

Software Requirements Specification (SRS)

For

**Campus Connect: Integrated Lost and Found
with College Marketplace**

Pratush Gupta (2101153)

Prerna Singh (2101155)

Roshan Raj (2101175)

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Update Section

Name	Date	Changes Made

1. Introduction

1.1 Purpose

The purpose of the "Campus Connect" project is to provide a centralized platform for students to report and track lost and found items within the campus. Additionally, the platform will include features such as a college marketplace, study material repository, emergency contacts, and alumni connect.

1.2 Scope

Campus Connect will include features for filing lost and found cases, a college marketplace similar to OLX, study material sharing, emergency contacts, and alumni networking. The system aims to streamline communication and collaboration among students and alumni within the campus.

1.3 Intended Audience

- College Administration: To understand the overall system functionality, security measures, and compliance with college policies.

- Faculty Members: To ensure the system aligns with academic requirements and supports educational activities.
- Students: To understand how to use the system effectively for filing lost and found cases, utilizing the marketplace, accessing study materials, emergency contacts, and alumni networking.
- Alumni: To grasp the features related to alumni networking and engagement.
- System Developers: To gain insights into the functional and non-functional requirements for system development.

2. Overall Description

2.1 Product Perspective

The system will act as a standalone web application accessible to registered students within the college. It will not be integrated with external systems.

2.2 User Classes and Characteristics

Admin: Manages user accounts, monitors reported cases, oversees the marketplace, and administers study materials, emergency contacts, and alumni connections.

Student: Reports lost or found items, explores the college marketplace, accesses study materials, views emergency contacts, and engages with alumni connect.

2.3 Operating Environment

The system will operate as a web application, accessible through standard web browsers on desktop.

2.4 General Constraints

There are several constraints that may impact the development and implementation of our website. Some of these include:

- **Technology Constraints:** The system must be compatible with commonly used web browsers (e.g., Chrome, Firefox, Safari). The use of specific programming languages and frameworks may be constrained by college IT policies or existing infrastructure .
- **Integration Constraints:** Compatibility with existing college systems or databases, if applicable, must be ensured and Integration constraints with third-party services (e.g., payment gateways, external APIs) need to be considered.

3. Functional Requirements

3.1 Lost and Found

3.1.1 Student

RF1: Log in to the system.

RF2: File a lost item report.

RF3: File a found item report.

RF4: View and update your own reported cases.

3.1.2 Admin

RF5: Log in to the system.

RF6: View and manage reported cases.

RF7: Mark cases as resolved.

3.2 College Marketplace

3.2.1 Student

RF8: Browse items for sale.

RF9: Post an item for sale.

RF10: Contact a seller.

RF11: Mark an item as sold.

3.2.2 Admin

RF12: Monitor and manage posted items.

RF13: Remove inappropriate listings.

3.3 Study Material Repository

3.3.1 Student

RF14: View and Download the materials

3.3.1 Admin

RF15: Upload study materials

RF16: Manage study material categories.

3.4 Emergency Contacts

3.4.1 Student

RF17: Access emergency contact information.

3.4.2 Admin

RF18: Manage and update emergency contact information.

