



# Government procurement and warehouse management system

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## Abstract

Our project Government Procurement  
Our project Government Procurement and Warehouse Management talks about the digital transformation the two sub systems:  
Government Procurement Management and Warehouse Management in accordance with the Egyptian Auctions and Tenders Regulation Law No.189 of 2018  
where all processes that were carried out manually will be converted to electronic using a web-based information system to improve efficiency and accuracy and reduce costs and developed to facilitate material management and delivery and improve planning and inventory tracking. The tool will provide an easy-to-use interface for users and provide detailed reports for data analysis and strategic decision making. It is expected that this project will contribute to improving the university's governmental and educational operations and better achieving the institution's goals.  
Government Procurement Management  
Purchases Manager creates tenders, enters Items, and forms the committee, which in our system consists of 3 committees:  
1- Specifications and Pricing committee The Head of Committee sets determine the specifications and initial price of item  
2- Technical committee The Head of Committee check items are determined S&P Committee  
3- Selection committee The Head of Committee selects the best offers submitted by Vendor based on price  
Government Warehouse Management  
Warehouse manger Enter and edit items And Deliver and return entrusted items which in our system consists of 3 committees:  
1- Receiving Committee: The Head of Committee Receive the delivered items  
2- technical checking committee: The Head of Committee Check the validation of items  
3- Expiring Committee: The Head of Committee is responsible for Expire items

## Objective

Government Procurement Management System Objectives:

- 1- Enhance Efficiency: Automate procurement processes to reduce time and administrative workload.
- 2- Improve Accuracy: Minimize errors through automated data entry and validation checks.
- 3- Cost Control: Optimize spending by ensuring competitive bidding and cost-effective purchasing.
- 4- Transparency: Provide clear, traceable records of all procurement activities for accountability.
- 5- Compliance: Ensure all procurement activities adhere to legal and regulatory standards.
- 6- Supplier Management: Maintain a comprehensive database of suppliers and their performance histories.
- 7- Strategic Decision-Making: Utilize detailed reports and analytics to inform procurement strategies and decisions.

Government Warehouse Management System Objectives:

- 1- Inventory Accuracy: Improve inventory tracking and management to maintain accurate stock levels.
- 2- Operational Efficiency: Streamline warehouse operations, including receiving, storing, and dispatching goods.
- 3- Reduce Waste: Manage inventory expiration dates to minimize waste and ensure timely usage of items.
- 4- Improve Planning: Use data analytics to predict inventory needs and optimize stock levels.
- 5- Security: Implement robust security measures to protect warehouse assets from loss or theft.
- 6- Cost Savings: Reduce storage and operational costs through efficient warehouse management practices.
- 8- Enhanced Reporting: Provide detailed inventory reports for better monitoring and strategic planning.

## tools

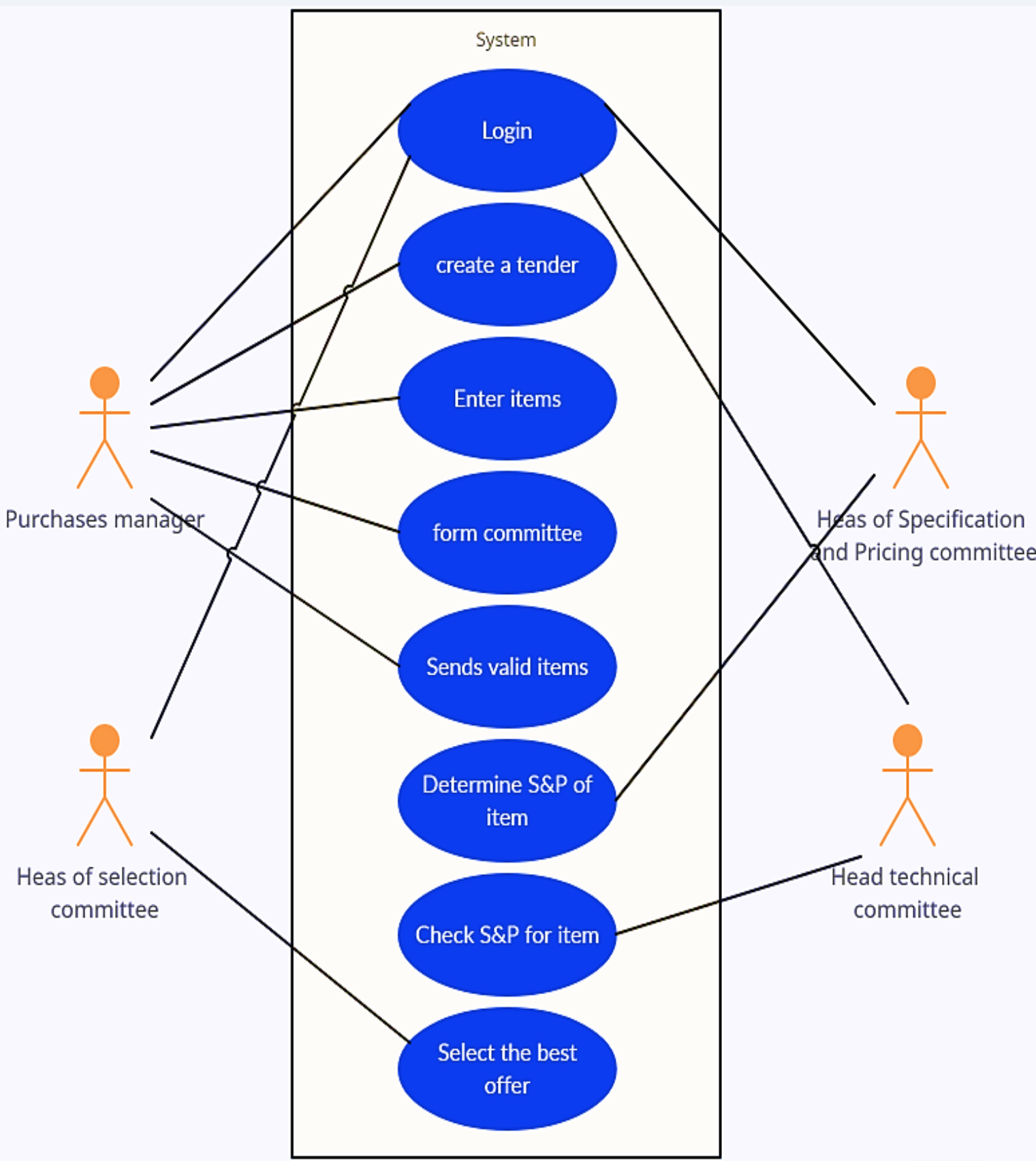
- Adobe XD
- HTML
- CSS
- Bootstrap
- JavaScript
- jQuery
- .Net core
- SQL Server



