Ahsanullah University of Science & Technology

Department of Computer Science & Engineering (CSE)

Proposal on

"Requisition Management System"

Prepared for:

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Course No. & Name

CSE 3224 – Information & System Design Lab

Prepared By:

Lab Section : A2

Group No: 4

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Project Overview

The Requisition Management System is a software solution designed to streamline and automate the process of managing requisitions in an organization. It facilitates the creation, approval, tracking, and fulfillment of requisitions, ensuring efficient procurement and inventory management. The Requisition Management System aims to enhance operational efficiency, improve procurement processes, reduce manual errors, and provide better control and visibility over requisitions and inventory management within the organization.

Project Implementation Tool / Framework

- Netbeans 8.2
- Java Swing
- SQL Server
- SQL Server 2014 Management Studio

User Story

As a Requisition Manager, I would typically have several requirements for a requisition management system software.

1. **User-Friendly Interface:** The software should have an intuitive and easy-to-use interface, allowing requisition managers to navigate through the system effortlessly and perform their tasks efficiently.

2. **Requisition Creation:** The software should allow requisition managers to create and submit requisitions easily. This includes providing fields for necessary information such as item description, quantity, required delivery date, budget codes, and any other relevant details.

3. **Approval Workflow:** The software should support an approval workflow that enables requisition managers to route requisitions to the appropriate approvers based on predefined rules or hierarchy. It should provide visibility into the approval status and allow tracking of pending, approved, or rejected requisitions.

4. **Collaboration and Communication:** The system should facilitate communication between requisition managers, requesters. It should allow for comments, attachments, and notifications, ensuring all parties involved can communicate and collaborate effectively.

5. **Budget Control:** The software should integrate with budgeting or financial systems to check and control budgets during the requisition process. It should provide real-time information on available budget amounts, enabling requisition managers to make informed decisions and prevent overspending.

6. **Vendor Management:** The system should have functionality to manage vendor information, including maintaining a vendor database, tracking vendor performance, and integrating with vendor catalogs or pricing databases to streamline the requisition process.

7. **Purchase Order Generation:** Once requisitions are approved, the software should automatically generate purchase orders, including all relevant information such as item details, quantities, pricing, and delivery instructions. It should also allow requisition managers to track and manage purchase orders through their lifecycle.

8. **Security and Data Privacy:** The software should have robust security measures in place to protect sensitive requisition data. It should comply with data privacy and offer user access controls to ensure data confidentiality and integrity.

As a Branch Representative, I would typically have several requirements for a requisition management system software.

1. **Inventory Management:** The software should have a comprehensive inventory management module that allows you to view the available supplies in the warehouse. It should provide real-time information on stock levels, locations, and any other relevant details.

2. **Supply Request Creation:** The software should enable requisition managers to create supply requests directly from the warehouse inventory. It should include features like search and filter options to easily locate the required supplies and add them to the request.

3. **Reorder Point and Notifications:** The software should support setting up reorder points for supplies. When the stock reaches a specified threshold, the system should generate automatic notifications to requisition managers, prompting them to initiate a supply request.

4. **Multiple Warehouse Support:** If your organization has multiple warehouses or storage locations, the software should be able to handle requests from different warehouses. It should allow requisition managers to select the appropriate warehouse when creating a supply request.

5. **Stock Availability Verification:** The software should check the availability of requested supplies in the inventory in real-time. It should prevent requisition managers from placing requests for items that are out of stock or unavailable.

6. **Request Tracking:** The software should provide visibility into the status of supply requests. Branch Representative should be able to track the progress of their requests, from submission to fulfillment, and receive notifications or updates on any changes or delays.

7. **Delivery Scheduling:** The software should allow requisition managers to specify the desired delivery date or timeline for the requested supplies. It should support coordination with the warehouse team to ensure timely delivery.

Module Breakdown

1. **User Module:**
    *   **Users Login:** Allows users (manager & representative) to log in to the application using a username and a password by accessing the database.

2. **Requisition Manager Module:**
    *   **Product List:** Allows Manager to view products of the inventory with all the details.
    *   **Add Product:** Allows to input product with the details such as category, name, quantity and price etc.
    *   **Update Product:** Allows to update the product information such as quantity and price.
    *   **Delete Product:** Allows to delete any product from the product list.
    *   **Request Approval:** Allows to approve, hold or deny any kind of request from the branch representative.
    *   **Resolved & Unresolved Delivery:** Allows manager to view the resolved and Unresolved Delivery.

3. **Branch Representative Module:**

- **Product List:** Allows representative to view products of the inventory with all the details.
- **Place Order:** Allows representative to place order to the manager.
- **View Order:** Allows to view placed order to the manager with order status.
- **Update Oder:** Allows representative to update order such as update quantity and add new product to the order.
- **Cancel Order:** Allows to cancel any placed order to the manager.