3.5 Alumni Connect

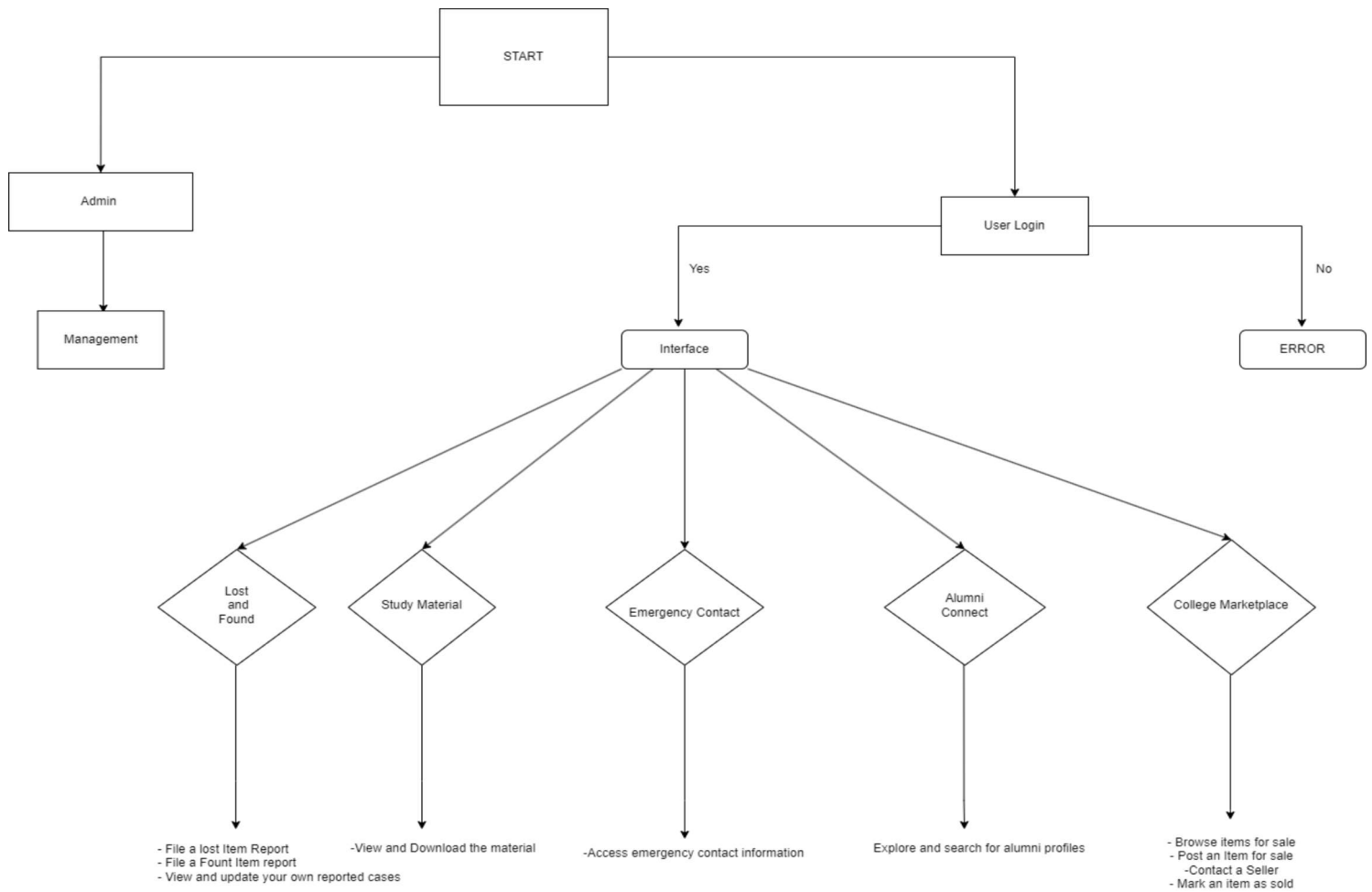
3.5.1 Student

RF19: Explore and search for alumni profiles.

3.5.2 Admin

RF20: Manage and update alumni profiles.

4. Decision Tree



5. Decision Table

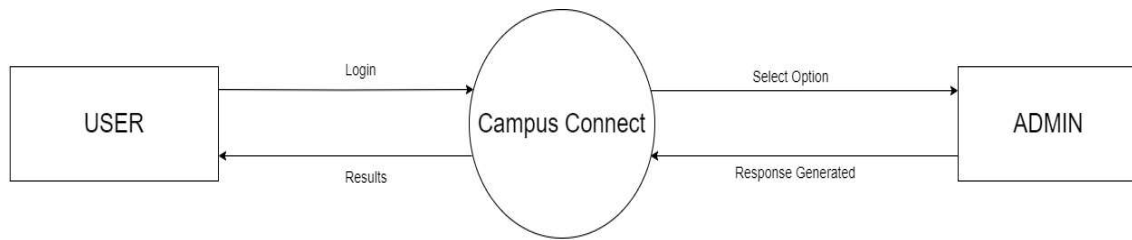
Conditions:

Admin	No	No	No	Yes	
Valid Username	Yes	No	Yes	--	
Valid Password	Yes	No	No	--	

Actions:

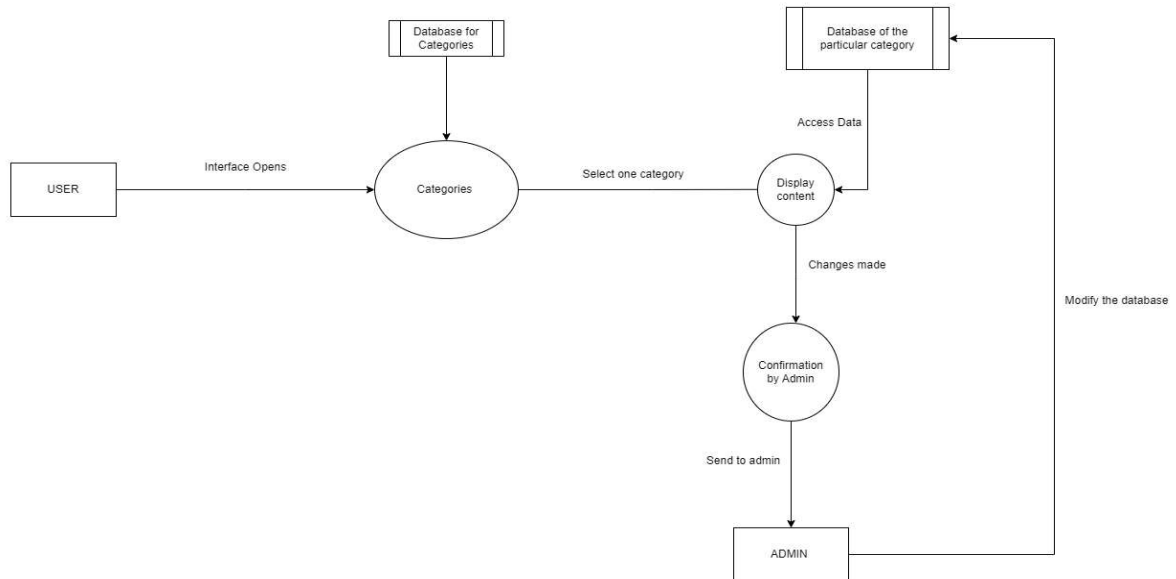
Login Successful	Yes	--	--	Yes	
Error	--	Yes	Yes	--	
Manage (Delete , Add , Verify)	–	–	–	Yes	
File lost and found case	Yes	--	--	Yes	
Access Study Materials	Yes	--	--	Yes	
Get Emergency Contacts	Yes	--	--	Yes	
Get Alumni Network	Yes	--	--	Yes	
Access Marketplace	Yes	--	--	Yes	