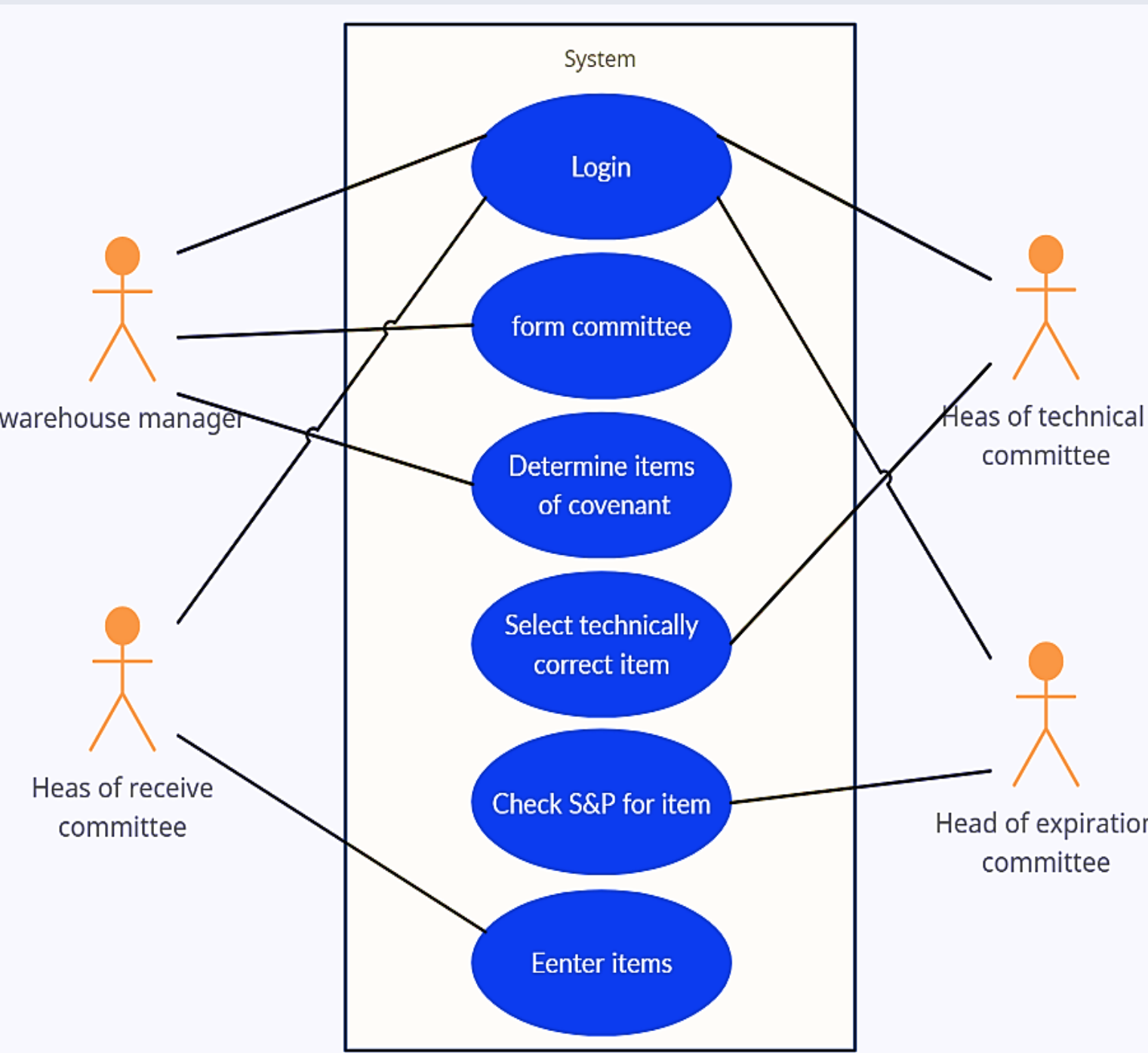
## Method

Use case diagram

- Purchases department

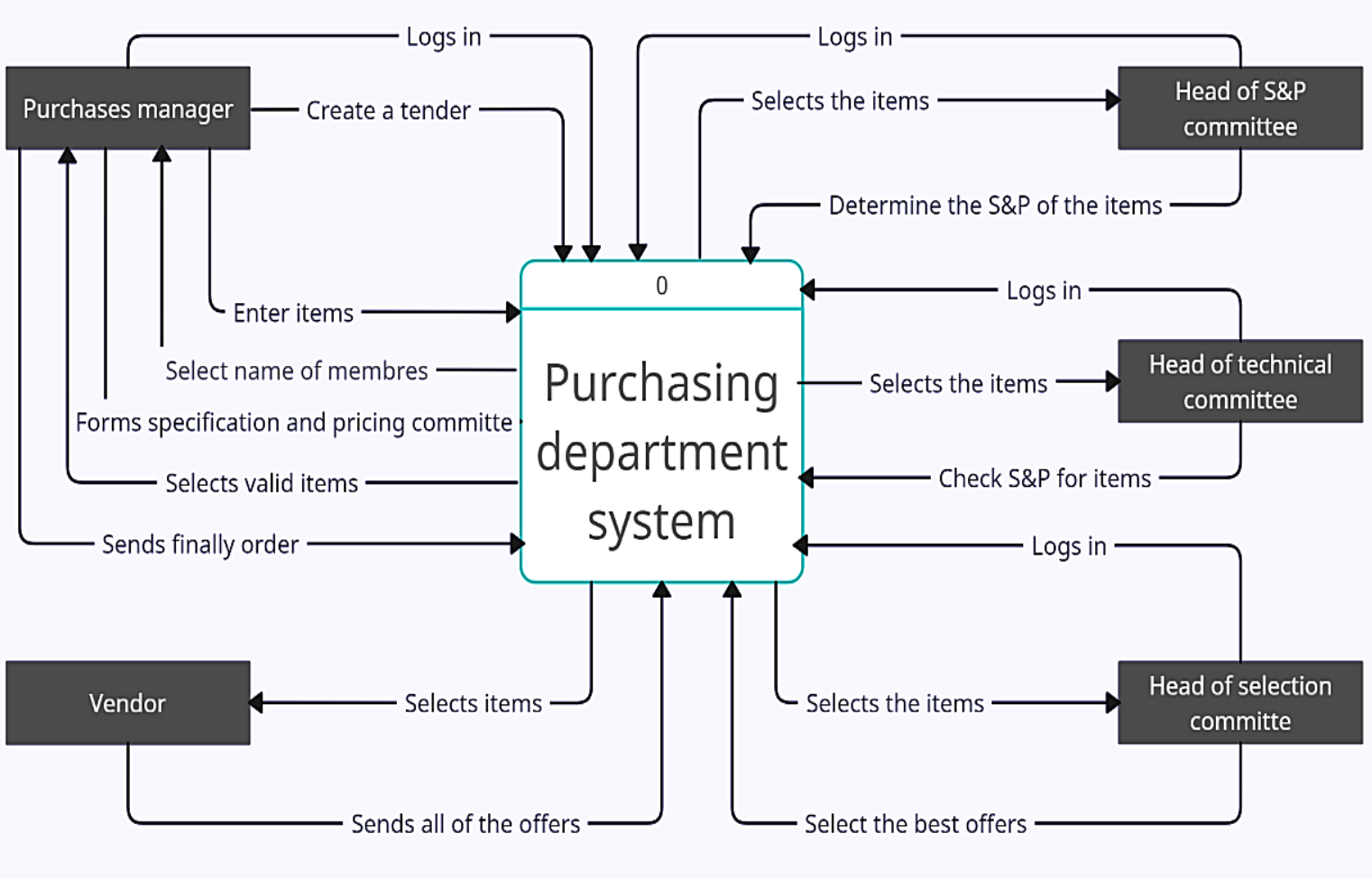


