Software Requirement Specification

SHOPPING MALL MANAGEMENT SYSTEM

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1.Abstract

The Shopping Mall Management System is a web-based application designed to facilitate the management of a virtual shopping mall where multiple shop owners can set up their shops. The system allows shop owners to propose setting up a shop within the mall, which can be approved by the mall owner. It also provides features for shop management, including inventory management, operating hours, and performance analytics.

2. Scope and Objective

The scope of the Shopping Mall Management System includes shop owner registration, shop proposal submission, mall owner approval, shop management, and user authentication. The objective is to provide a user-friendly platform for shop owners to establish their presence within the virtual mall and for mall owners to efficiently manage the mall's operations.

3.Functional Requirements

3.1 Shop Owner Registration and Authentication

Shop owners must be able to register an account with the system by providing their details such as name, email, and contact information.Registered shop owners should be able to log in securely using their credentials, consisting of a username/email and password.

3.2 Shop Proposal Submission

Shop owners should have the ability to submit proposals for setting up a shop within the virtual mall.Each proposal should include details such as shop name, type of products/services offered, business plan, and proposed location within the mall.

3.3 Mall Owner Approval

The mall owner should receive notifications of new shop proposals and be able to review them.The mall owner should have the authority to approve or reject shop proposals based on

criteria such as feasibility and alignment with the mall's theme.Approved shops should be added to the virtual mall's directory for public access.

3.4 Shop Management

Approved shop owners should be able to manage their shop details through a dashboard interface. Shop management functionalities should include updating shop information, managing inventory, setting operating hours, and viewing analytics and reports related to the shop's performance within the mall.

4. Non Functional Requirements

4.1 Security

The system should implement robust security measures to protect user data and prevent unauthorized access. User authentication should be performed securely using encryption techniques to safeguard login credentials.

4.2 Performance

The system should be able to handle multiple concurrent users without significant degradation in performance. Response times for critical operations such as shop proposal submission and approval should be minimal.

4.3 Usability

The user interface should be intuitive and easy to navigate for both shop owners and mall visitors. Clear instructions and prompts should be provided throughout the system to guide users through various processes.

5. High level Design

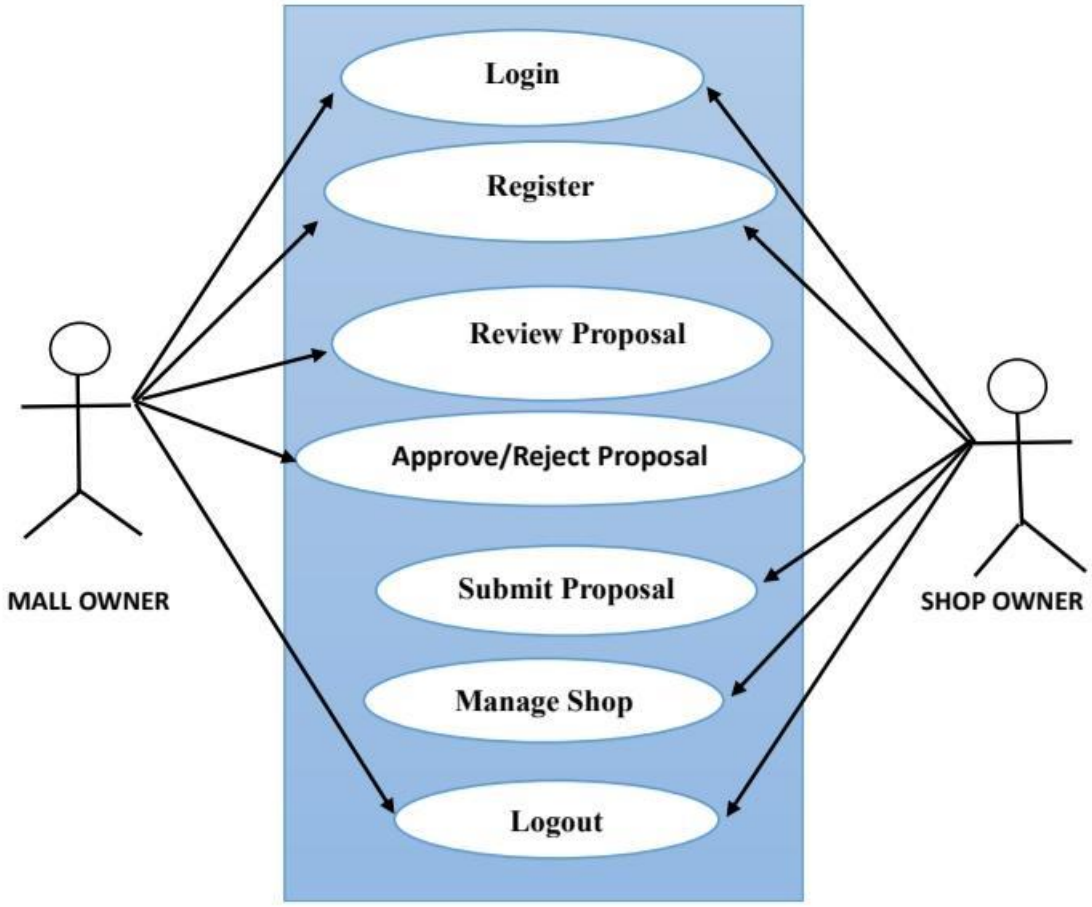
The high-level design of the Shopping Mall Management System will consist of a client-server architecture. The client-side interface will be developed using HTML, CSS, and JavaScript, providing a responsive and interactive user experience. The server-side logic will be implemented using a web framework such asNode.js, handling user authentication, data validation, and business logic. The system will utilize a relational database management system (e.g., MySQL)to store user data, shop details, and mall configurations.