6. Level-0 DFD



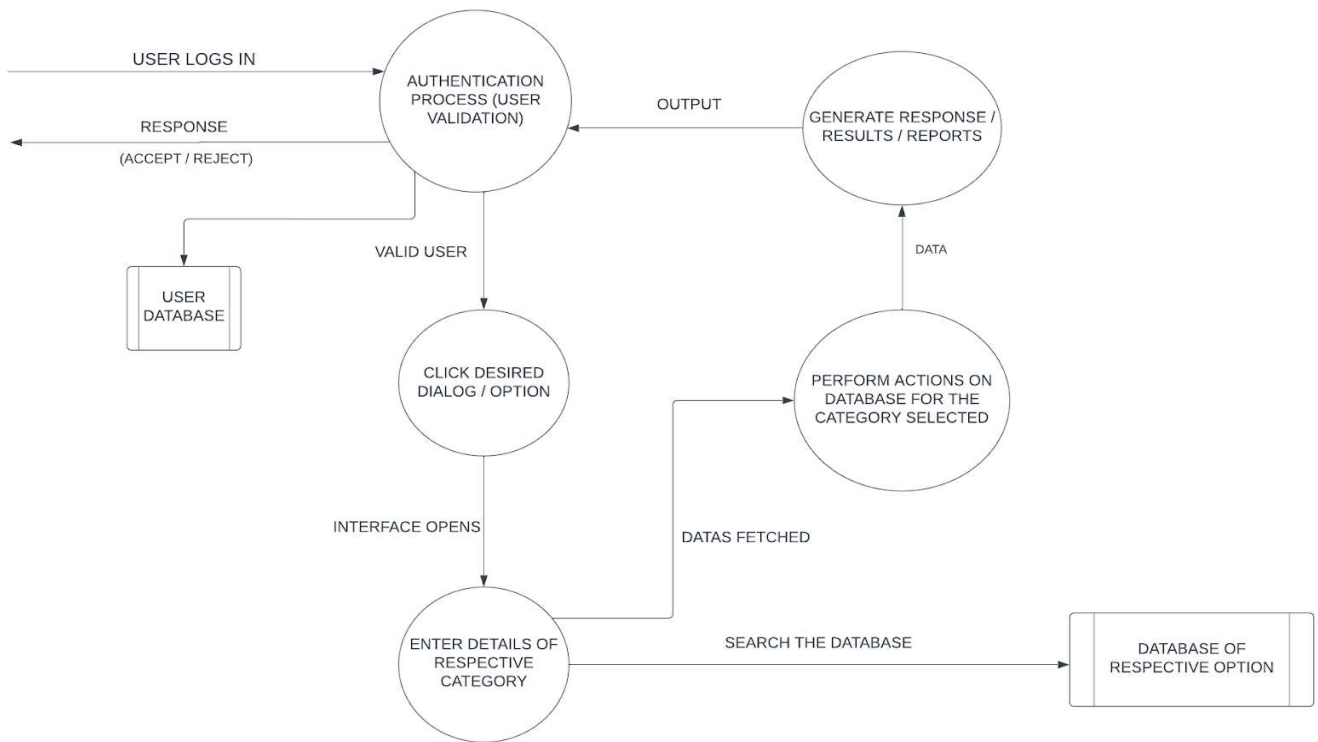
Level 0 DFD

7. Level-1 DFD



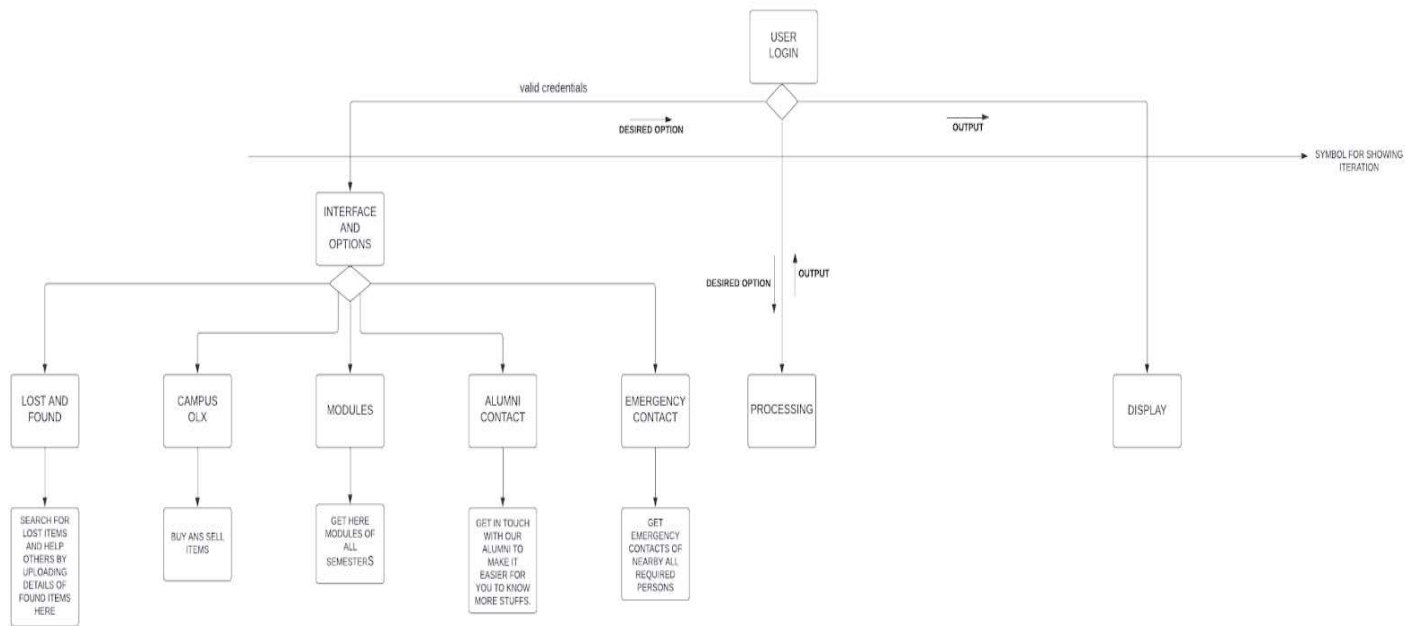
LEVEL 1 DFD

8. Level-2 DFD



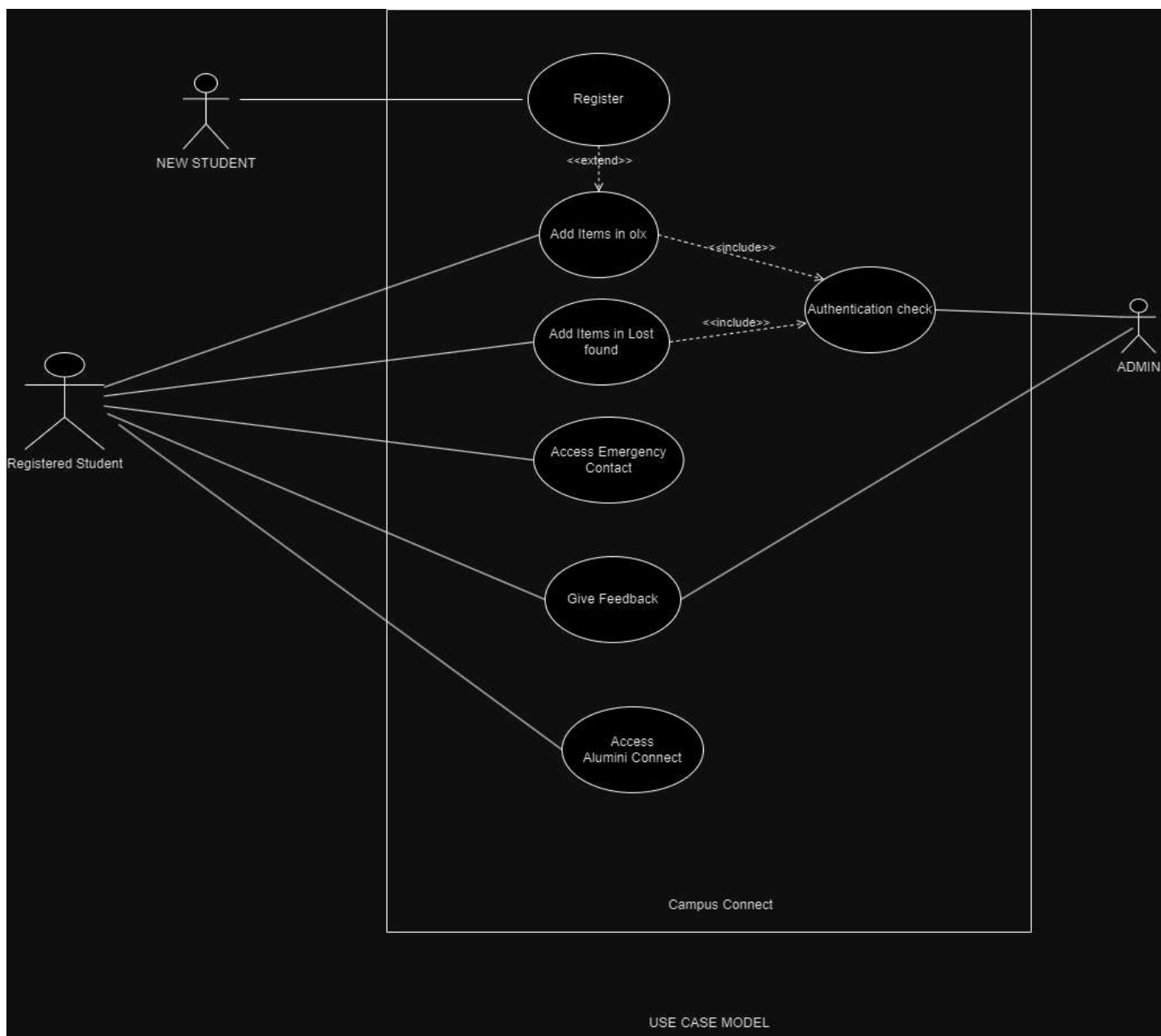
LEVEL2 DATA FLOW DIAGRAM

9. Structured Diagram

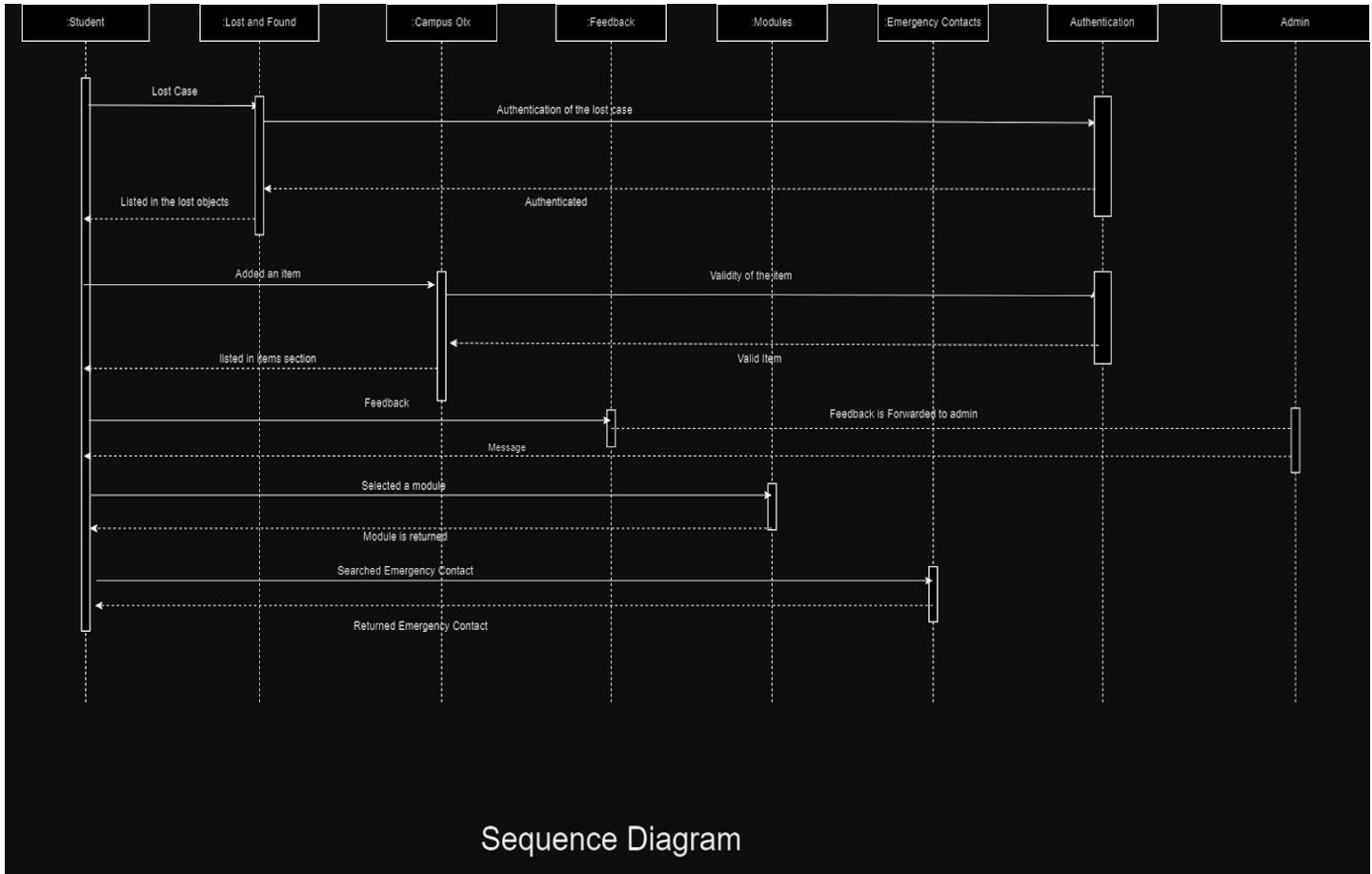


STRUCTURED DESIGN

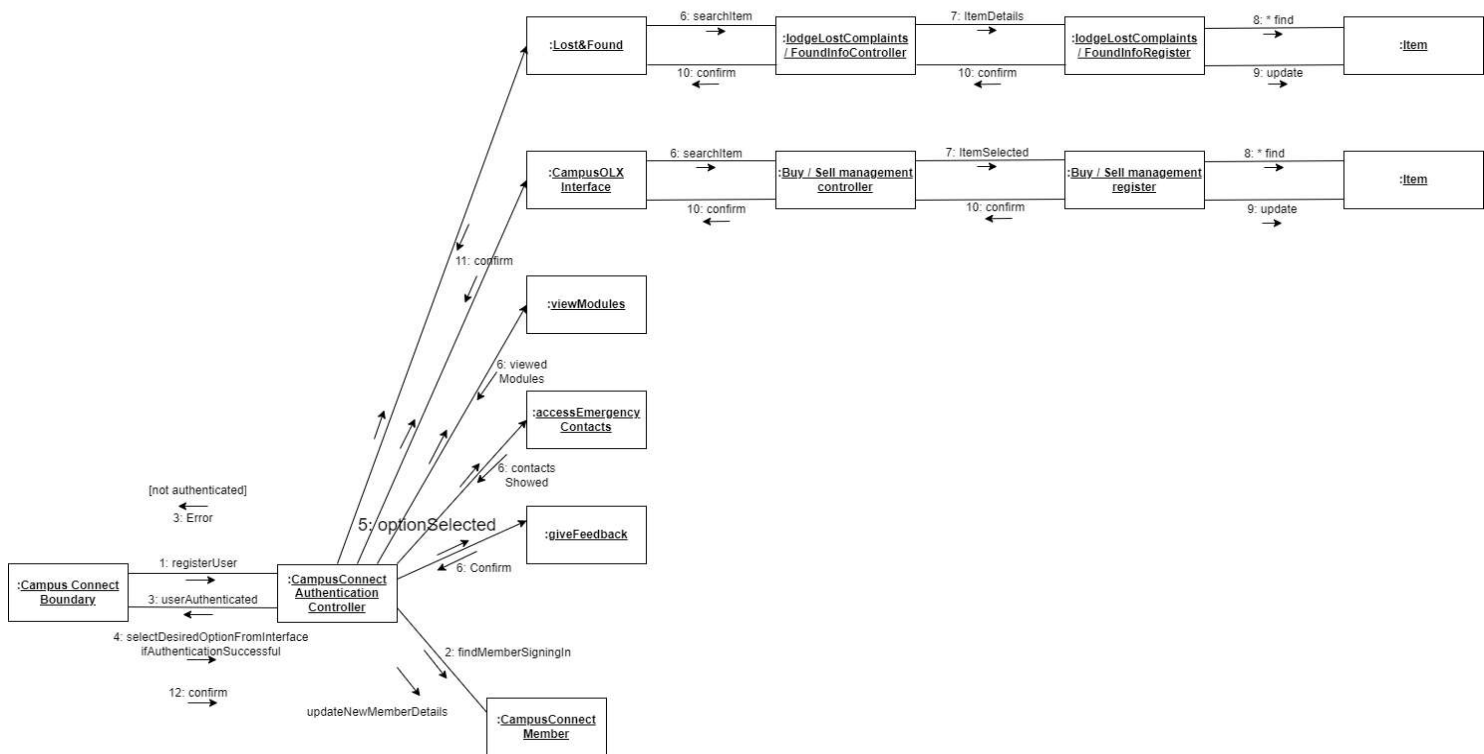
10. Use Case Diagram



11. Sequence Diagram

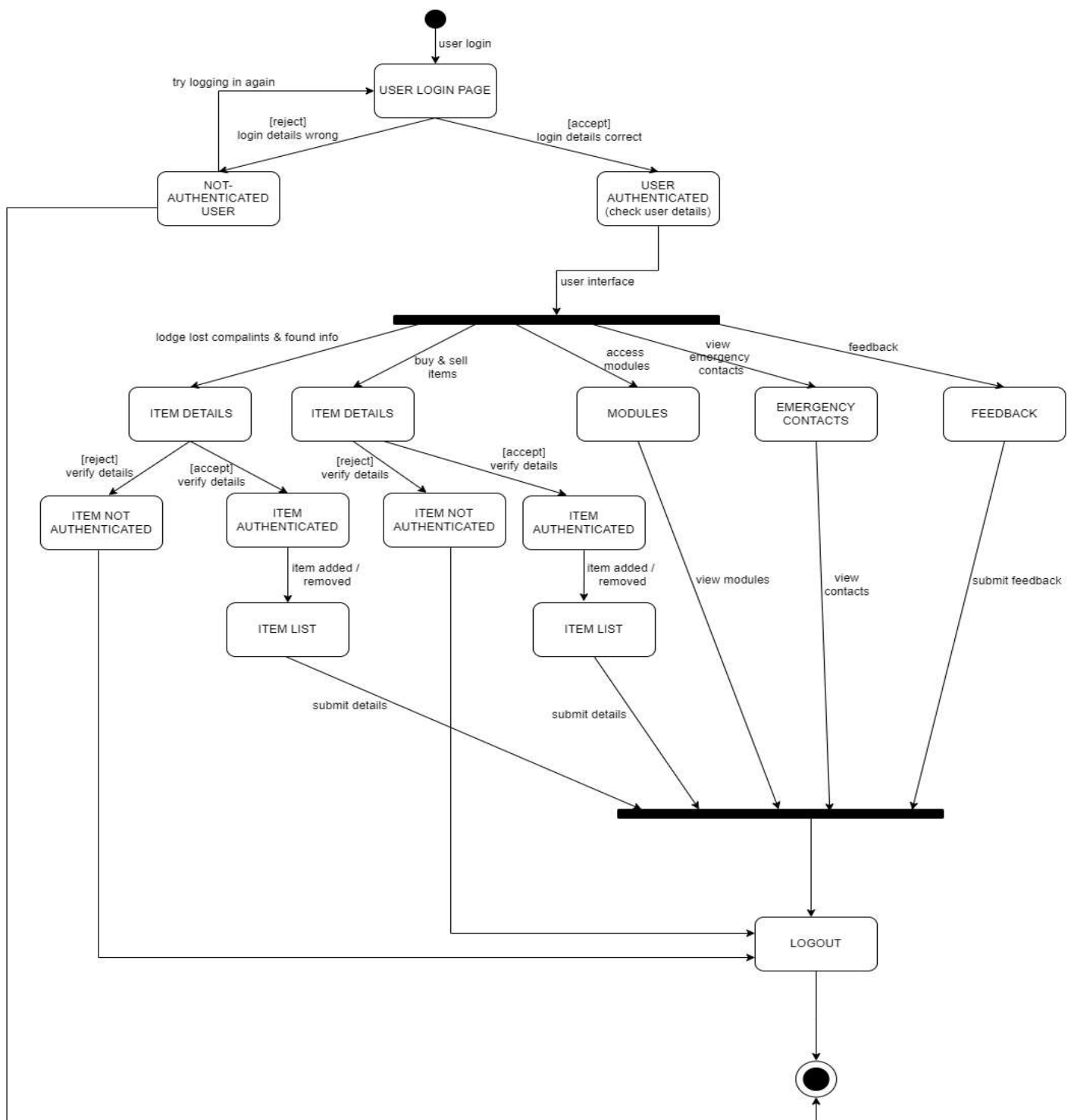


12. Collaboration Diagram



