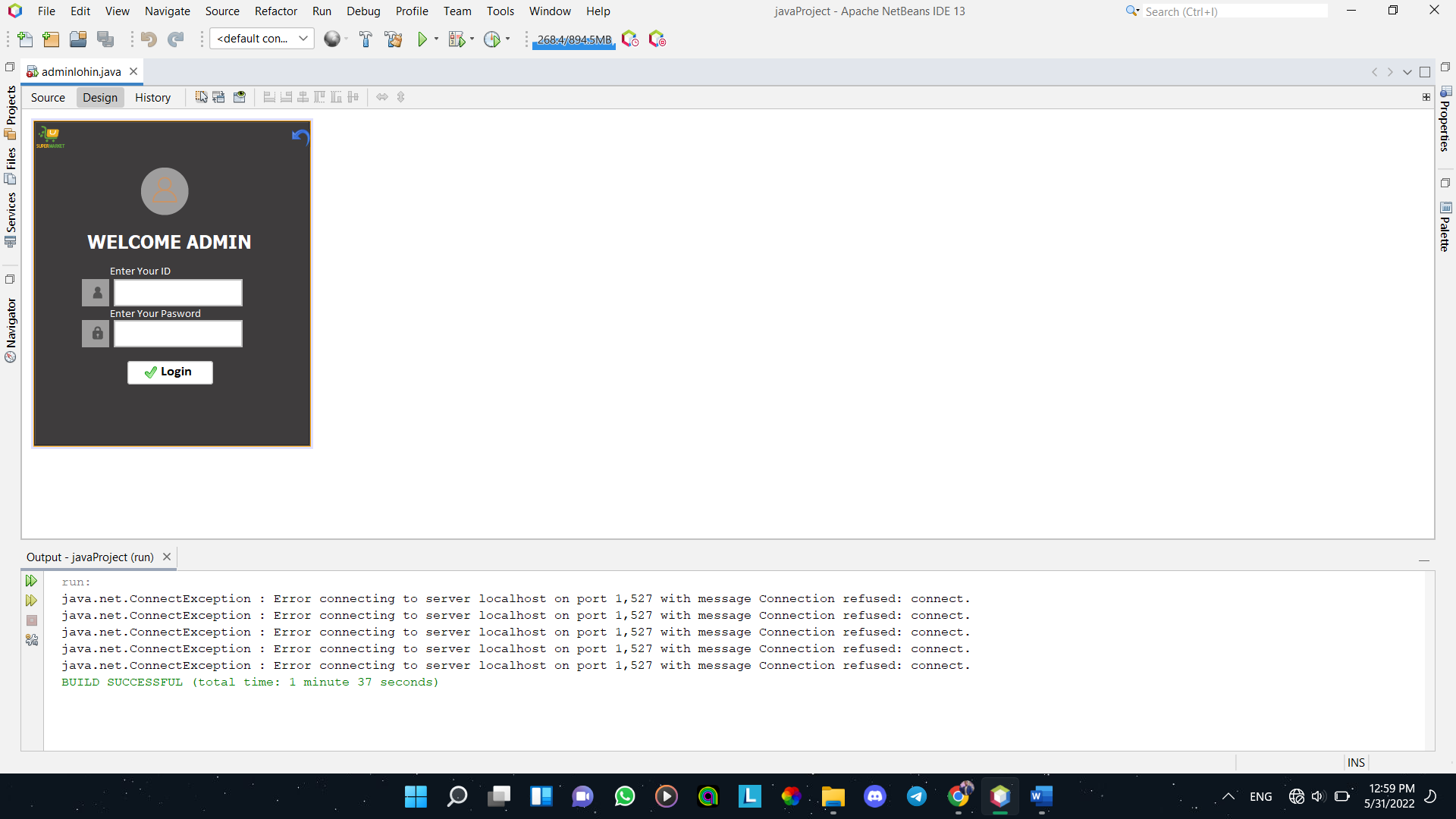
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Al-Rayah 31-insertion

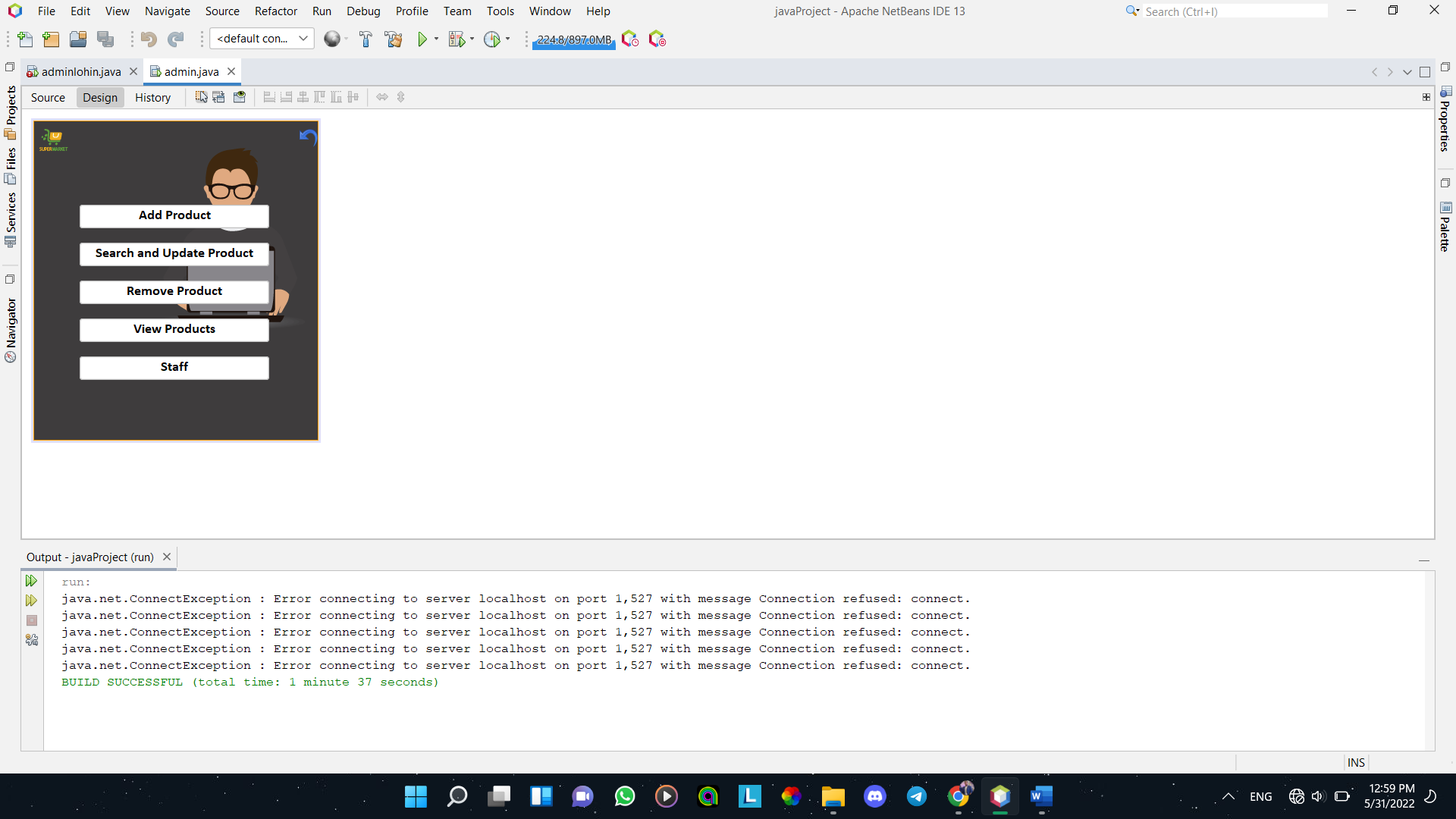
