Ahsanullah University of Science & Technology

Department of Computer Science & Engineering (CSE)

Proposal on

"Requisition Management System"

Prepared for:

Dr. Taslim Taher

Md. Nafis Fuad

Course No. & Name

CSE 3224 – Information & System Design Lab

Prepared By:

Lab Section : A2

Group No: 4

Alistair Biswas	ID: 20200104046
Rafeed Mahbub Rafi	ID: 20200104041
Syed Mohtasib Mashruk	ID: 20200104029
Md. Fahim Faisal	ID: 20200104032

Project Overview:

Agile Scrum Methodology

For our requisition management system, the agile scrum technique would be the best process model. The Agile Scrum model is an iterative and incremental method for creating software that places a focus on adaptability, teamwork, and providing value to consumers. The Scrum methodology divides the project into a number of sprints, which are fixed-length iterations. Building the most crucial features first and producing a potentially marketable product are the objectives of each sprint, which ranges in duration from two to four weeks. In succeeding sprints, the product is expanded, and changes are made in response to consumer input in between sprints.

The Agile Scrum methodology is appropriate for our project for the following reasons:

1. **Flexibility and Adaptability:**
   We could find additional requirements as the project develops or get user feedback. These modifications and reprioritized features can be incorporated and adjusted according to Agile Scrum in following sprints.

2. **Incremental Delivery:**
   Incremental delivery enables the deployment of essential capabilities early and progressively improves the system over time, enabling speedier value delivery to consumers or clients.

3. **Collaboration:**
   The scrum structure promotes teamwork throughout the duration of the project. Stakeholders can offer feedback on the implemented functionality through sprint reviews, ensuring the system satisfies their needs.

4. **Iterative Development and Feedback:**
   Scrum employs an iterative methodology that enables feedback loops and continual improvement. A more user-friendly and effective system is produced as a consequence of this iterative feedback loop's assistance in improving the features connected to inventory management.
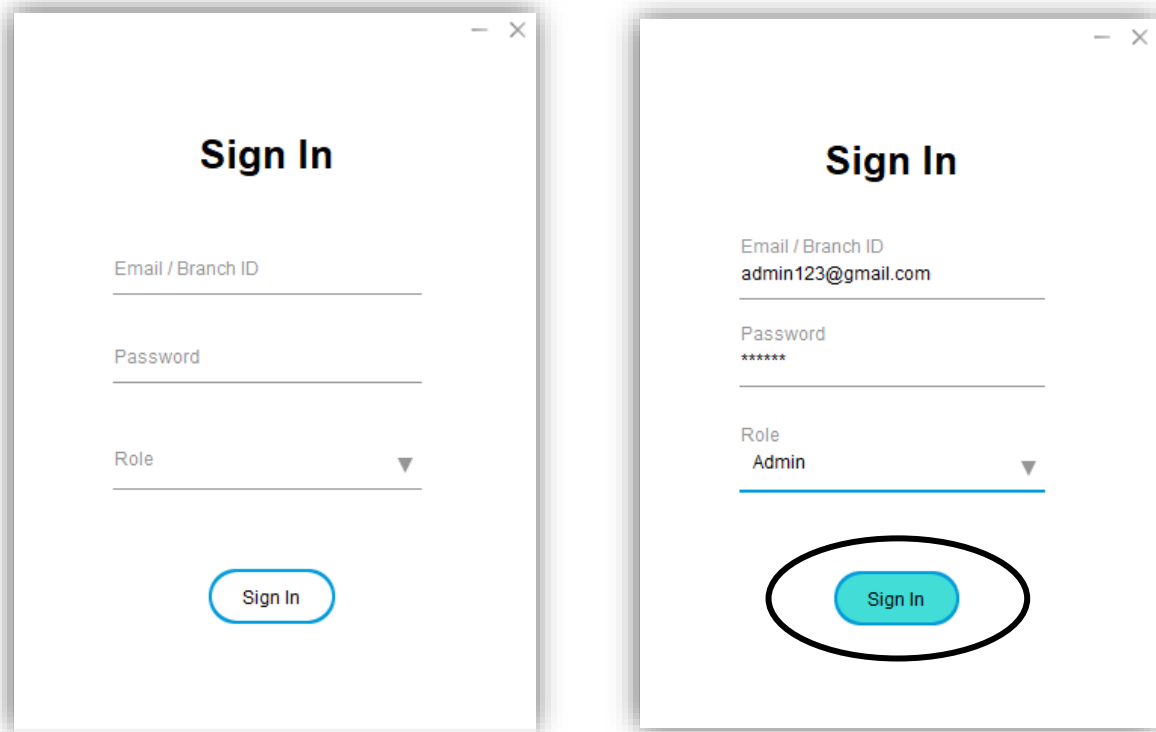
5. **Risk Management:**

   The Agile Scrum paradigm encourages early identification to enable efficient risk management. Regular Sprint Reviews offer chances to recognize and quickly manage risk, ensuring that any problems are fixed on schedule.

The Agile Scrum approach is the most appropriate for our project because of its adaptability, incremental delivery, collaboration, iterative development, and risk management. This methodology enables us to successfully manage risks in our project, adapt to changing needs, create value progressively, include users throughout the development process, and incorporate iterative feedback.

User Stories and Relevant UI:

As a Requisition Manager,

I want to be able to login to the Requisition Management System so that I can access the system to perform my duties efficiently. I should be successfully signed into the system using the email and password & select the role. The **Figure 1** given below shows the sign in form for this system.