6. Low level Design

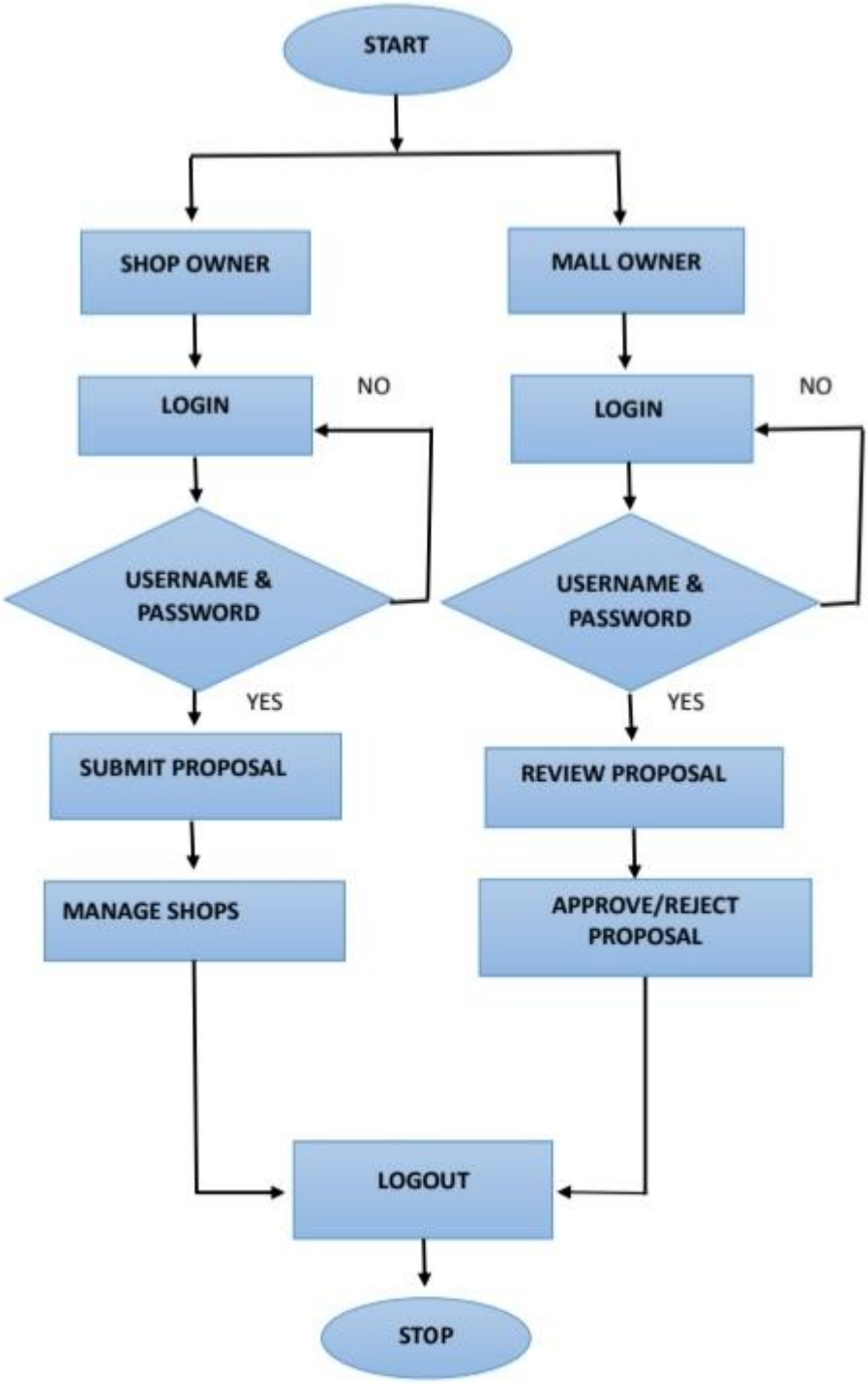
The low-level design will involve creating detailed specifications for each module of the system. This will include class diagrams, sequence diagrams, and data flow diagrams to illustrate the relationships between different components. For example, a class diagram will depict the structure of the user authentication module, including classes for user accounts, authentication tokens, and access control policies. Sequence diagrams will illustrate the flow of interactions between the client and server during operations such as shop proposal submission and approval.