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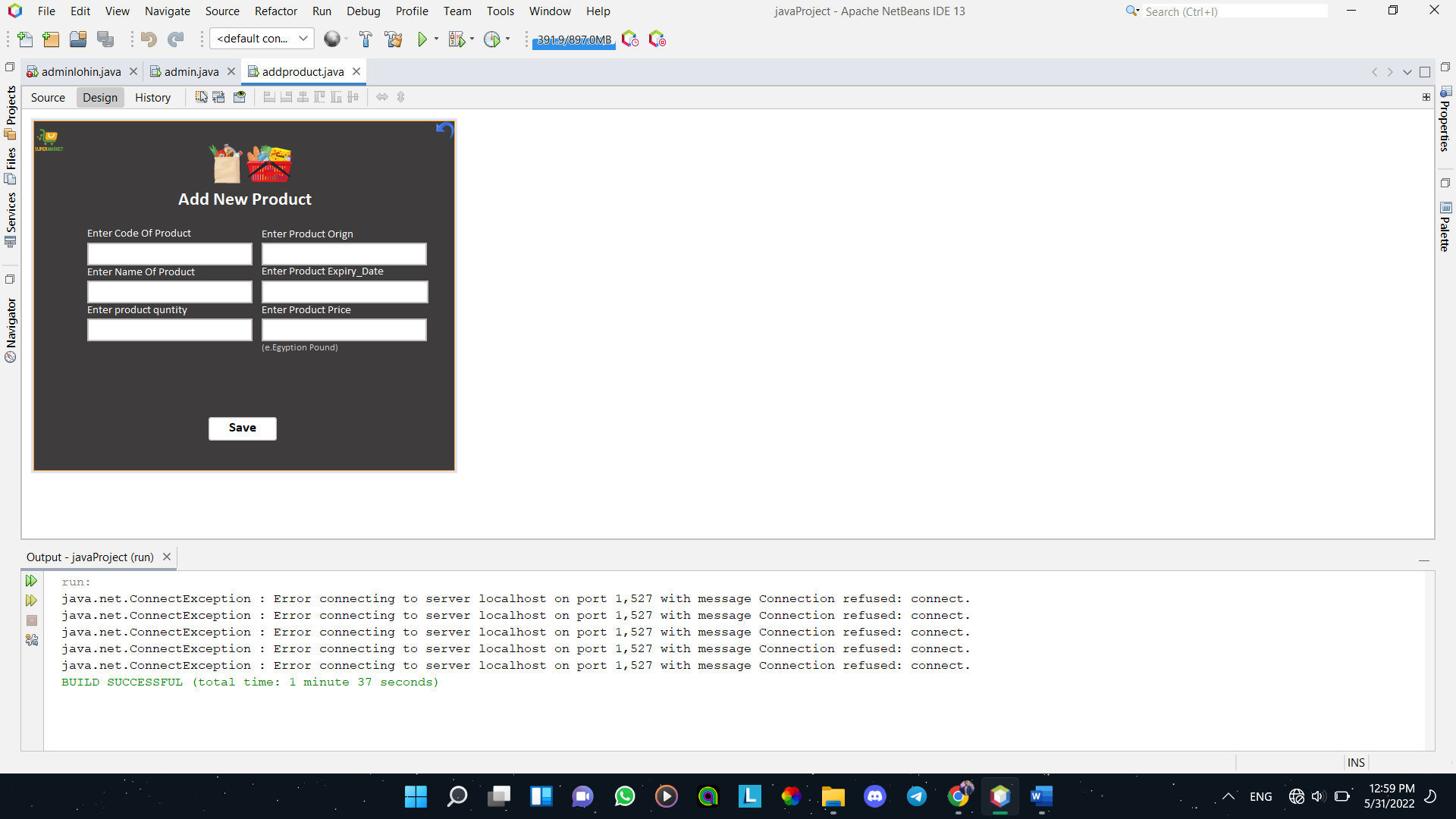
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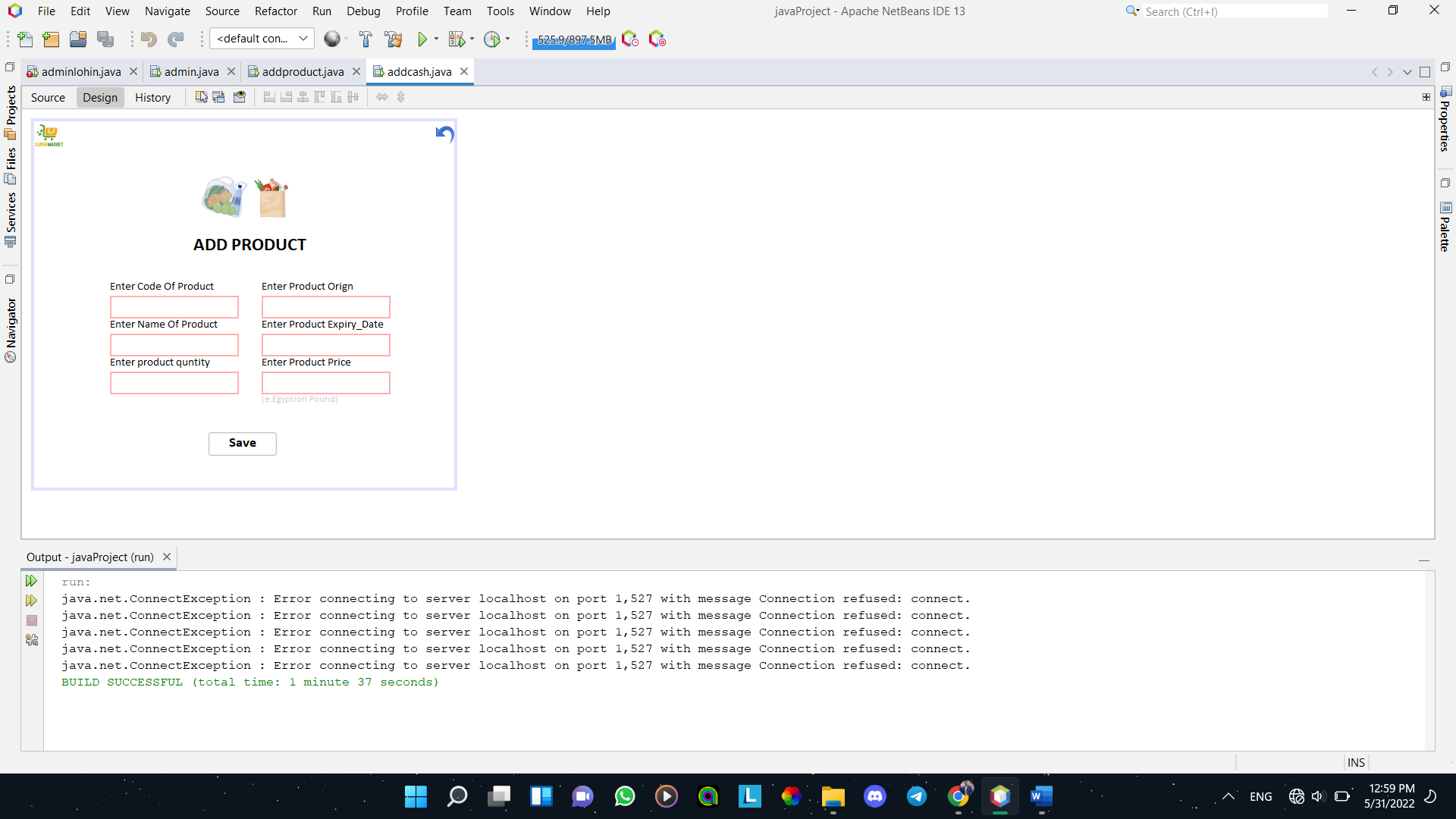