Figure 1: Sign in UI (Manager)

As a requisition manager,

I want to view the product list in inventory with all the information. Also, I want to add, update and delete products from the product list, want to take actions against any product requests, also want to see the resolved and unresolved delivery list.
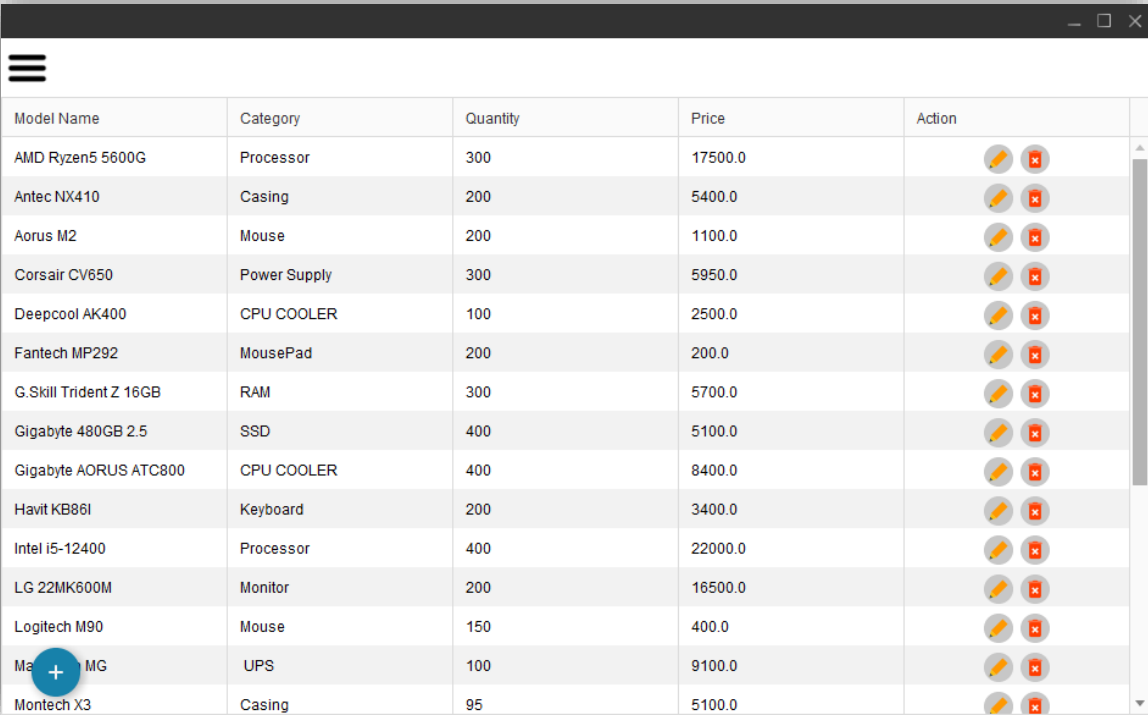
- The system should provide an interface to view product list with information, add, update and delete product from the product list, approve or reject any request and to show the resolved and unresolved delivery.

This **Figure 2** shows the Manager Panel Home UI below where he/she can select all the options he/she can operate.
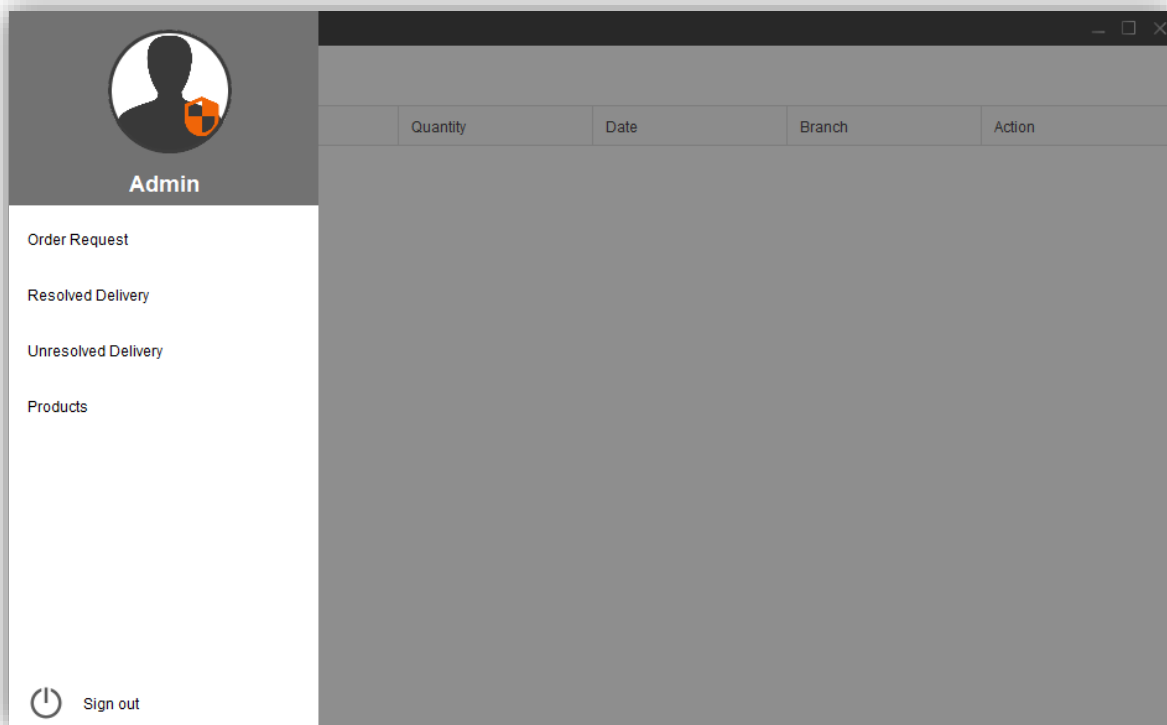