- Warehouse department

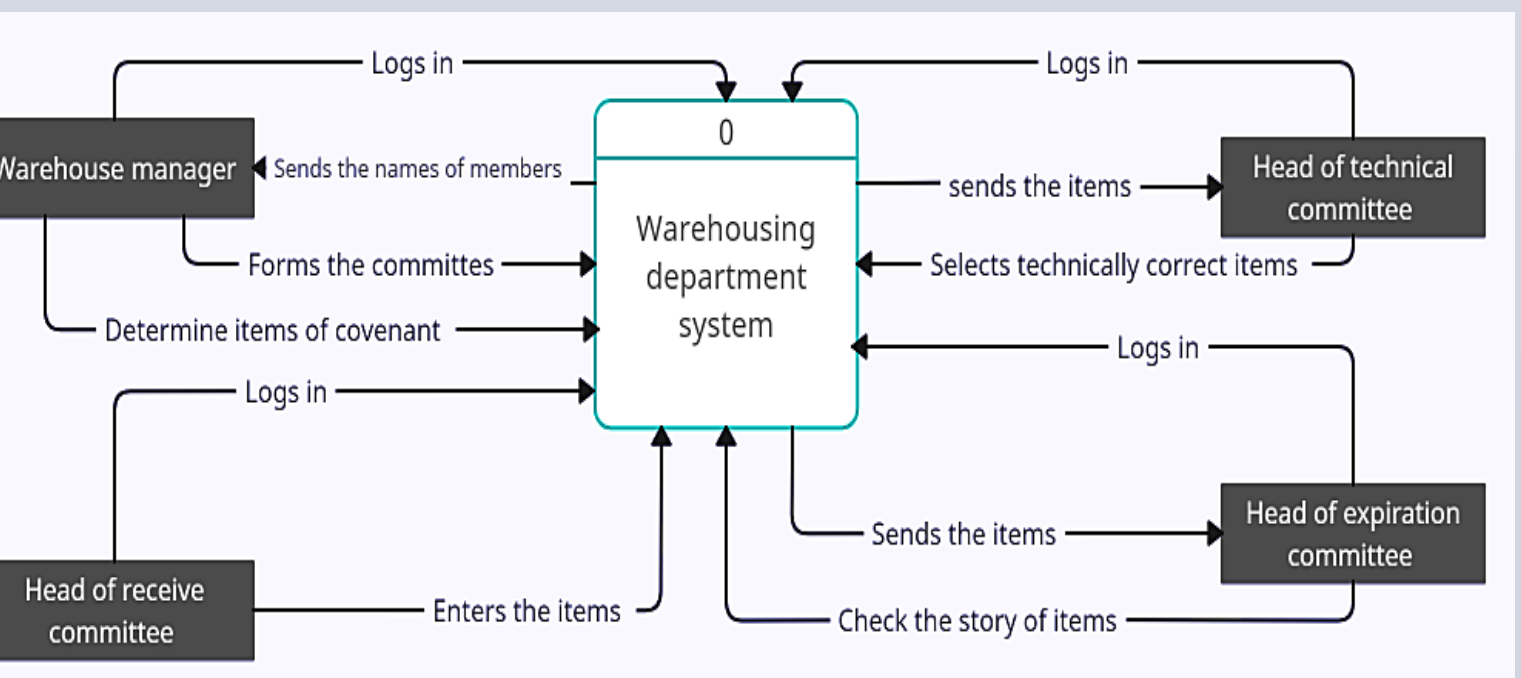


Data flow diagram ( level 0)