Al-Rayah -GUI



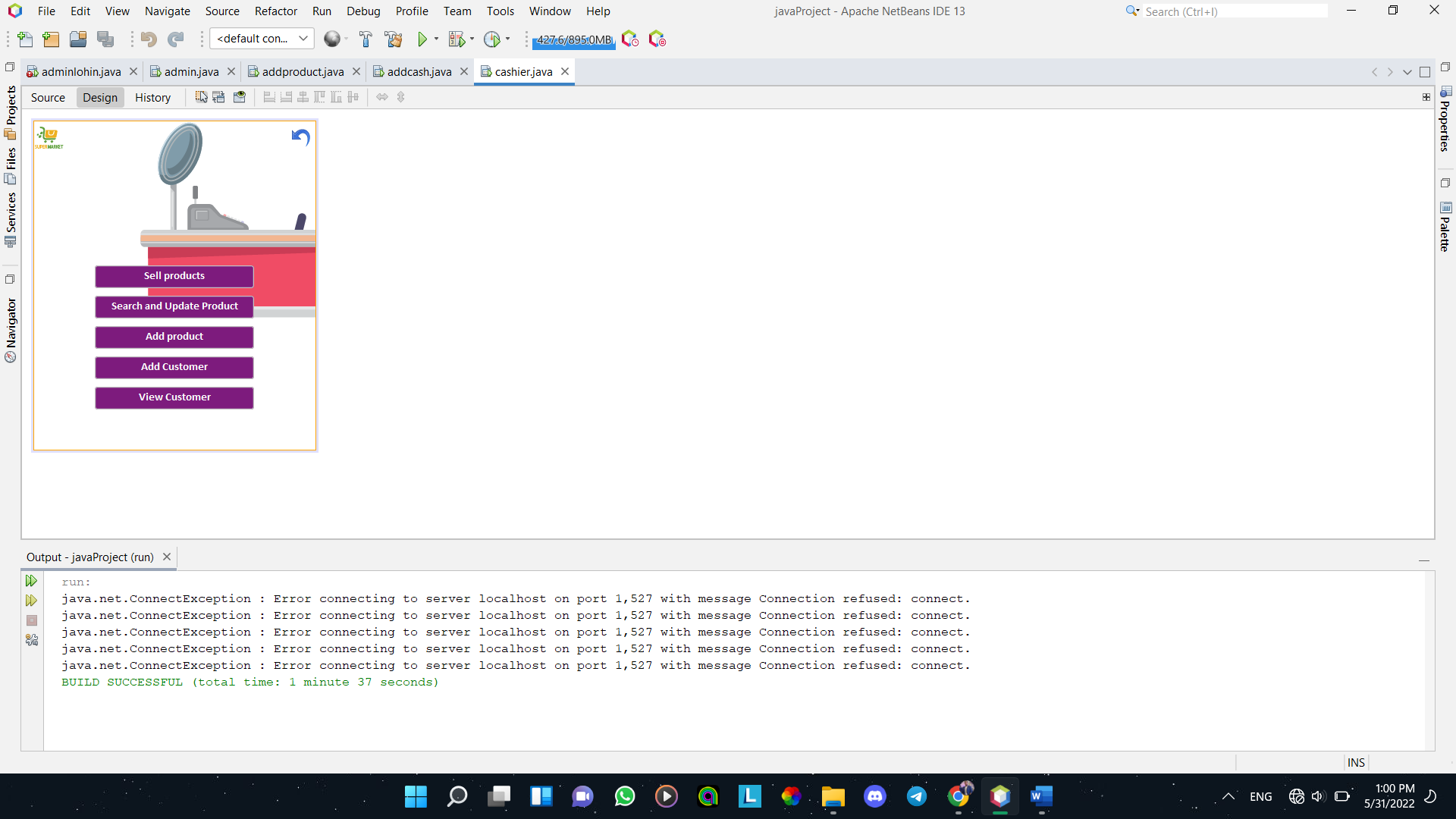
Al-Rayah -GUI



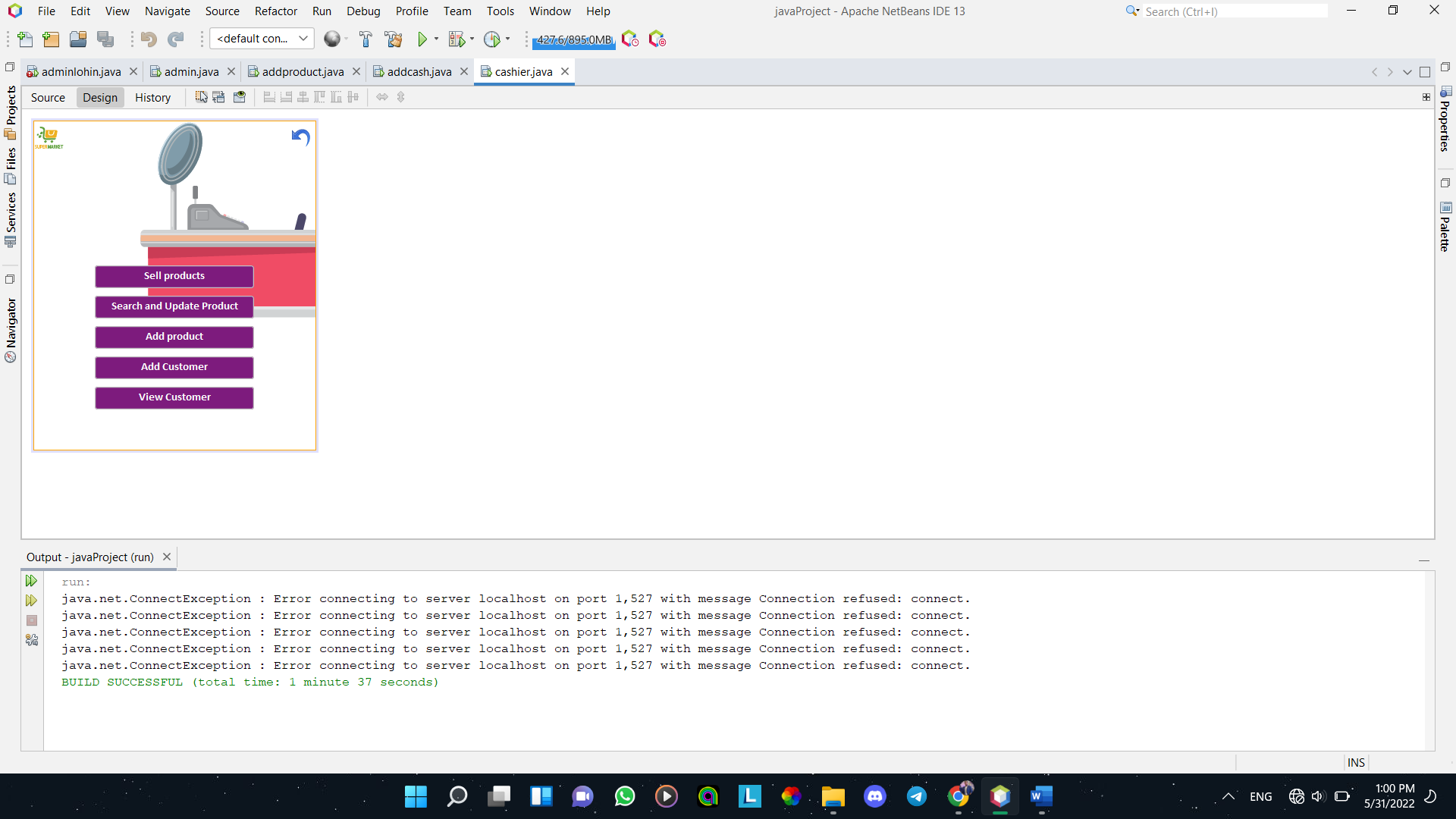
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Al-Rayah -GUI