Figure 2: Manager Panel UI

The manager can select the option "Products" to view all the products in the inventory. The manager can perform multiple operation from this page. He/she can add products in the inventory by clicking the Add icon from the bottom left and also can edit and delete the products from the inventory. The manager can find edit icon and delete icon from the right side of every product. The **figure 3** shows the view product form below.

| Model Name	Category	Quantity	Price	Action
AMD Ryzen5 5600G	Processor	300	17500.0	
Antec NX410	Casing	200	5400.0	
Aorus M2	Mouse	200	1100.0	
Corsair CV650	Power Supply	300	5950.0	
Deepcool AK400	CPU COOLER	100	2500.0	
Fantech MP292	MousePad	200	200.0	
G.Skill Trident Z 16GB	RAM	300	5700.0	
Gigabyte 480GB 2.5	SSD	400	5100.0	
Gigabyte AORUS ATC800	CPU COOLER	400	8400.0	
Havit KB86I	Keyboard	200	3400.0	
Intel i5-12400	Processor	400	22000.0	
LG 22MK600M	Monitor	200	16500.0	
Logitech M90	Mouse	150	400.0	
Ma MG	UPS	100	9100.0	
Montech X3	Casing	95	5100.0	

Figure 3: View Product UI

The **Figure 4** shows below the add product interface of the system. After clicking the add icon a dialog box appears and the manager can fill the box with the information he/she wants to add and click "OK" to finally add the product with information.
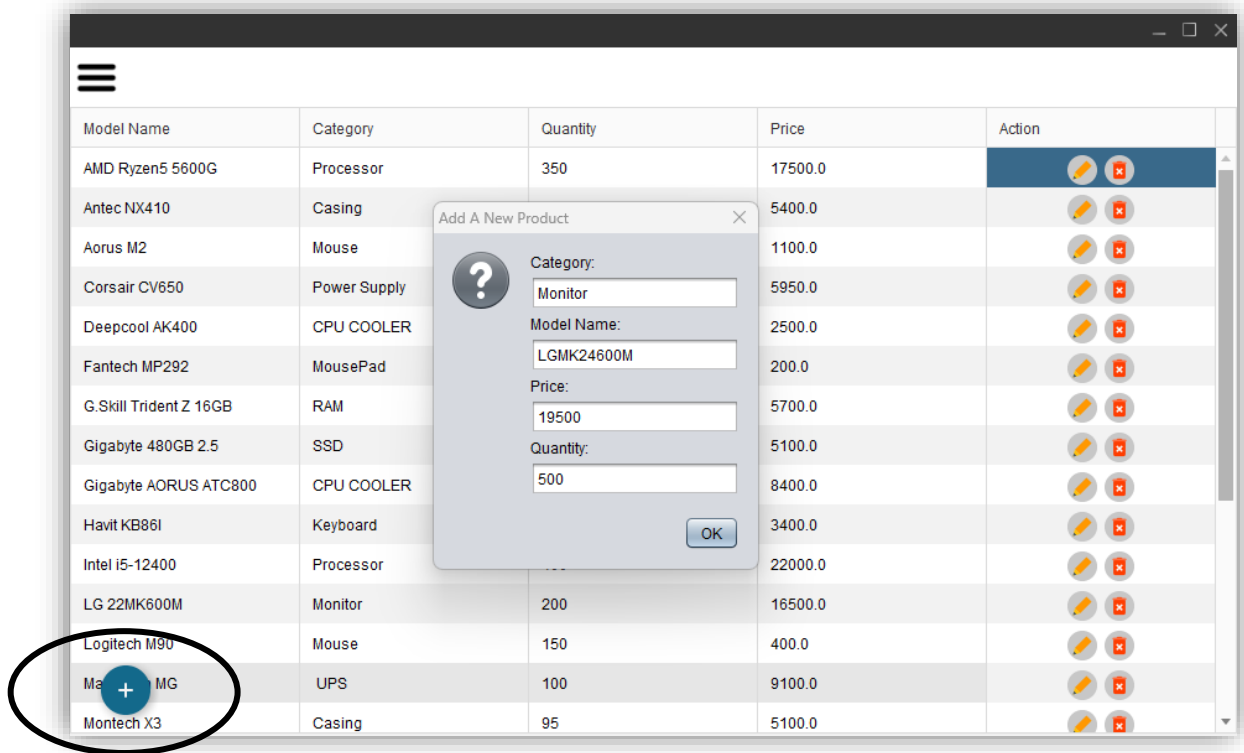

