Introduction

EsemkaCommerce is an ecommerce application that makes buying and selling transactions easier for customers. Customers can see the products being sold along with the available stock. Admin can also manage product data that you want to sell.

Contents

In this test project there are some files and usable resources:

1. EsemkaCommerce_TP.pdf   (Test project file)
2. EsemkaCommerce_Demo   (Wireframe demo folder)
3. EsemkaCommerce_Style   (Style folder)
4. EsemkaCommerce_DB.sql   (Microsoft SQL Server database file)

Project Description & Tasks

When developing the project, ensure all the deliverables meet the general requirements provided by the project designers:

- Project Criteria:
  - The project name should be "DESKTOP_[XX]", where XX is your PC number.
  - Time management is a crucial factor for the success of this project. So, manage your time wisely and submit all your works on time.
- Application User Interface:
  - Use the style guide provided consistently in the entire project.
  - The application wireframe is already provided by the UI designer.
    - You are allowed to modify the application interfaces as long as it doesn't interfere the business and application flow.
  - The scoring will be focused on the features of the application.
  - Please provide scrollbar when the content doesn't fit into the container.
- Validation and Error Messages:
  - The application must runs well with a proper validation and shows a useful error messages to the user.
  - Analyze the required validation(s) that is/are needed in the application. This is one of the scoring criteria for your analytical skills for the project.
  - Any specific validation will be given in the project description.

Instructions for Competitors

1. **Import the Database**

   Import the database from the ".sql" files that already given to you. This will be the only database that you will be working on. You are **prohibited** to change any schema on the database.

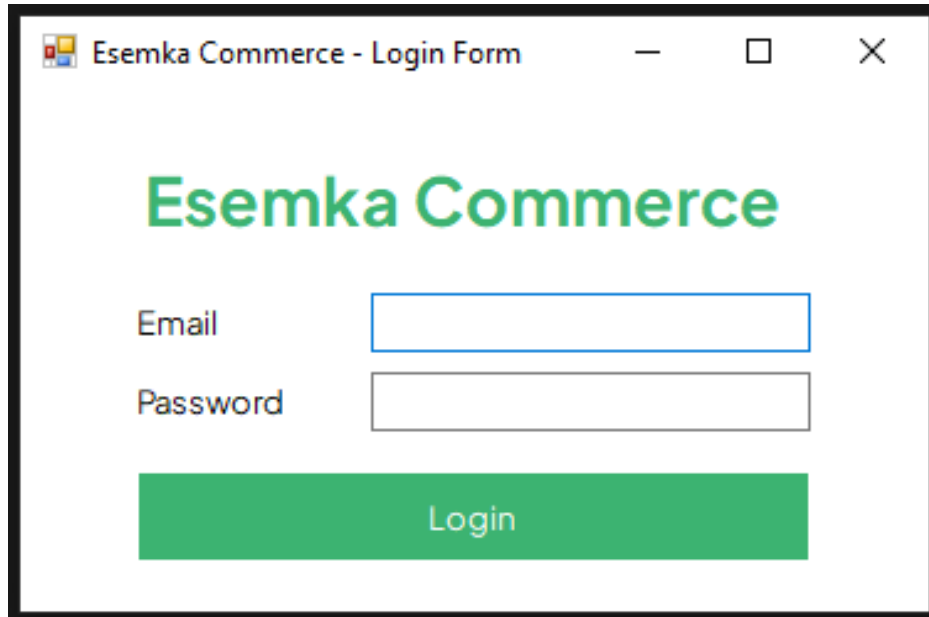2. **Develop the application and submit the project**

   Develop the desktop application based on the description in the next section. And submit all your projects to the jury.

Entity Relationship Diagram
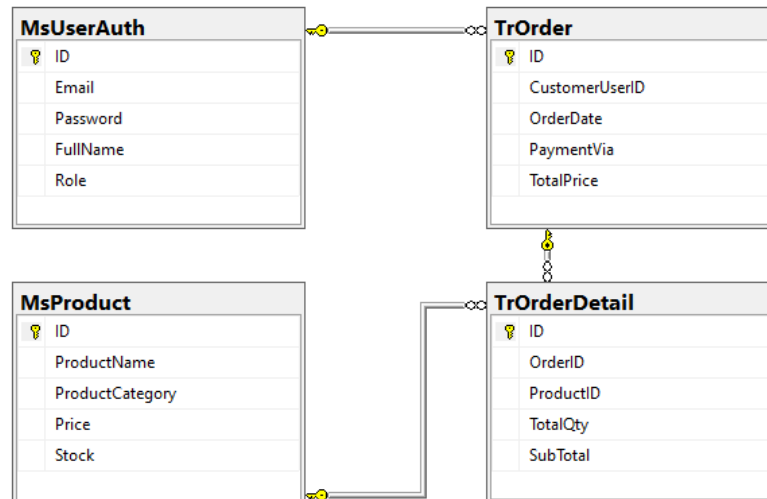
To make it easier for you to understand the database structure, Database Designers from EsemkaCommerce has provided you an Entity-Relationship Diagram (ERD). This diagram will explain the concept and representation of the data model that is used in the database.