Collaboration Matrix

| *Task*	*Alistair Biswas*	*Rafeed Mahbub*	*Syed Mashruk*	*Fahim Faisal*
Project Planning & Feature Selection	R		R	
Create Roadmap	R			R
Project Proposal	R			
Login Page Design & implementation		R		
Home Page UI Design		R		
Database Connection Design				R
Backend Implementation of Login Interface		R	R	
Backend Implementation of Manager Panel		R		
Backend Implementation of Representative Panel	R		R	
Debugging	R	R	R	R
Cross Device Testing	R	R	R	R
Report Writing & Presentation	R			
Final Launch	R	R	R	R

R = Responsible for the Task

Blank = Not Responsible for the Task

Gantt Chart

The Gantt Chart presented below provides a visual representation of the project schedule for the Development of our "Requisition Management System".

Task	Start Date	End Date	Days to complete
1 Planning & Design Phase	3-May	12-May	10
1.1 Project Planning & Features Selection	3-May	6-May	4
1.2 Create a Roadmap	7-May	9-May	3
1.3 Project Proposal	10-May	12-May	3
2 Development Phase	20-May	3-Jul	45
2.1 Login Page Design & Implementation	20-May	22-May	3
2.2 Home Page UI Design	23-May	3-Jun	12
2.3 Database Connection & Design	4-Jun	8-Jun	5
2.4 Backend Implementation of Login Interface	9-Jun	13-Jun	5
2.5 Backend Implementation of Manager Panel	14-Jun	25-Jun	12
2.6 Backend Implementation of Representative Panel	26-Jun	3-Jul	8
3 Testing & Quality Assurance	10-Jul	26-Jul	17
3.1 Debugging	10-Jul	19-Jul	10
3.2 Cross Device Testing	20-Jul	26-Jul	7
4 Launch	27-Jul	10-Aug	15
4.1 Report Writing & Presentation	27-Jul	5-Aug	10
4.2 Final launch	6-Aug	10-Aug	5

Gantt Chart
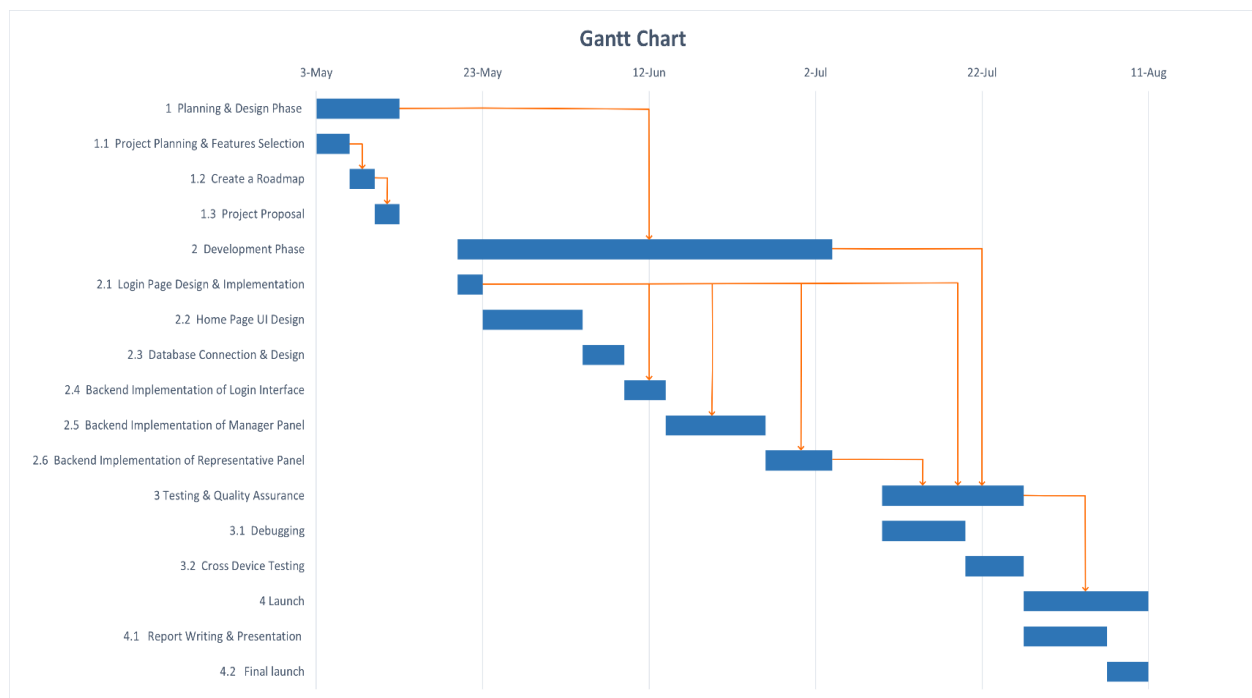
Conclusion

In conclusion, the requisition management system project will successfully achieve its objectives of automation, efficiency, centralization, standardization, and improved communication. It will transform the requisition process, empowering the organization with a user-friendly system that optimizes operations, and drives overall productivity.