Figure 4: Add Product UI

The manager can also update and delete product from the inventory by clicking the update and delete icon from the right of each product. After clicking the update icon, a dialog box appears where the manager can update the product information (quantity & price). And by clicking the delete icon the selected product will be deleted from the inventory. The **figure 5 & 6** shows the update & delete product interface.
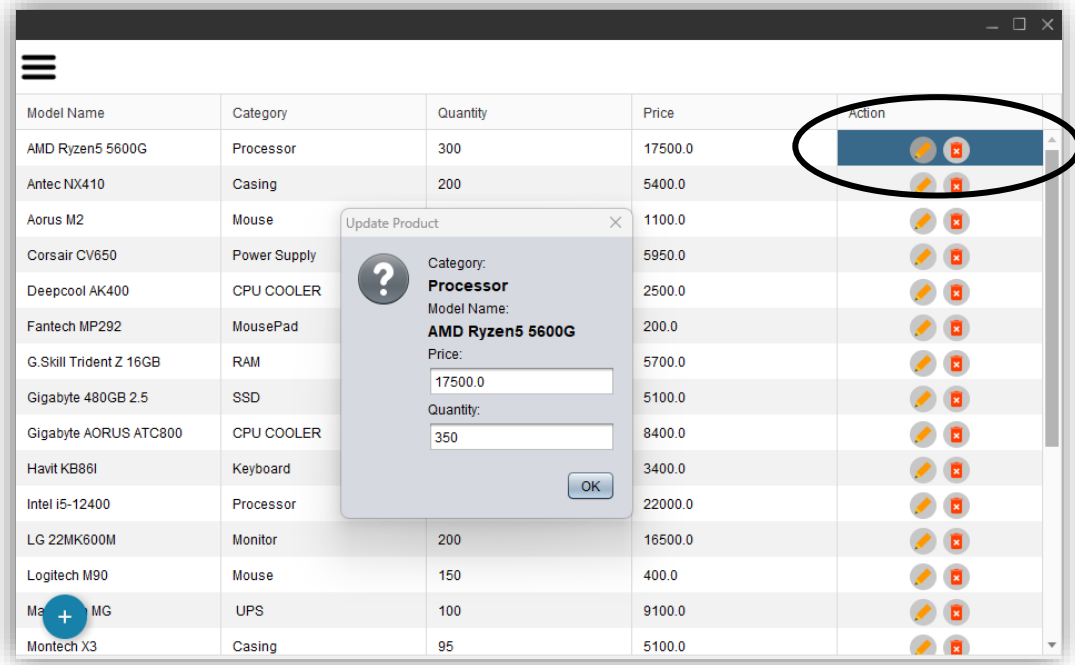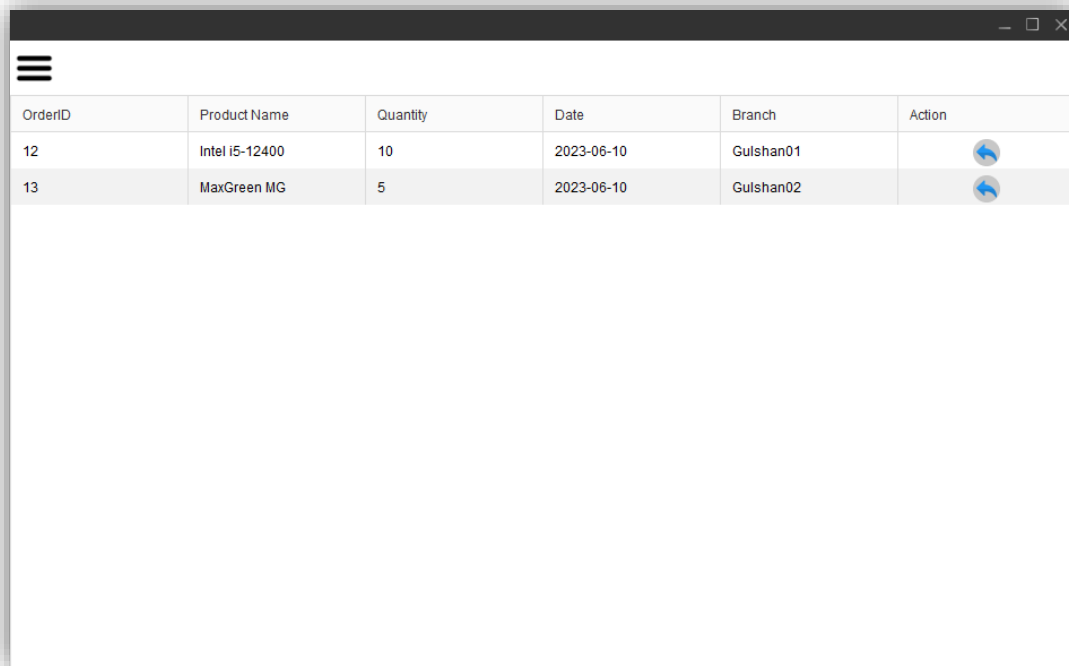
Figure 5: Update & Delete Product UI
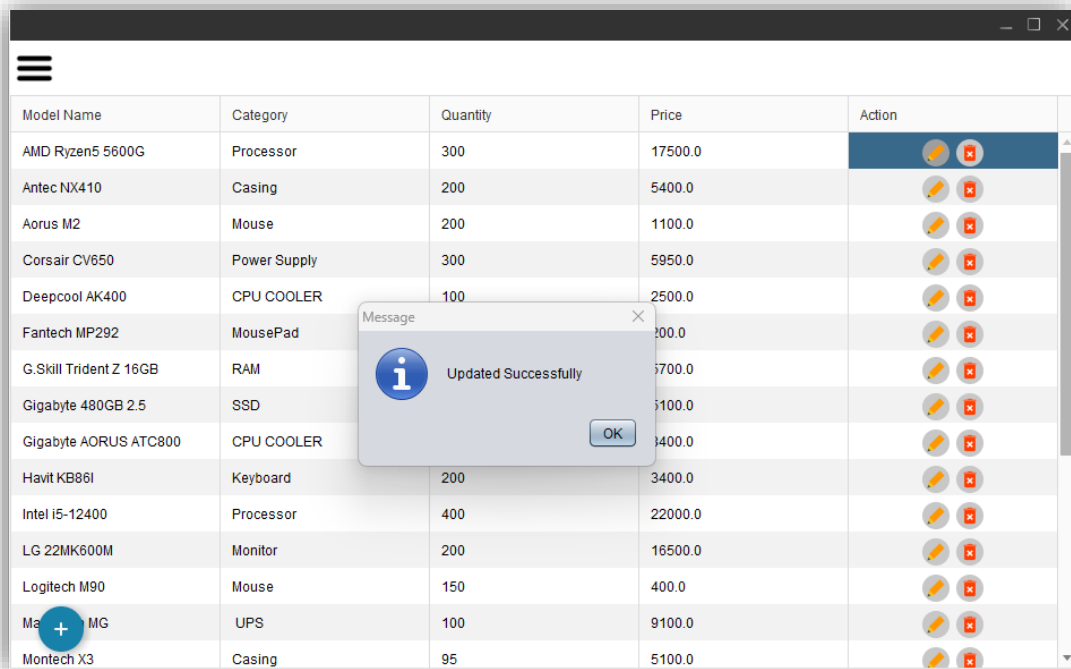
Figure 6: Update & Delete Product UI