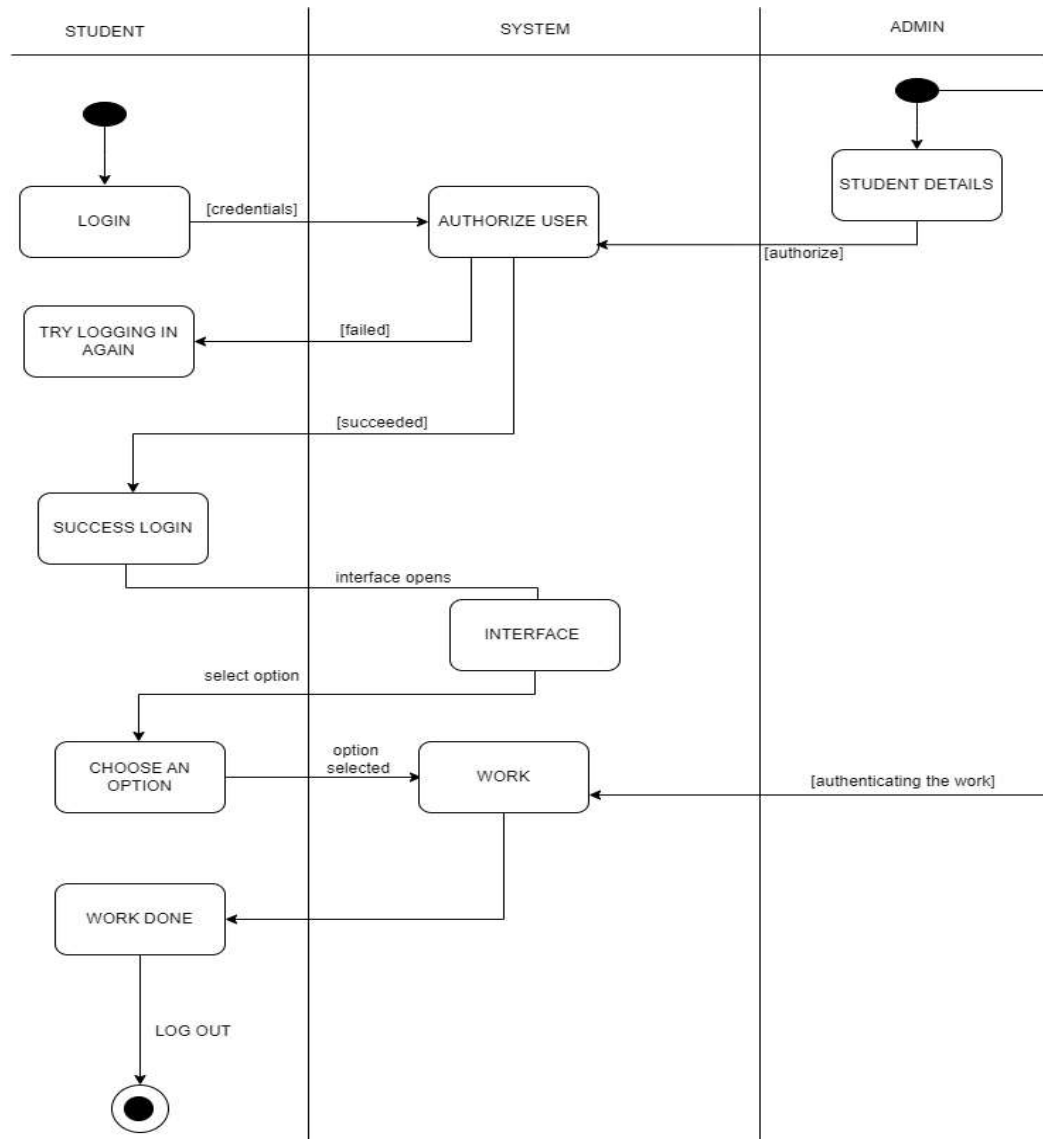
COLLABORATION DIAGRAM

13. State Chart Diagram



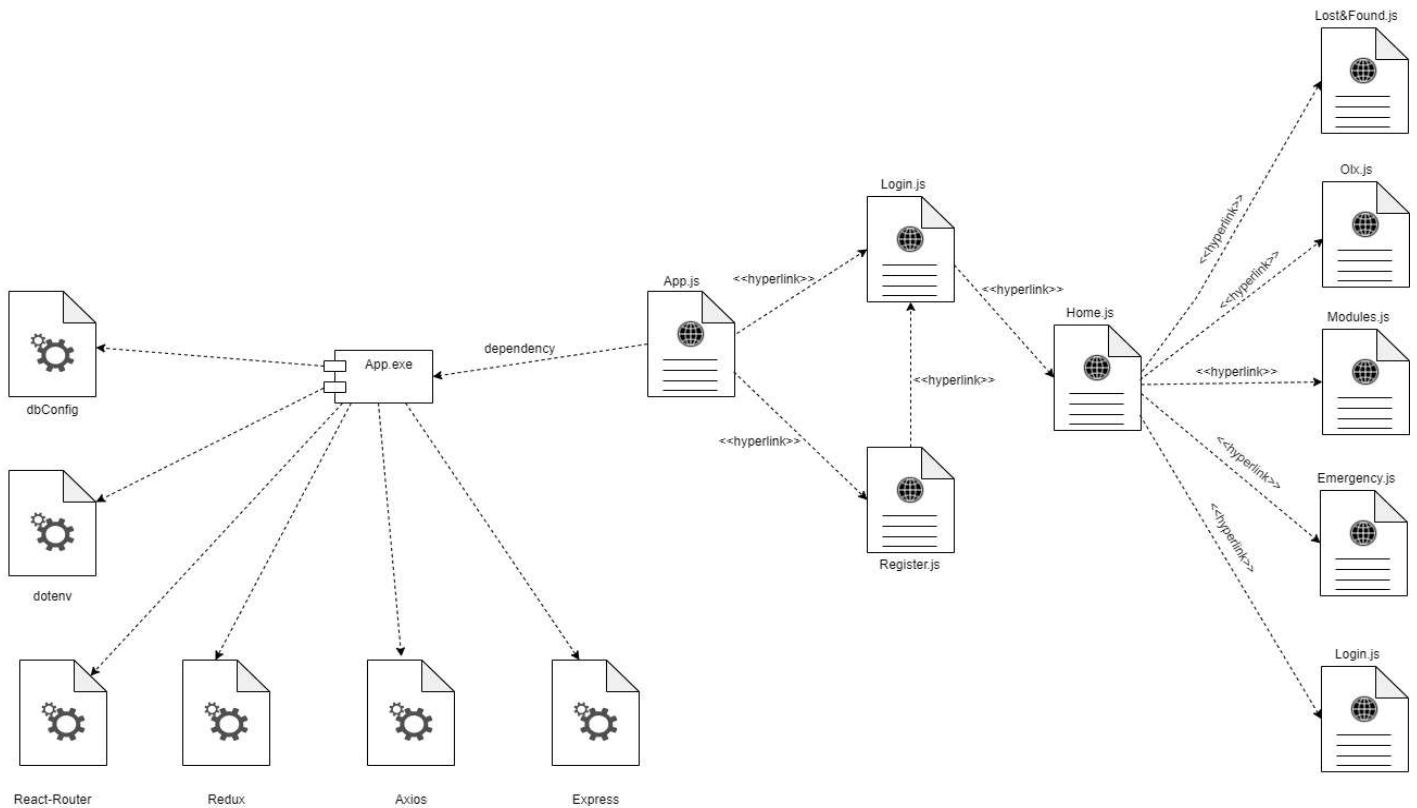
State Chart Diagram

14. Activity Diagram



Activity Diagram (using swimlane)

15. Component Diagram



COMPONENT DIAGRAM

16. Non-Functional Requirements

16.1 Performance

- The system should provide a responsive user interface, with page load times not exceeding [specified time] for 95% of user interactions.