- Purchases department

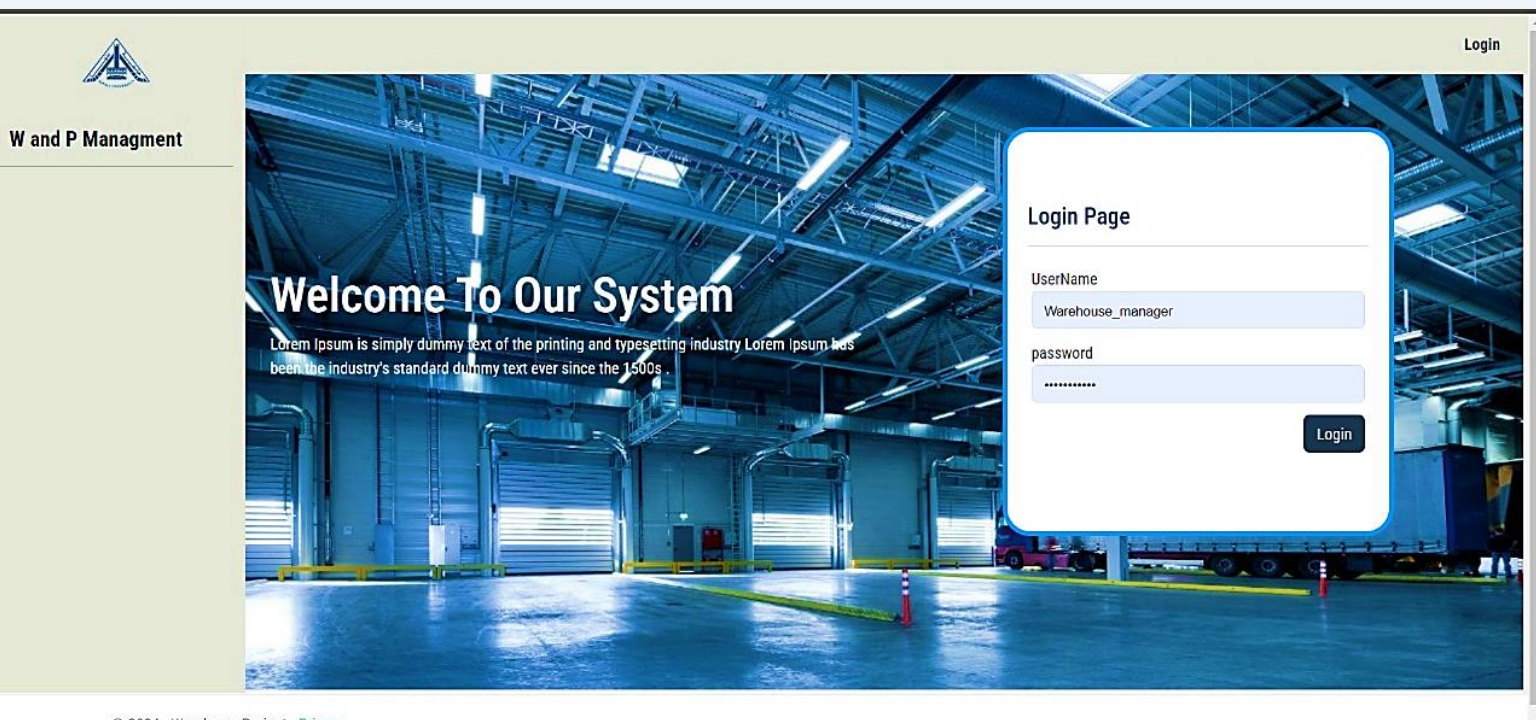


- Warehouse department