The manager can view all the requests from the "Order Request" option and can take actions against any request. The **figure 7 & 8** shows the Order request interface and approval request interface respectively.
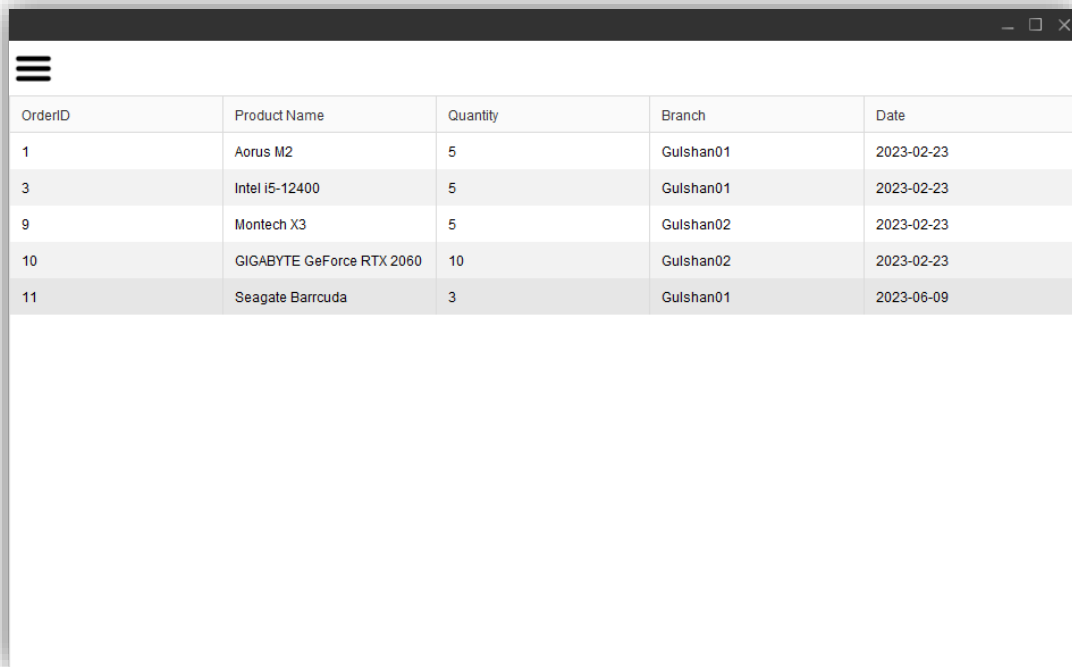
Figure 7: Order Request UI
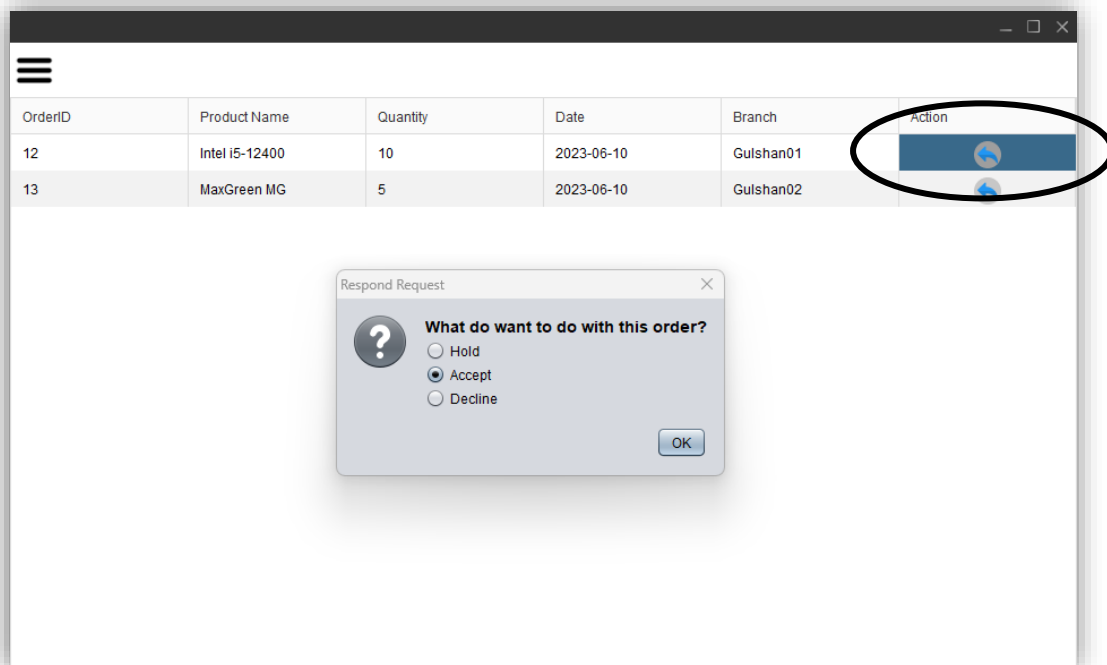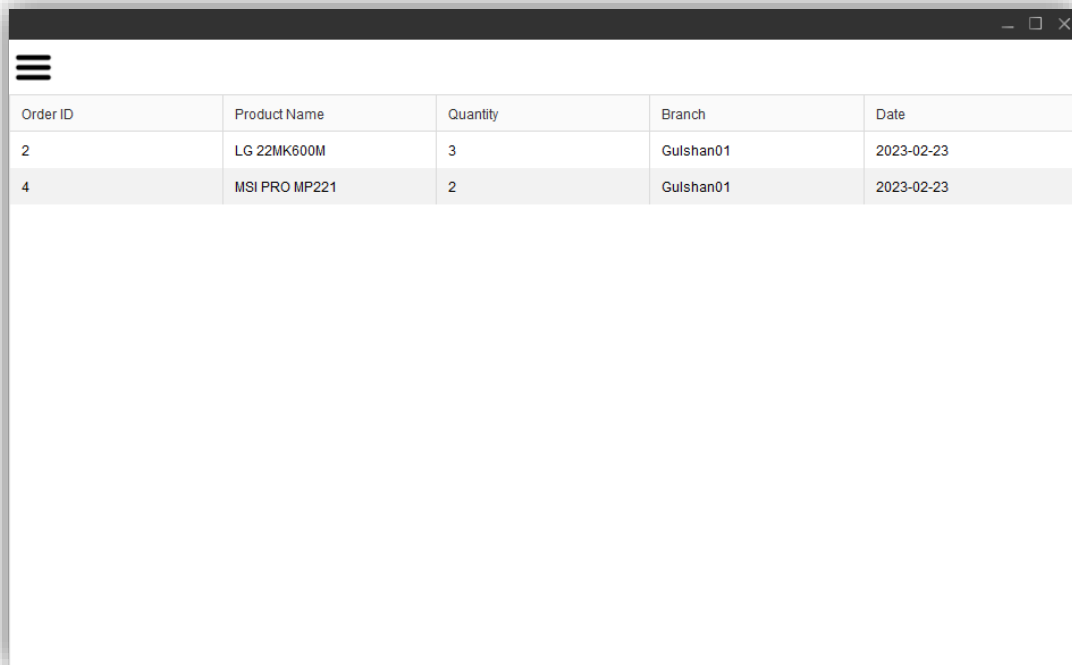