1. Login Form

This is the first form that will be used by the user to login to the application.

- Users can **login** to the application by **filling their email** and **password**.
  - If the **combination exists** in the database, check the **Role**. Then if role is **Admin** screen will be directed to **Admin Main Form** but if role is **Customer** screen will be directed to **Customer Main Form**
  - If the **combination doesn't exists** in the database, **let the user know**.
- **Validate** all field with shown message **.**

2. Admin Main Form

This is the main form of Admin. Admin can view the ordered transaction list, Manage Product (View, Add, Edit, Delete) and logout from the application.

- **Show** the **Admin Email**.

- **Show** the **Total Order** with Payment **Cash** & **EWallet**.

- **Display** the **Order Data** list

    o **Total Price** must shown with **Rupiah Separator** format (Rp.XXX.XXX)

    o When user **clicks** on the **Show Detail** button, the **Details Order** data will be shown by selected **Order ID**.

    o **Product Price** and **SubTotal** must shown with **Rupiah Separator** format (Rp.XXX.XXX)

- When user **clicks** on the **Manage Product** button, the **Manage Product Form** will be shown.

- When user **clicks** on the **Logout** button, the **Admin Main Form** is closed then **Login Form** will be shown.

3. Manage Product

This form will be used for **View, Add, Edit, Delete, Search** the **Product Data**.
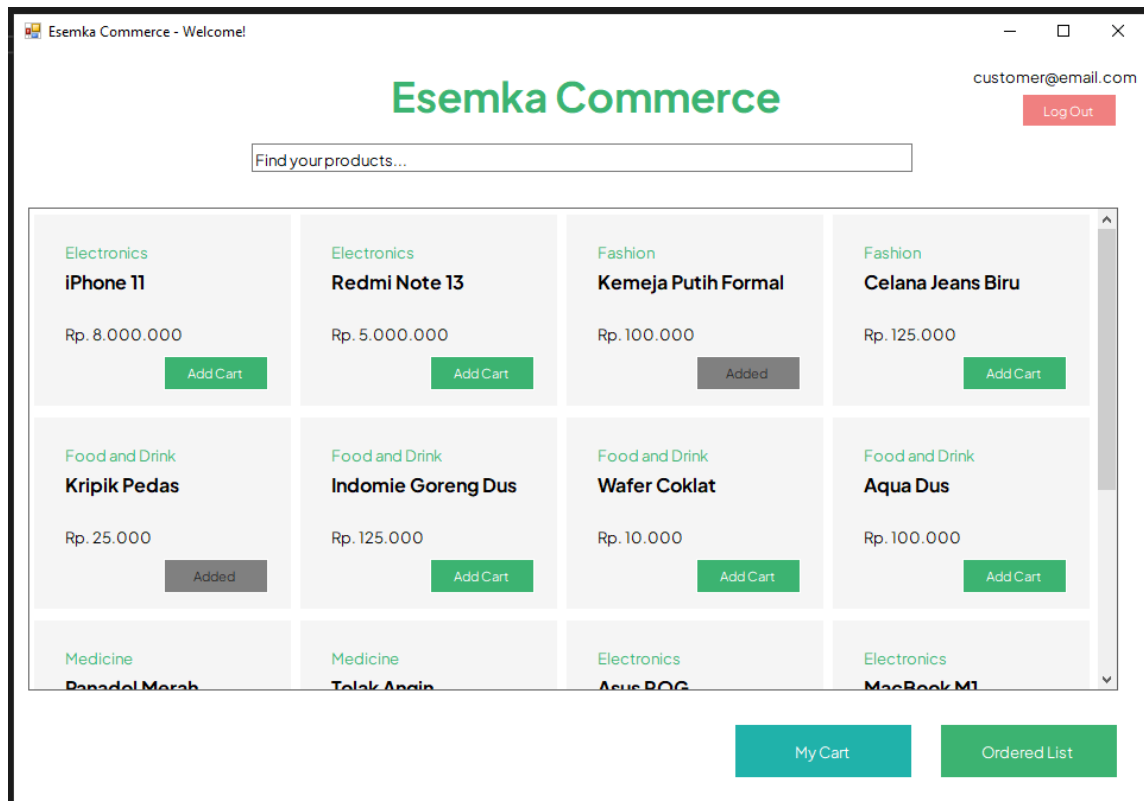
- Display the **Product Data** list.
  - ○ **Product Price** must shown with **Rupiah Separator** format (Rp.XXX.XXX)
  - ○ When user **clicks** on the **Edit** button, the **Modal Product** will be shown by selected **Product**
  - ○ When user **clicks** on the **Delete** button, show message "**Are you sure for delete this Product?**" and if user click OK the **Product** will be deleted on **database** then the **Product Data** list refreshed.
- When user **clicks** on the **Manage Product** button, the **Manage Product Form** will be shown.