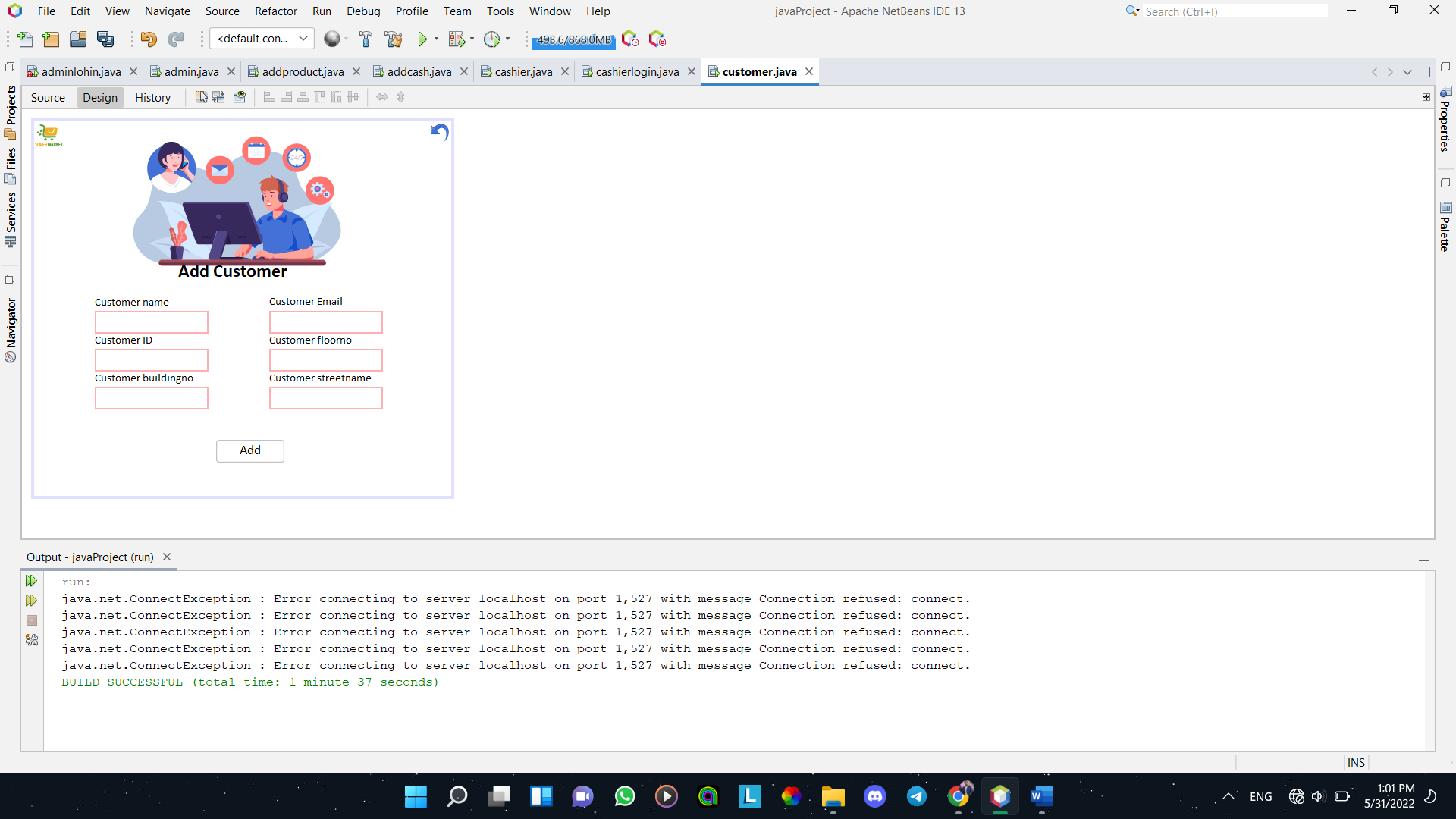


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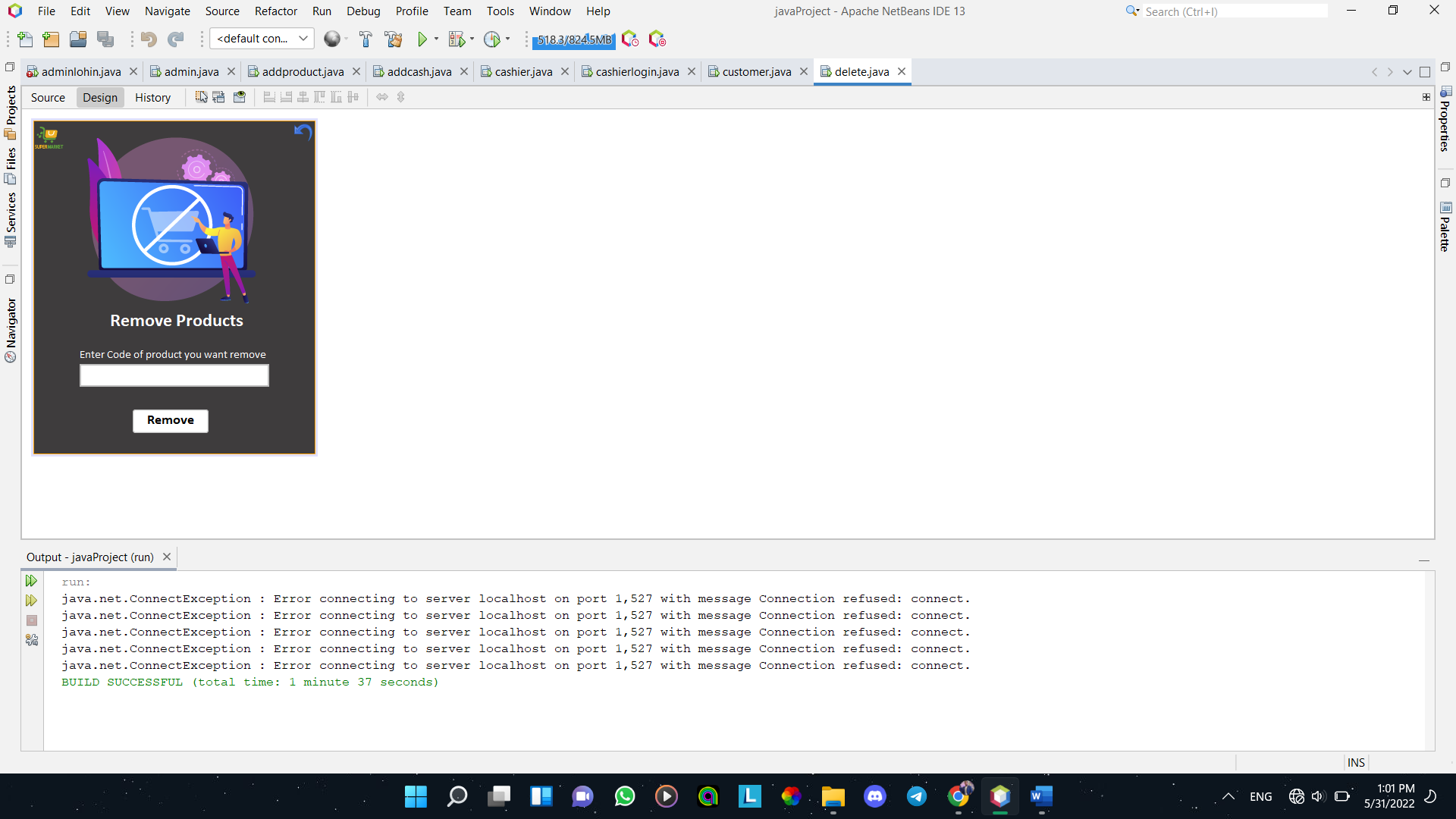


Al-Rayah -GUI