Figure 8: Request Approval UI

And lastly the manager can view the resolved and unresolved delivery list from the main panel. The **Figure 9 & 10** given below for the resolved and unresolved delivery UI.

OrderID	Product Name	Quantity	Branch	Date
1	Aorus M2	5	Gulshan01	2023-02-23
3	Intel i5-12400	5	Gulshan01	2023-02-23
9	Montech X3	5	Gulshan02	2023-02-23
10	GIGABYTE GeForce RTX 2060	10	Gulshan02	2023-02-23
11	Seagate Barrcuda	3	Gulshan01	2023-06-09

Figure 9: Resolved delivery UI

Order ID	Product Name	Quantity	Branch	Date
2	LG 22MK600M	3	Gulshan01	2023-02-23
4	MSI PRO MP221	2	Gulshan01	2023-02-23

Figure 10: Unresolved delivery UI

As a Branch representative,

I want to be able to login to the Requisition Management System so that I can access the system to request a product. I should be successfully logged into the system using the branch id & password & select the role. The **Figure 11** shows the sign in form for this system as a branch representative.
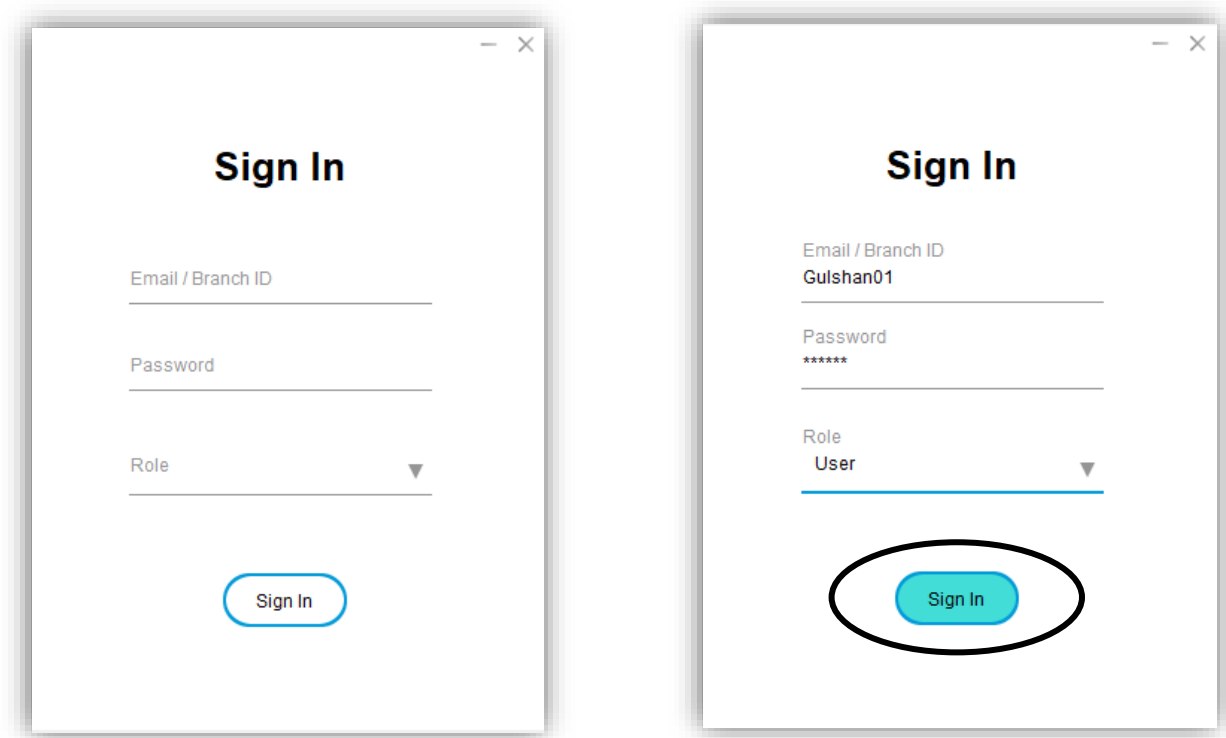
Figure 11: Sign in UI (Representative)

As a Branch representative,

I want to view the product list in inventory with all the information. Also, I want to request for products & want to be able to update & delete my requests. I also want to view all of my requests.

- The system should provide an interface to view product list with information, to place order from the product list, to update and delete pending requests and to view all the requests.

This **figure 12** below shows the Representative Home UI where a branch representative can operate his/her activities.

Figure 12: Representative Panel
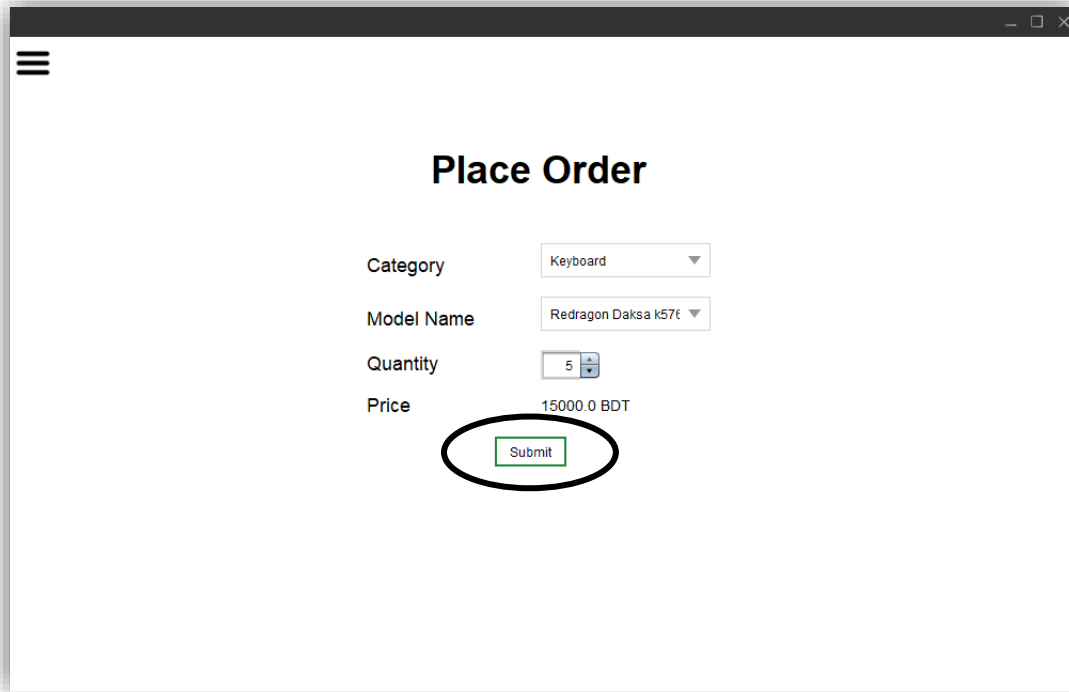
The branch representative can view all the available products in inventory from view product UI. **Figure 13** shows the view product interface below.

Figure 13: View Products UI

The representative can place order from the place order UI. He/she can select product category & the model name of every product from the category automatically appears. After select the model name, the representative can place quantity and the total price will automatically appears in the form. Here **Figure 14 & 15** for Place order UI is given below.