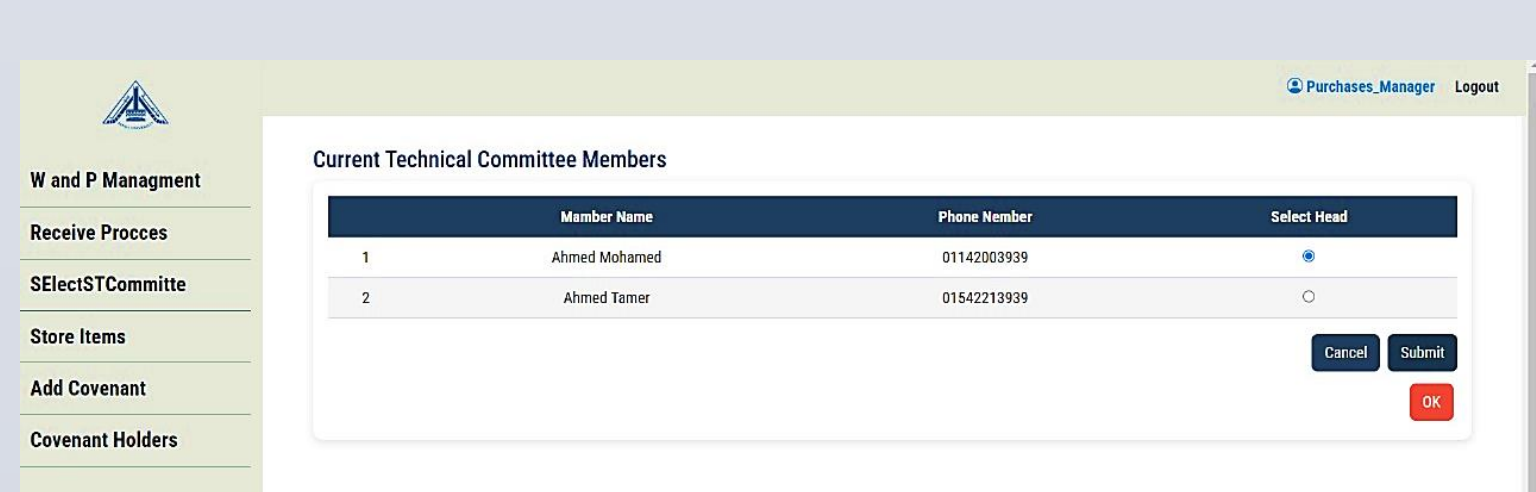
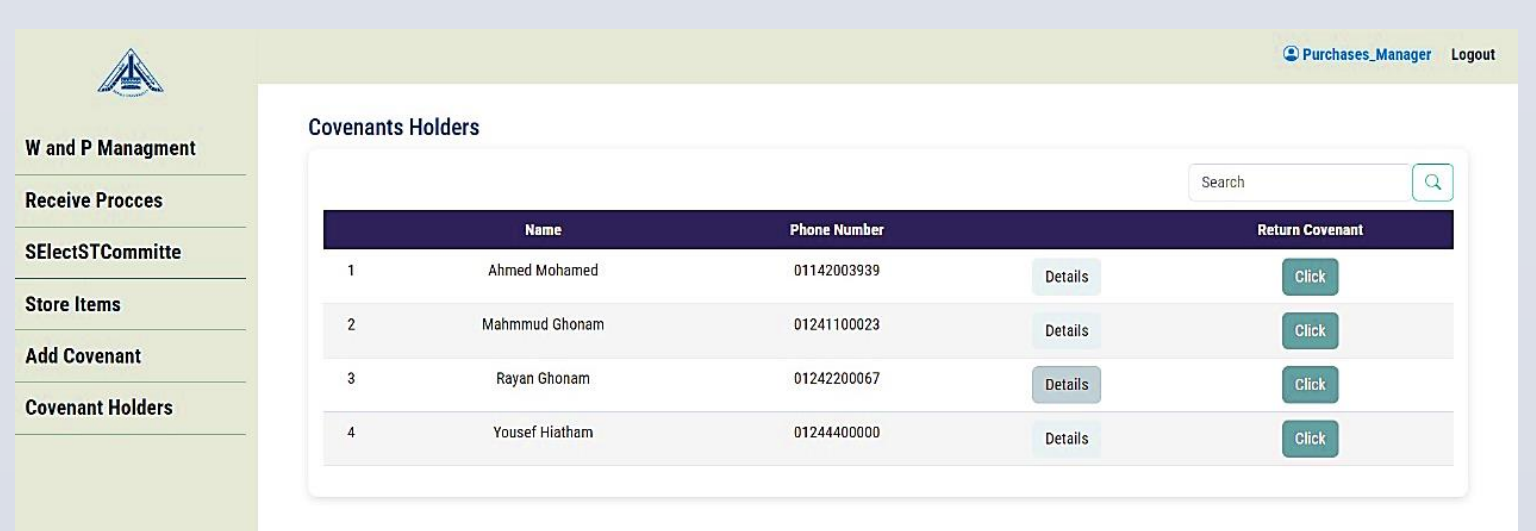