4. Modal Product

This form will be used to add or edit **Product**. User must be click **New Data** or **Edit** on **Manage Product** form.

- When user open **Modal Product** from **Product Data** list on **Manage Product** form, field will be filled by selected **Product**
- When user open **Modal Product** from **Add New** on **Manage Product** form, all field will be **empty**.
- The **Product Category** data with **(Electronics, Fashion, Food and Drink, Medicine)**.
- When user **clicks** on the Save (**Insert / Update**) button, **Validate** it with:

  o All field cannot be **Empty**.

  o **Name** must be **5 – 25 characters**.

  o **Price** only accept **number**.

  o **Stock** must be minimum **1** and maximum **1000**.

- When user **Validate** is correct **:**

  o Show message **"Completed Save Data!"** then **Direct** users **back** to their **Manage Product**.
  o Data will be saved to **database**.
  o Close the **Modal Product** after the data is saved to database.
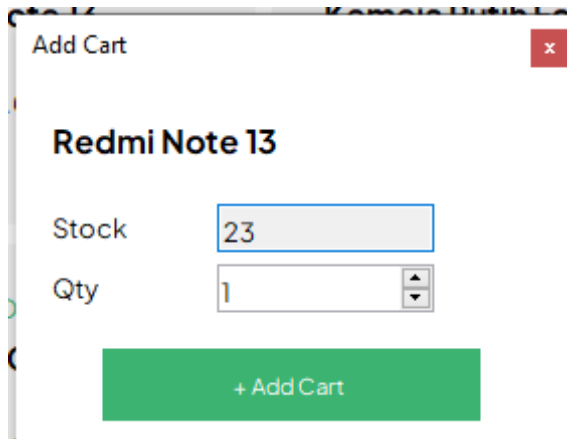
5. Customer Main Form

This is the main form of Customer. Customer can order Product (add to cart), view list of cart, view list of ordered product and logout from the application.

- **Show** the **Customer Email**.
- Display the **Product Data** list that **made by the admin**.
  - **Product Price** must shown with **Rupiah Separator** format (Rp.XXX.XXX)
  - When user **clicks** on the **Add Cart** button, the **Modal Add Cart** will be shown by selected **Product**.
  - When **Product** has been added, **Add Cart** button will be show **"Added"** and **disabled**.
- Display the **list of Product** based on **Product Name** or **Product Category** when user typing in **Search Box**
- When user **clicks** on the **My Cart** button, the **My Cart Form** will be shown.
- When user **clicks** on the **Ordered List** button, the **Order List Form** will be shown.
- When user **clicks** on the **Logout** button, the **Customer Main Form** is closed then **Login Form** will be shown.

6. Modal Add Cart

This form will be used to add **Product** to **My Cart**.

- When user open **Modal Add Cart** from **Product Data** list on **Customer Main Form** form, field will be filled by selected **Product**
- When user **clicks** on the +**Add To Cart** button, **Validate** it with:

  o **Qty** cannot be higher than **Stock**.

- When user **Validate** is correct :

  o Data will be added to **global variable** (for list at **My Cart Form).**
  o Close the **Modal Add Cart** and refresh the **Product Data** list.