Figure 14: Place Order UI

Figure 15: Place Order UI

The representative can also view his/her pending orders before accepted by the manager from pending order UI. From that page he/she can also update & delete pending orders. The **figure 16 & 17** are given below which show the pending order interface & update order interface respectively.

Figure 16: Pending Order UI
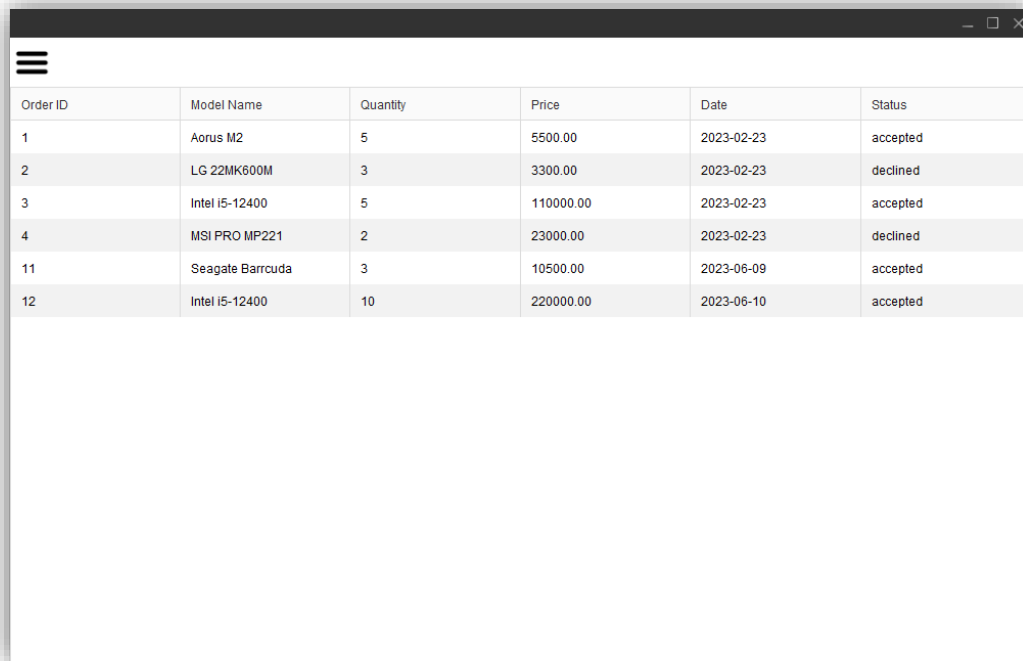
Figure 17: Update Order UI

Lastly the representative can view the accepted order list from the option. **Figure 18** shows the view order UI below.
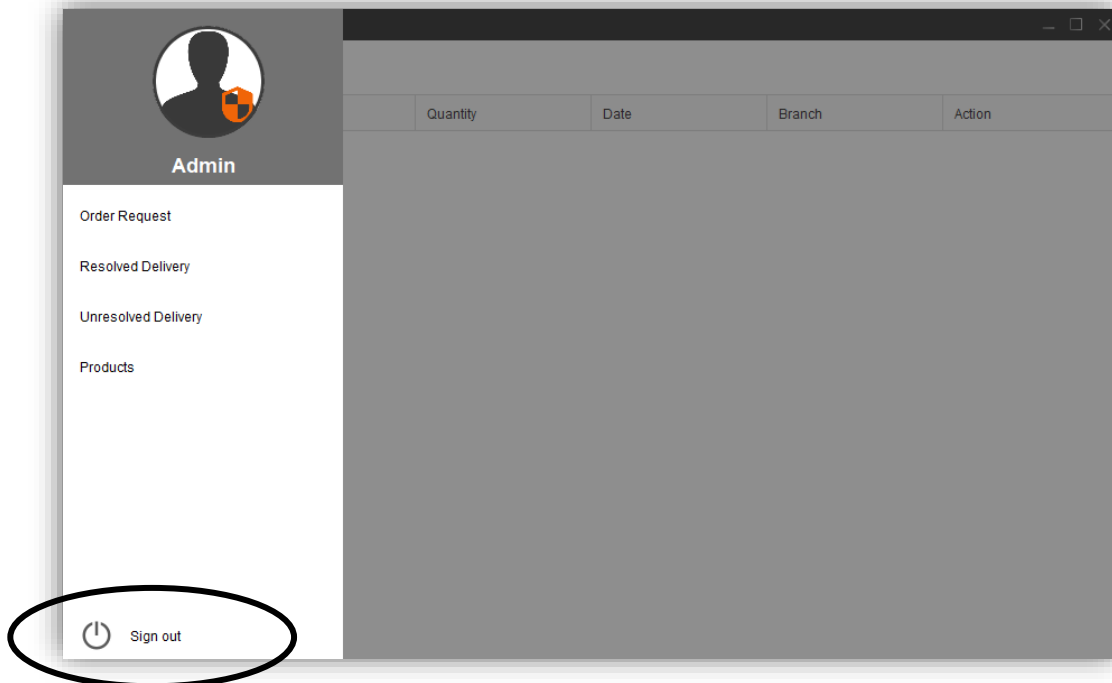

Figure 18: View Order UI

Finally, both manager and branch representative can sign out from the system from the sign out option in bottom left from the home UI. After sign out, the sign in form will appear. The **figure 19** shows the sign out option below.

Figure 19: Sign out