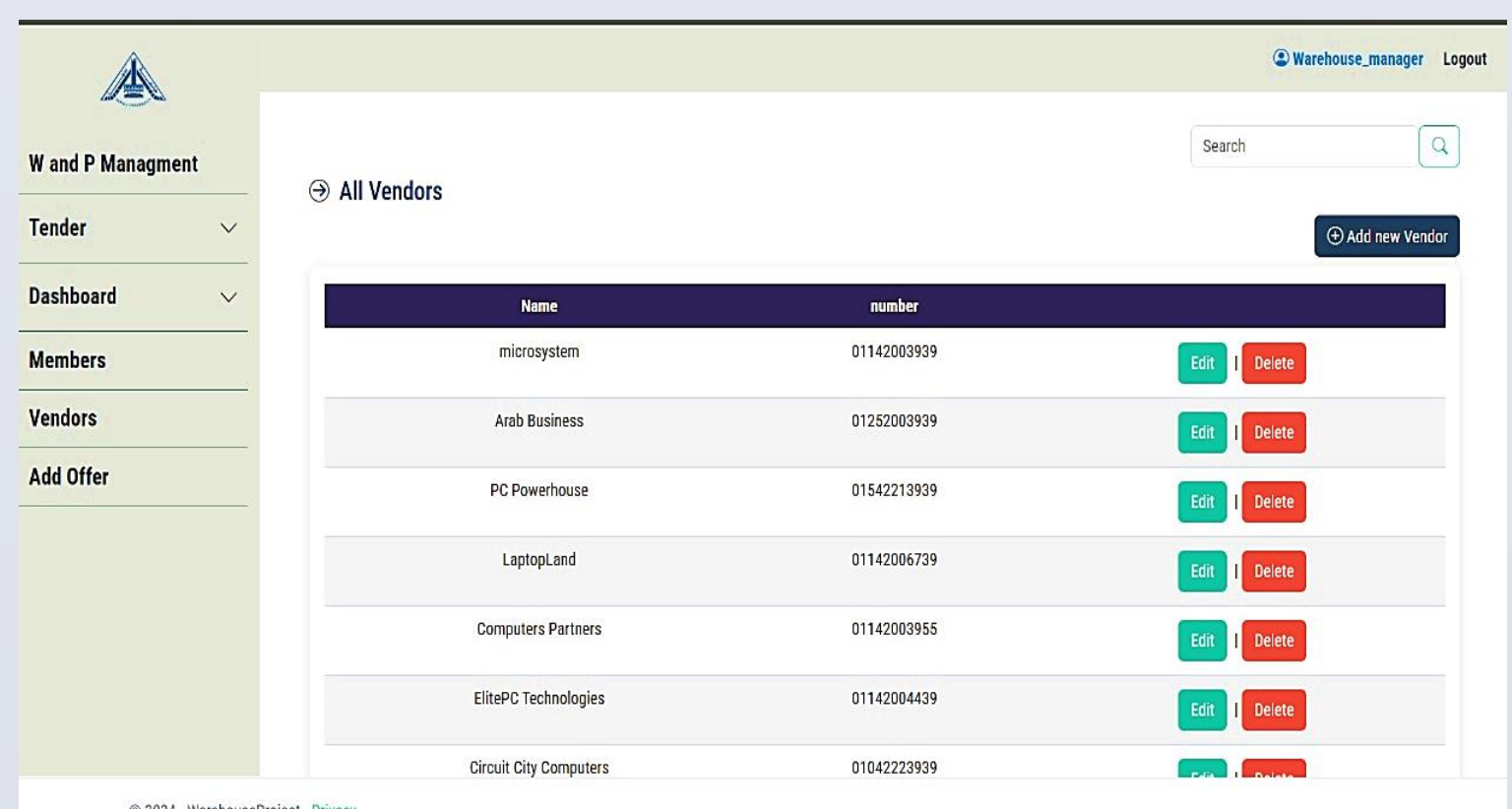
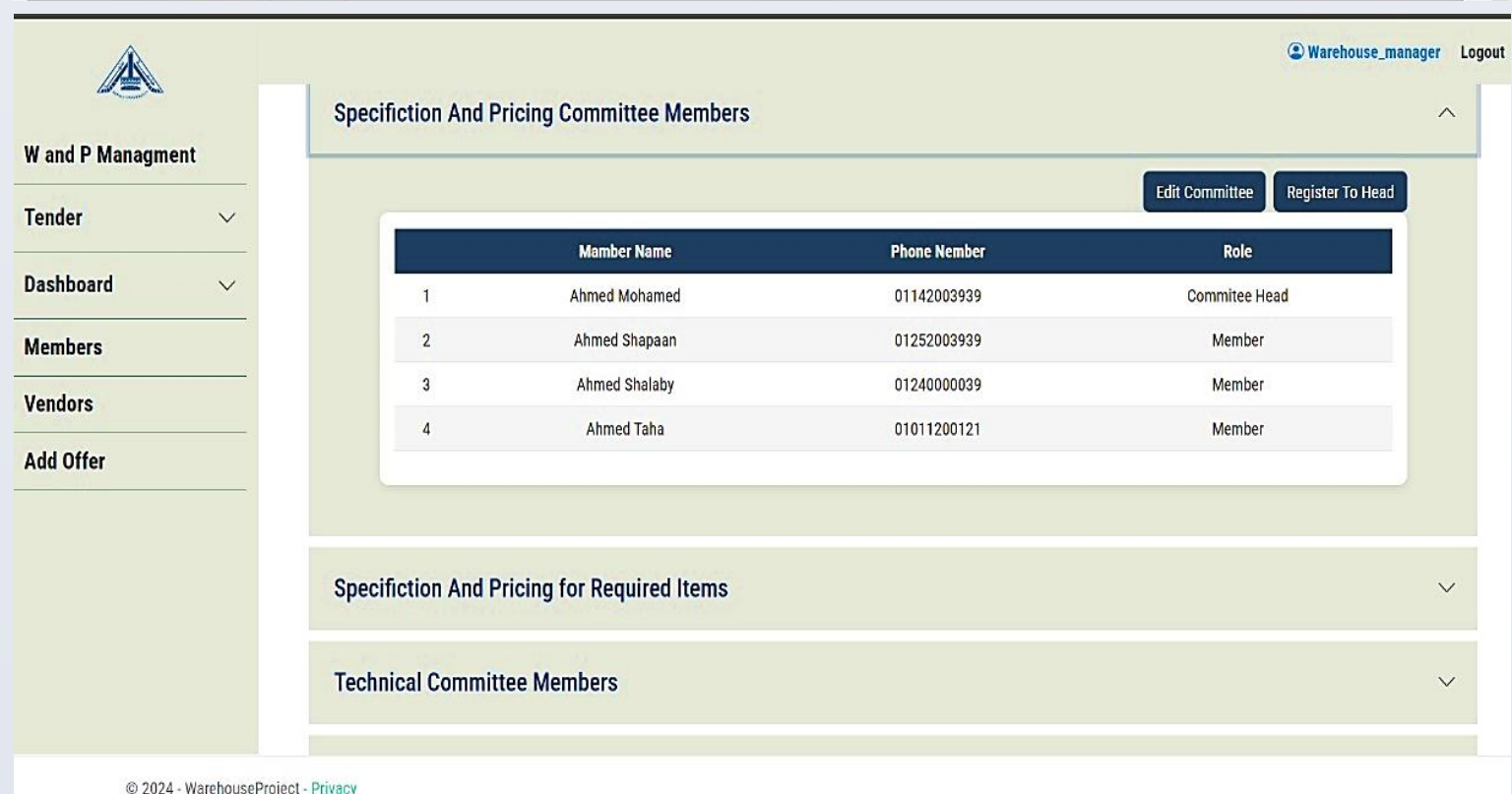