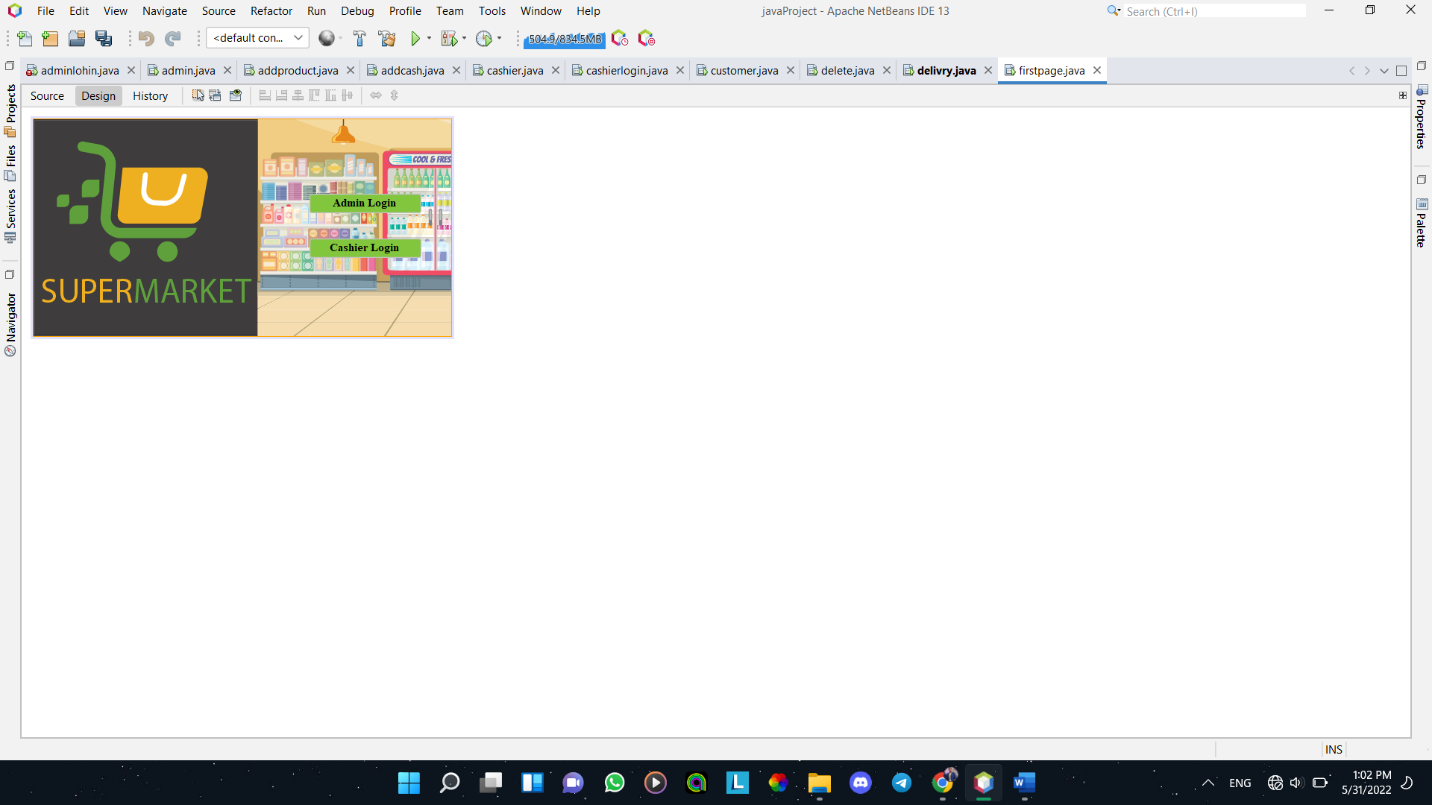
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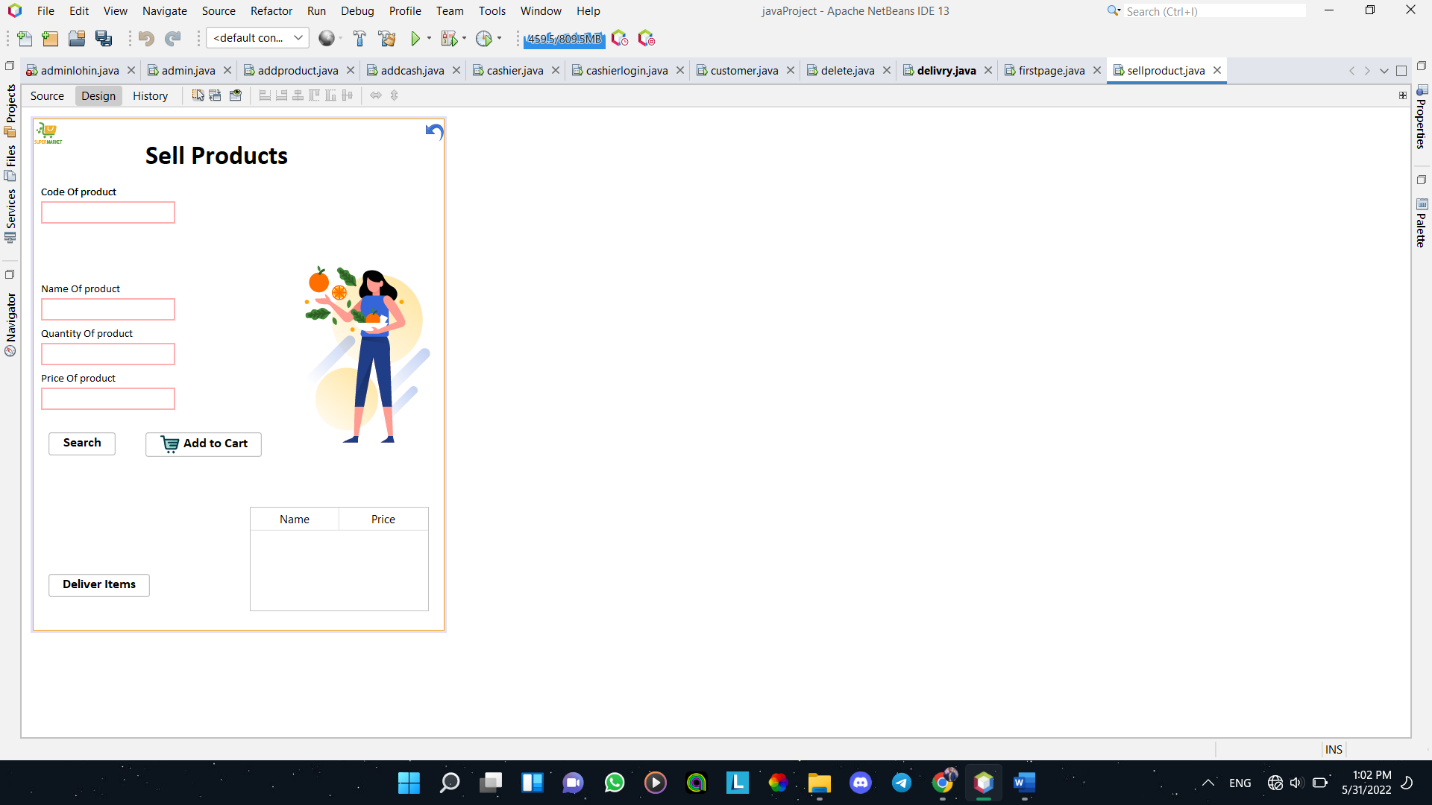
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