- Concurrent user handling: The system must support [number] concurrent users without significant performance degradation.

16.2 Security

- User Authentication: User credentials must be securely stored and transmitted using industry-standard encryption protocols.
- Authorization: Access to different functionalities and data must be role-based, ensuring that only authorized users can perform specific actions.
- Data Privacy: The system must comply with relevant data protection regulations and ensure the privacy of user data.
- Logging and Auditing: The system should maintain detailed logs of user activities for auditing and troubleshooting purposes.

16.3 Usability

- The user interface should be intuitive and user-friendly, requiring minimal training for users to navigate and perform tasks.
- Accessibility: The system should adhere to accessibility standards (e.g., WCAG) to ensure it is usable by individuals with disabilities.

16.4 Scalability

- The architecture should be scalable to accommodate future growth in terms of users, data, and functionalities.
- The system should handle an increasing number of study materials, lost and found cases, marketplace listings, and user accounts without a significant decrease in performance.

16.5 Maintenance and Support

- The system should be designed to facilitate easy maintenance, updates, and bug fixes.

- Support and Updates: The development team should provide ongoing support and release updates as needed.

17. Conclusion

This Software Requirements Specification outlines the features and functionality of the "Campus Connect" project, including lost and found, college marketplace, study material repository, emergency contacts, and alumni connect. It serves as a foundation for the development team to build a comprehensive and effective system that meets the needs of students and administrators within the college community.