## Expectation Results

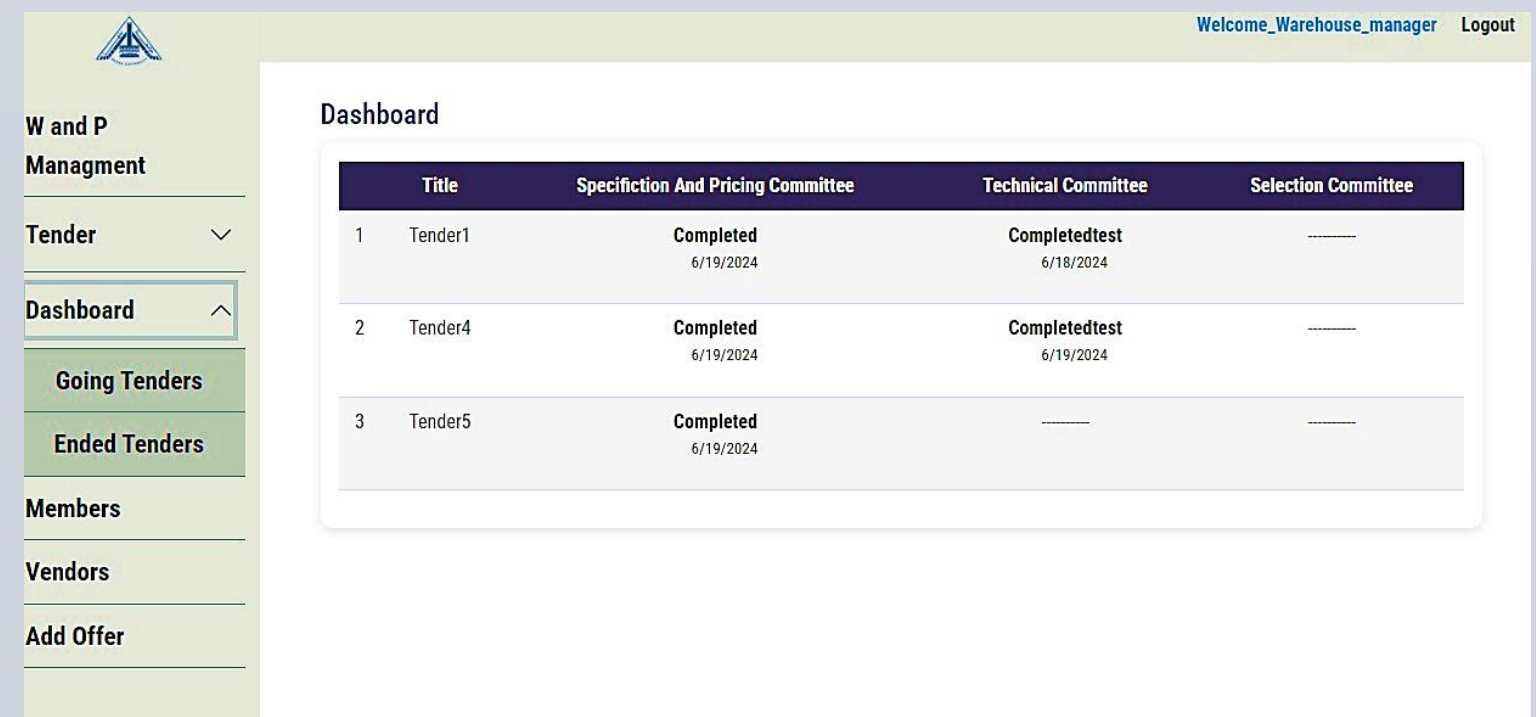
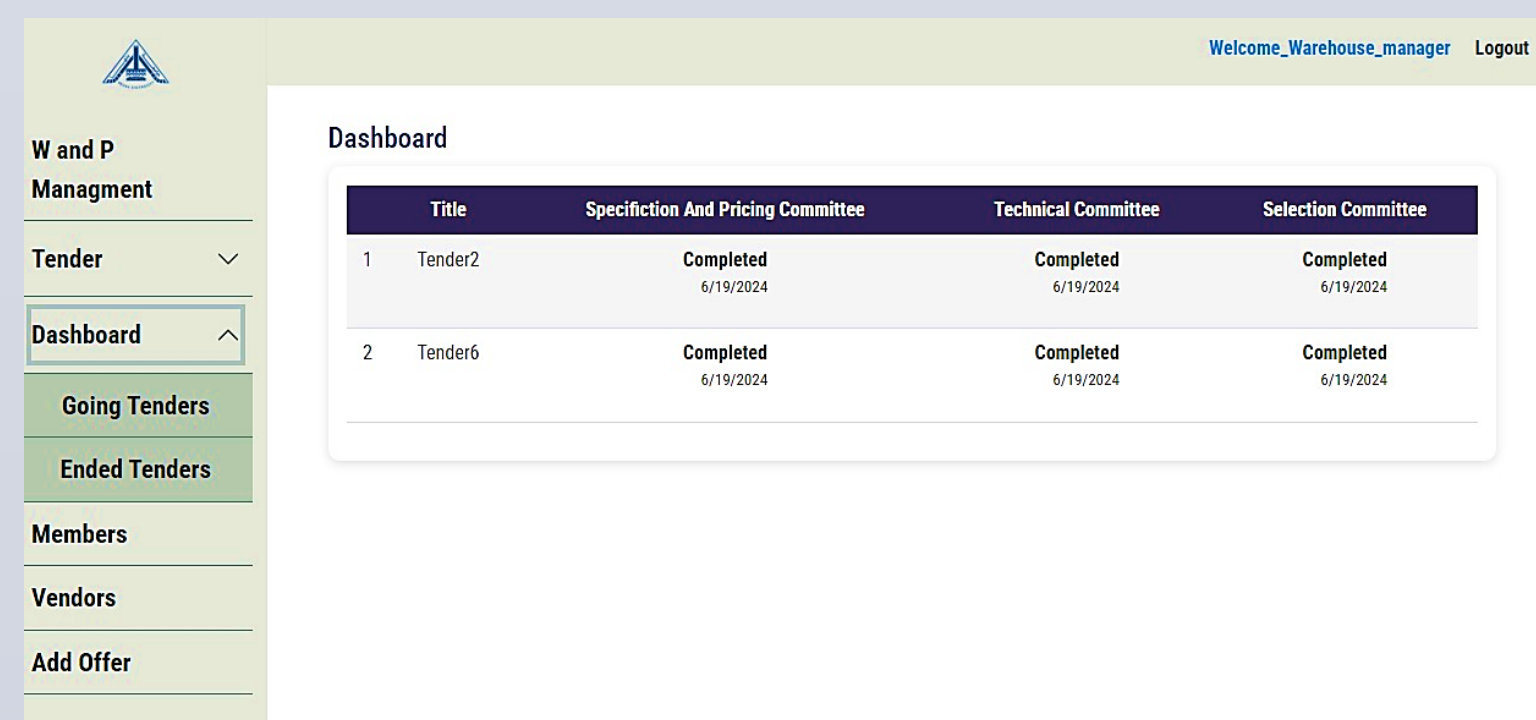
It is a login screen through which the purchasing manager, warehouse manager, and the head of each committee can enter