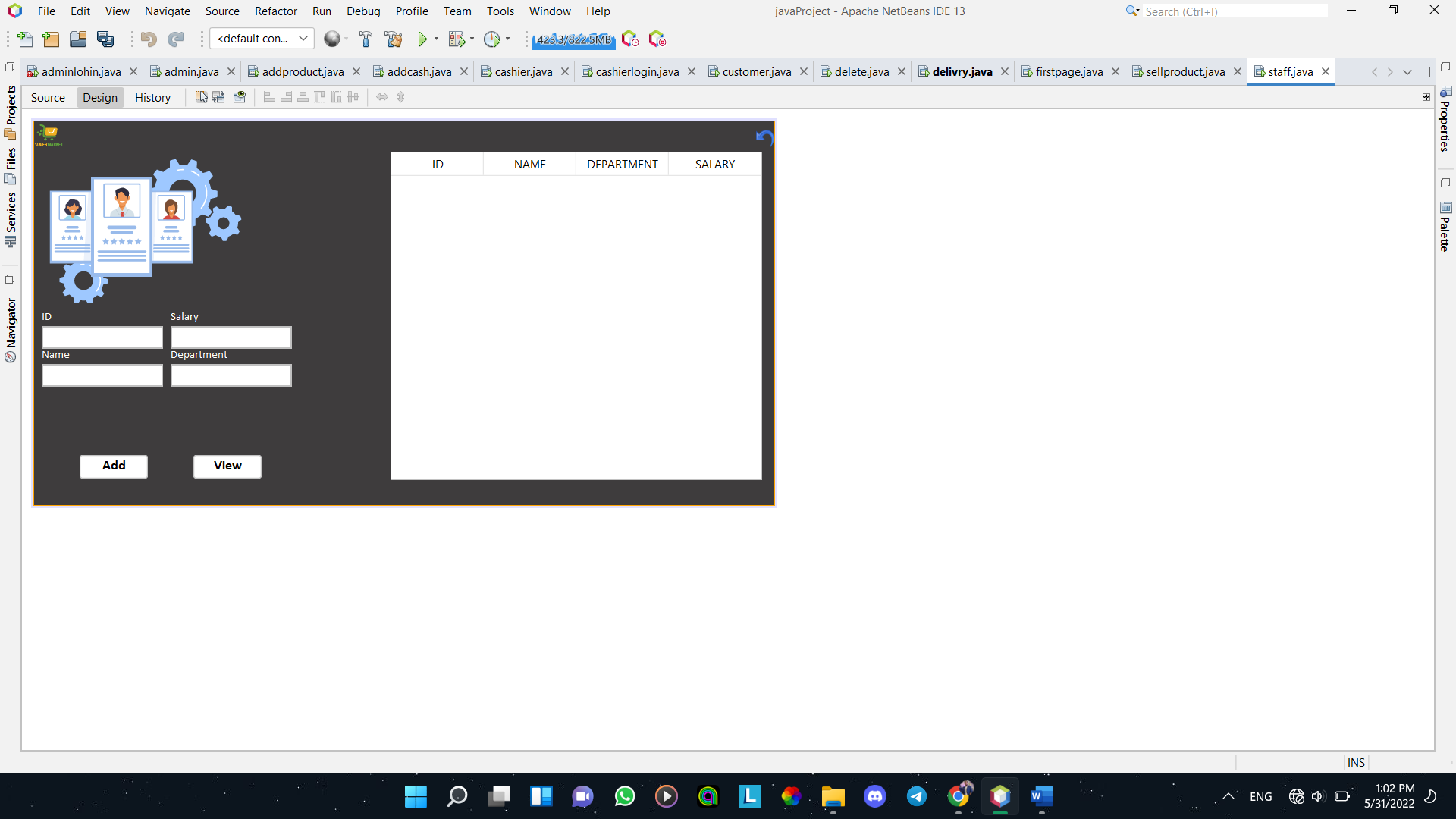
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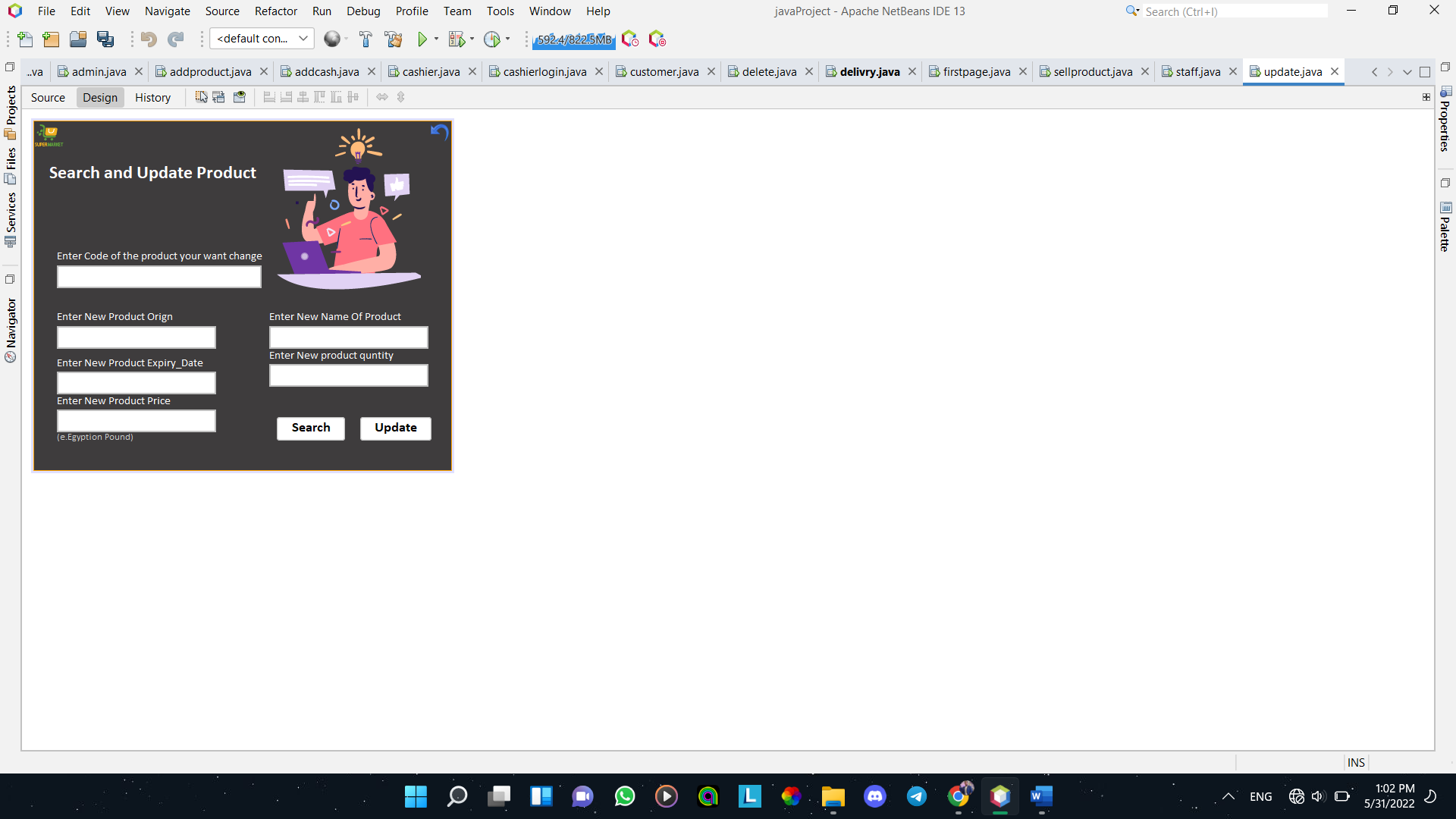