6. UML Diagrams

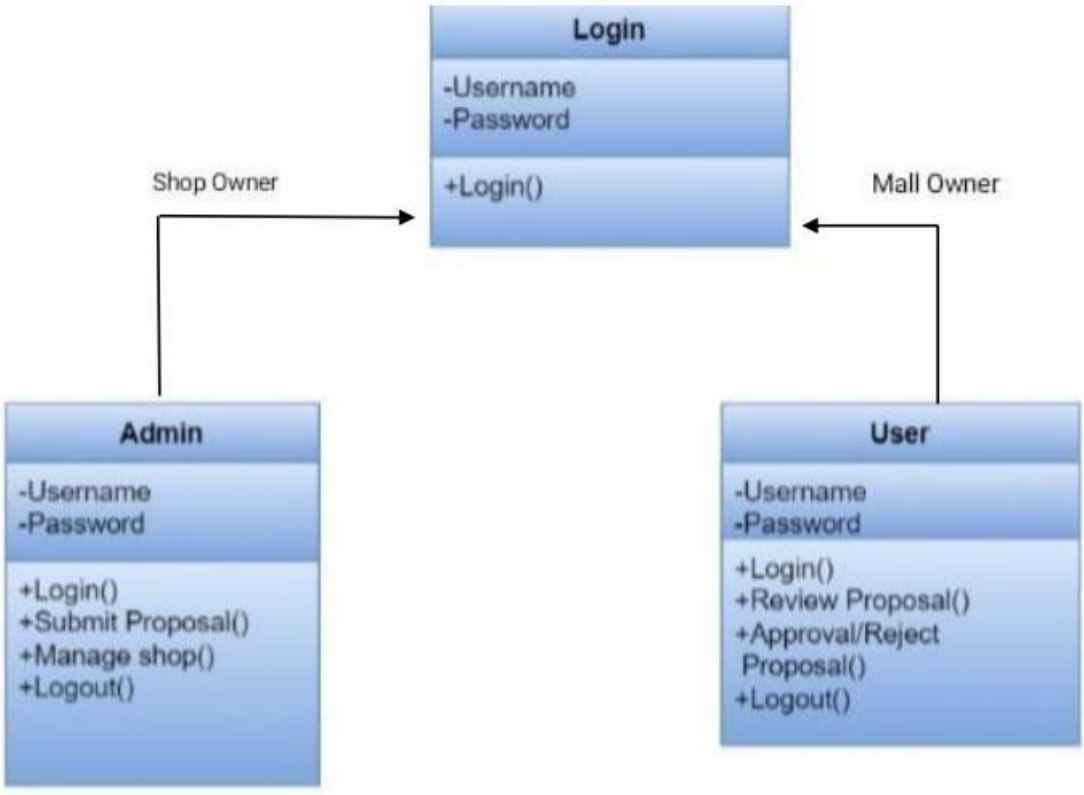
6.1 UseCase Diagram



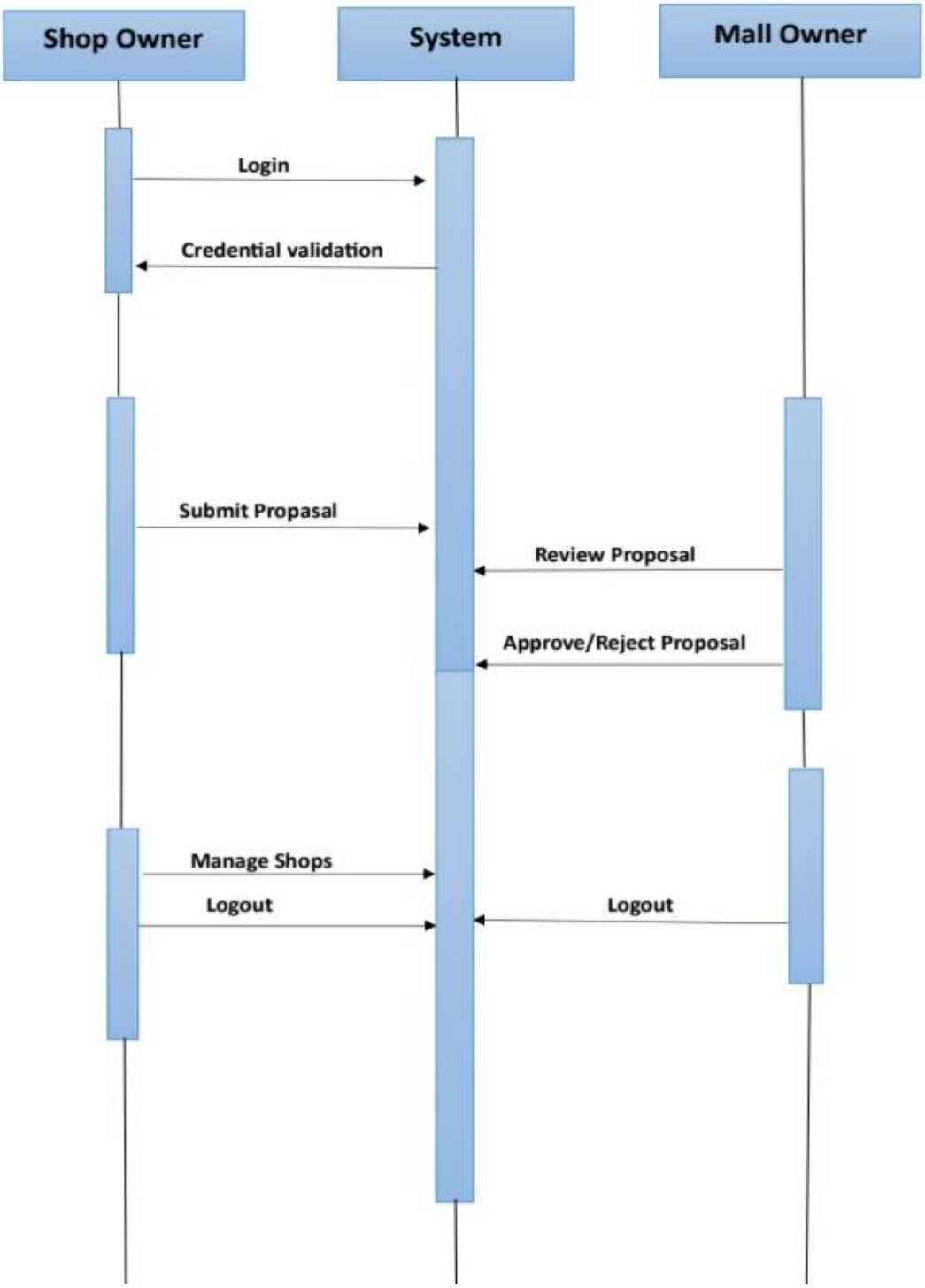
6.2 Flow Diagram



6.3 Class Diagram



6.4 Sequence Diagram



7. Test Cases

The Functional Specifications, Detailed Design Specification, and Requirements together drive the test plan.

TEST CASE	TEST PURPOSE	TEST CONDITION	EXPECTED OUTCOME
Shop Owner Registration	To verify that a user can successfully register in the system.	To verify that a user can successfully register in the system.	To verify that a user can successfully register in the system.
Shop Owner Login	To verify that a registered user can log in to the system.	Shop Owner provides valid login credentials (username/email and password).	Shop Owner is authenticated and redirected to the main dashboard
Submit Proposal	Shop Owner can apply for the Shop place which they want and apply it for the which shop they need to set	Mall Owner able to manage the Available place check it out for availabiity	Shop Owner can Successfully submit the proposal for shops.
Review proposal	Mall Owner can review the proposal given to the shop owner.	Allow shop owner to provide proposal .It should notify to the Mall Owner.	Users can be able to place theirnProposal and it is submitted to the admin for acceptance.

Approve/Reject Proposal	To verify the incoming proposal (managed by Mall Owner)	Mall Owner can able to monitor the incoming proposal.	Admin can be able to manage the Proposal successfully.
Manage Shops	Shops can be managed by shop owners with the place provided to them.	Shop owner can manage the shops.	Shop owner can see the available details and manage the shops.

8.Conclusion

The Shopping Mall Management System is a comprehensive solution for managing a virtual shopping mall, providing features for shop owner registration, proposal submission, mall owner approval, and shop management. By following the outlined requirements and design principles, the system will offer a seamless and efficient experience for both shop owners and mall visitors, facilitating the growth and success of businesses within the virtual mall environment.

9.Future Scope

In the future scope of the shopping mall project, users will have the capability to explore the variety of shops available within the mall through an intuitive interface, allowing them to browse through different categories of products and services. They will be able to view detailed information about each shop, including product listings, prices, and special offers. Additionally, users will have the option to add products from multiple shops into a unified shopping cart, enabling them to conveniently manage their selections in one place. Once satisfied with their choices, users can proceed to checkout and place their orders securely, making the entire shopping experience seamless and efficient. This enhancement will enhance user engagement, satisfaction, and ultimately contribute to the success of the virtual mall platform.