7. My Cart Form
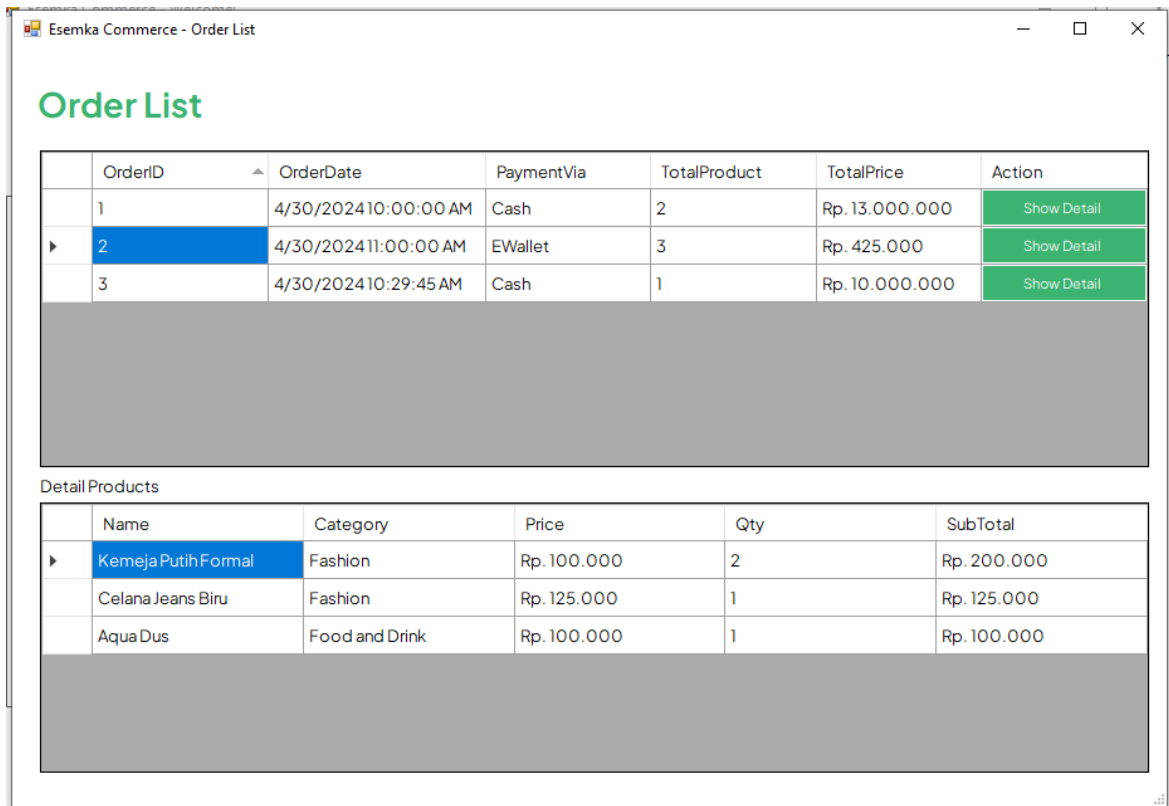
This form will be used to submit **Order** from **Cart** list.

- When user open **My Cart Form**, **Cart Data** list will be filled by list of **Added Product** from **Customer Main Form**.

  o When user **clicks** on the **Remove** button, shown message **"Are you sure for remove this product?"** and if user click OK the **Cart** will be removed then the **Cart Data** list, **Product Data** list on **Customer Main Form** refreshed and **Total Price** will be calculate.

  o When user change the **Qty**, validate **Qty** cannot be higher than **Stock.** If **Validate** is correct **Total Price** will be calculate.

- **Show** the **Total Price** with **Sum** of **SubTotal** from **Cart Data** list.
- **Show** the **Payment Via** with (**"Cash", "EWallet")**.
- When user **clicks** on the **Submit Order** button, **Validate** it with:

  o **Cart Data** list cannot be empty.

- When user **Validate** is correct **:**

  o Show message **"Order Completed!"** then **Direct** users **back** to their **Customer Main Form**.
  o **Stock** of **Product** on **Order Data** will be deduct based on **Total Qty** submited.
  o Data will be saved to **database**.
  o Close the **My Cart Form** after the data is saved to database.

8. Order List Form

This form will be used to view **Ordered Data**.

- **Display** the **Order Data** list
  - **Total Price** must shown with **Rupiah Separator** format (Rp.XXX.XXX)
  - When user **clicks** on the **Show Detail** button, the **Details Order** data will be shown by selected **Order ID**.
  - **Product Price** and **SubTotal** must shown with **Rupiah Separator** format (Rp.XXX.XXX)