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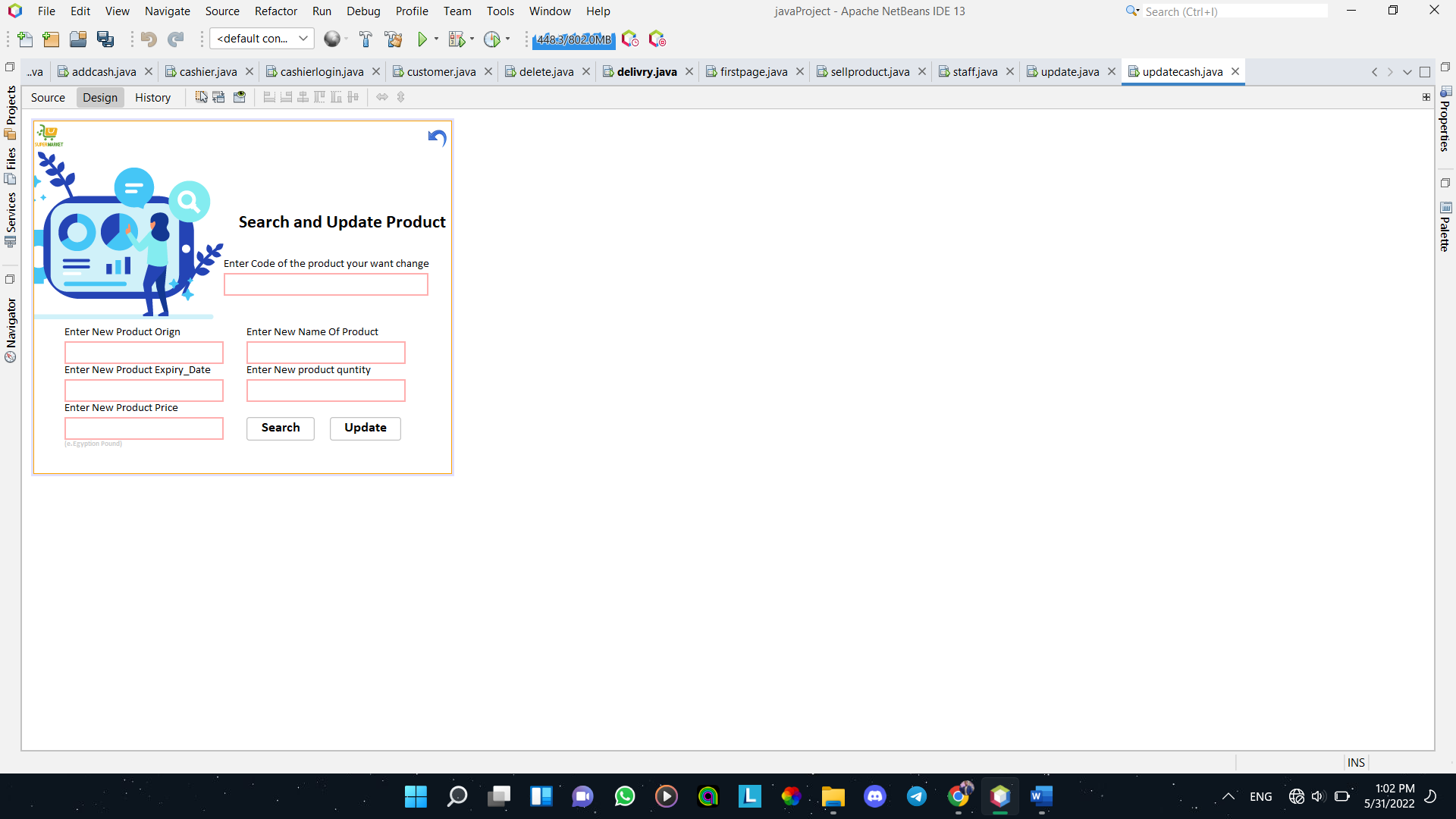
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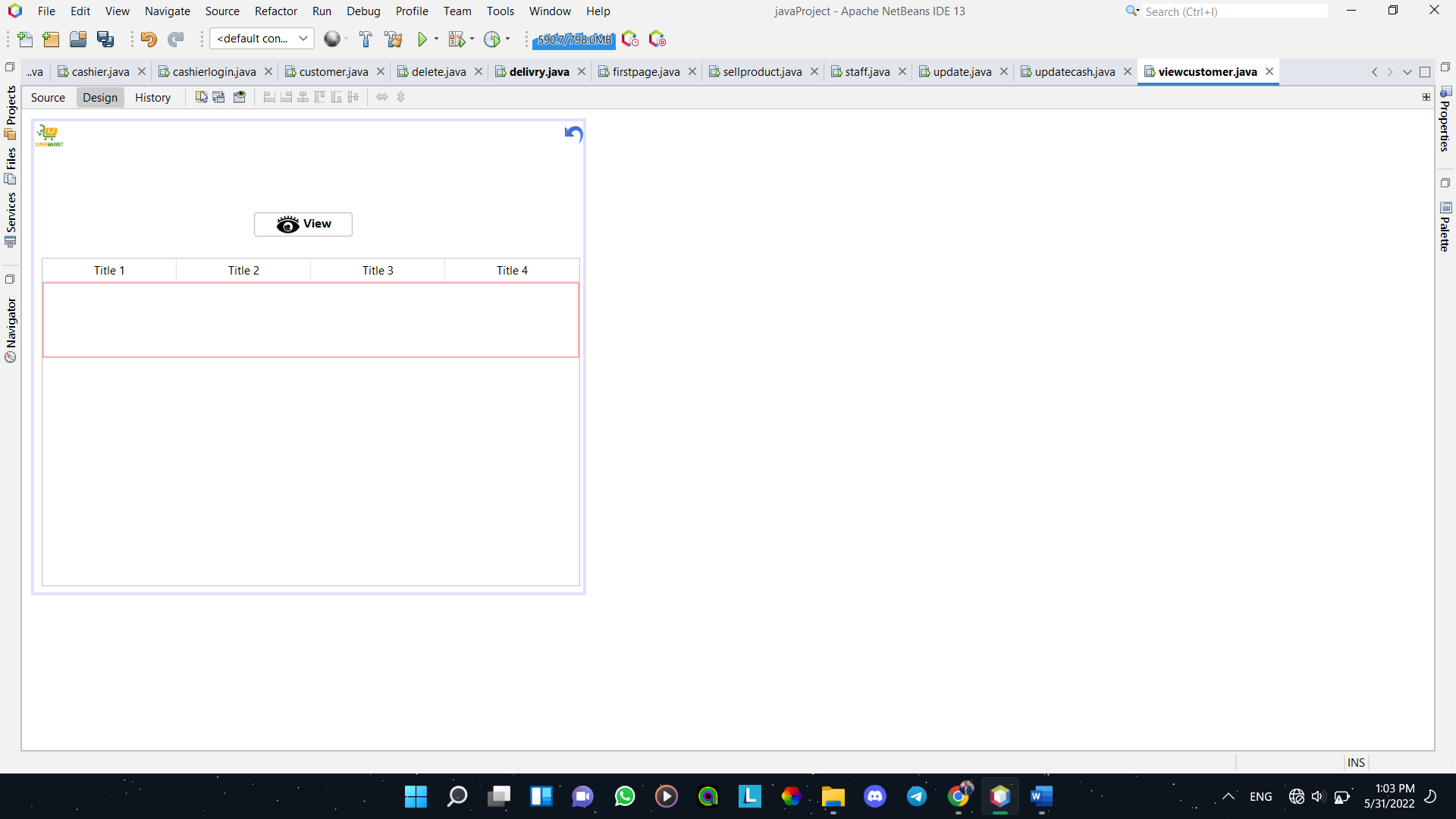