These screens show the home page and some important parameters



it is the dashboard through which items are displayed and separated according to whether they are completed or incomplete



## Conclusion

The project aims to digitize all manual processes in Government Procurement and Warehouse Management using a web-based information system. This will improve efficiency, accuracy, and cost-effectiveness, while facilitating material management, delivery, planning, and inventory tracking. The system features an easy-to-use interface and detailed reports for data analysis and strategic decision-making, enhancing the university's governmental and educational operations.

In Government Procurement Management, the Purchases Manager will create tenders, enter items, and form three committees:

- Specifications and Pricing Committee: Determines item specifications and initial price.
- Technical Committee: Checks items as specified.
- Selection Committee: Selects the best vendor offers based on price.

In Government Warehouse Management, the Warehouse Manager will handle item entry, editing, delivery, and return through three committees:

- Receiving Committee: Receives delivered items.
- Technical Checking Committee: Validates items.
- Expiring Committee: Manages item expiration.

Overall, the project aims to streamline operations, contributing to the university's goals.

## Reference

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- <https://www.javascripttutorial.net/>
- <https://stackoverflow.com/>

## Acknowledgements and contact

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## Team member



Muhammad Agami



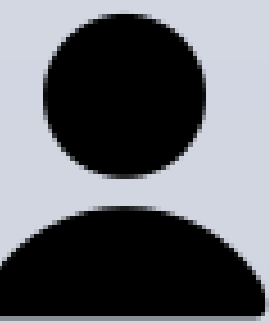
Mahmoud Abd-Elaziz



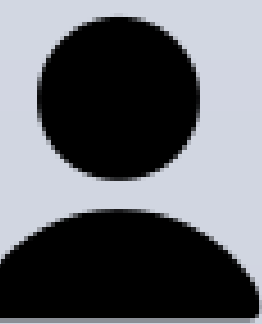
Zayed Adel



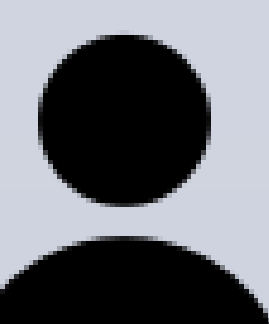
Ahmed Mohamed



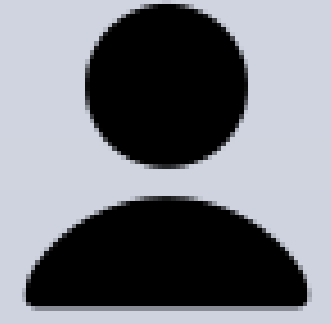
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