Al-Rayah -GUI



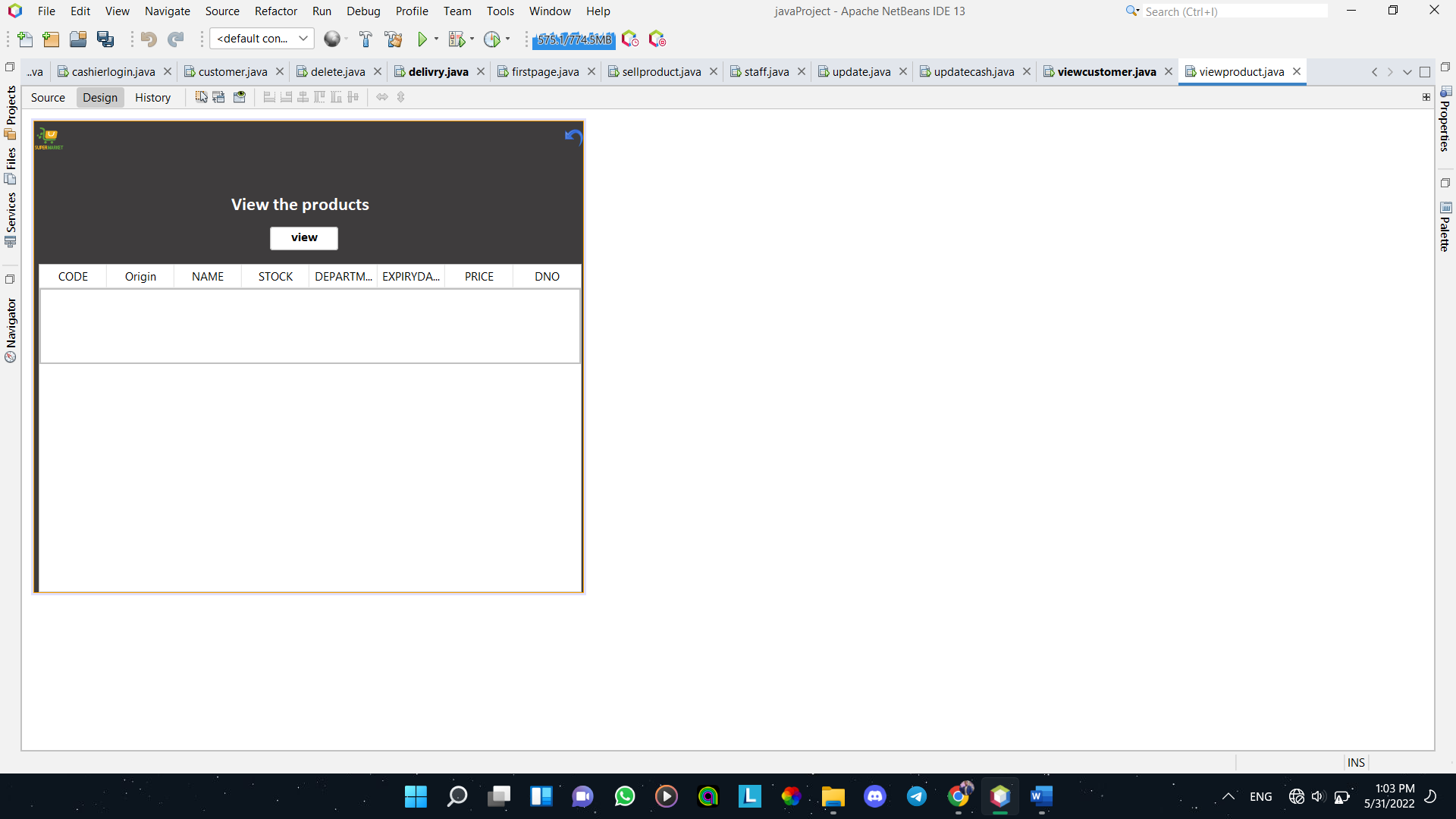
Al-Rayah -GUI



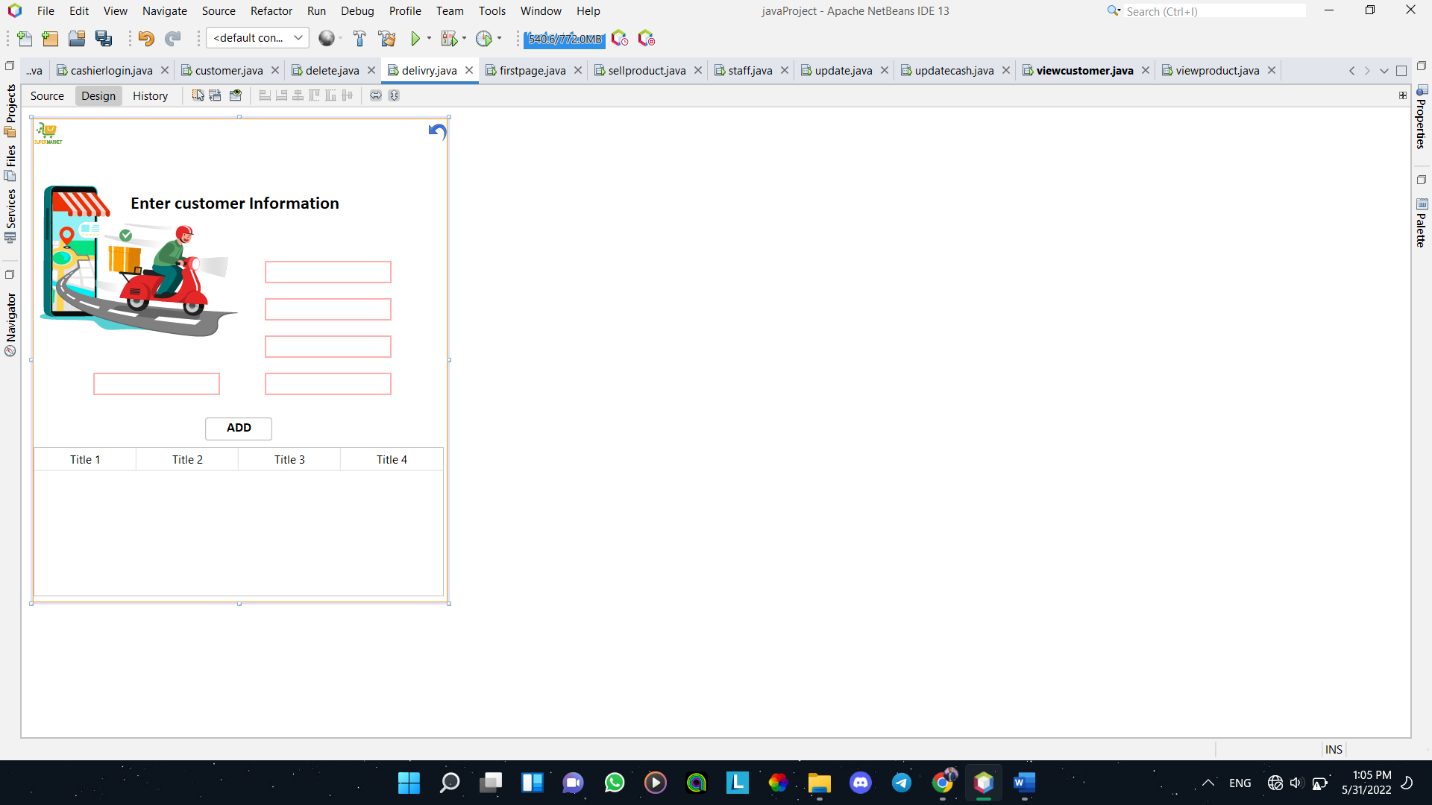
Al-Rayah -GUI



Al-Rayah -GUI



Al-Rayah -GUI



Al-Rayah -GUI