Student Housing Management System

Software Requirements Specification

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1. Scope

Since managing student housing is getting more difficult to manage in large universities, and it is considered a place that a decent percentage of students spend from 4 to 6 years of their lives inside it, there was a need for developing a system that can manage most of the student housing operations from room registering to maintenance and reports handling.
Student Housing Management System is hybrid mobile application aimed for students at King Saud University, and since the KSU campus is very large, it is harder than usual for students to make simple things like registering and reaching the maintenance.
choosing mobile app in particular came from the idea that smartphones nowadays are essential and carried by everyone due to their mobility and usability.
Finally, this system is not for managing anything related for students outside the student housing.

2. Functional Requirements

2.1 Functional Requirements

2.1.1 Student shall be able to login using university credentials.

2.1.2 Student shall be able to see if he has a room or not.

2.1.3 Student shall be able to view his room information.

2.1.4 Student shall be able to register for new room.

2.1.5 Student shall be able to see available rooms.

2.1.6 Student shall be able to search for a specific room.

2.1.7 Student shall be able to open ticket for maintenance.

2.1.8 Student shall be able to know when the maintenance will arrive.

2.1.9 Student shall be able to view his old maintenance tickets.

2.1.10 Student shall be able to make a complaint.

2.1.11 Student shall be able to view his previous complaints.

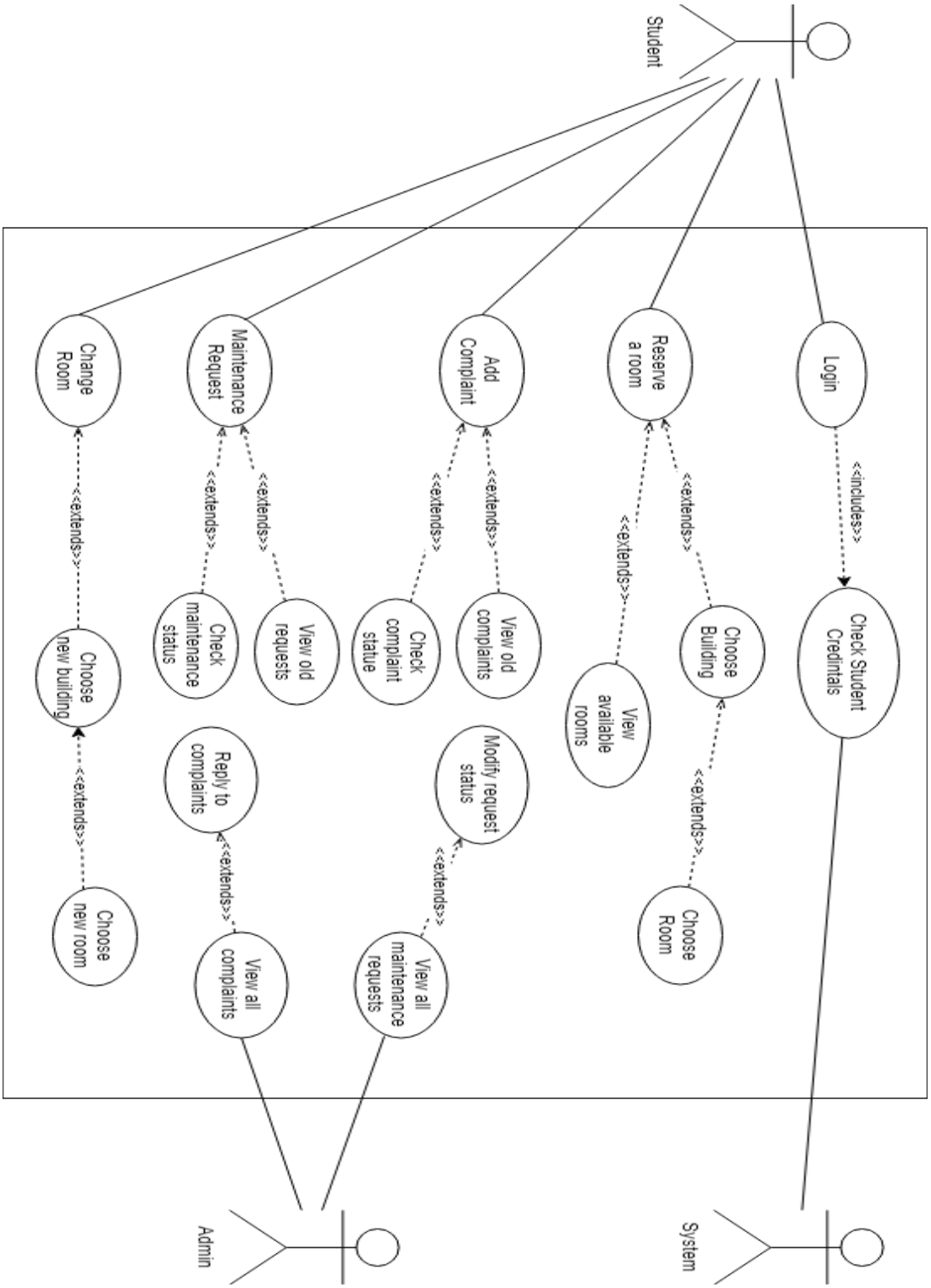
2.1.12 Admin shall be able to see all maintenance tickets.

2.1.13 Admin shall be able to see all complaints reported by players.

2.1.14 Admin shall be able to mark a maintenance request as done, or in-progress.

2.1.15 Admin shall be able to reply to students' complaints.

2.2 Use Case Diagram



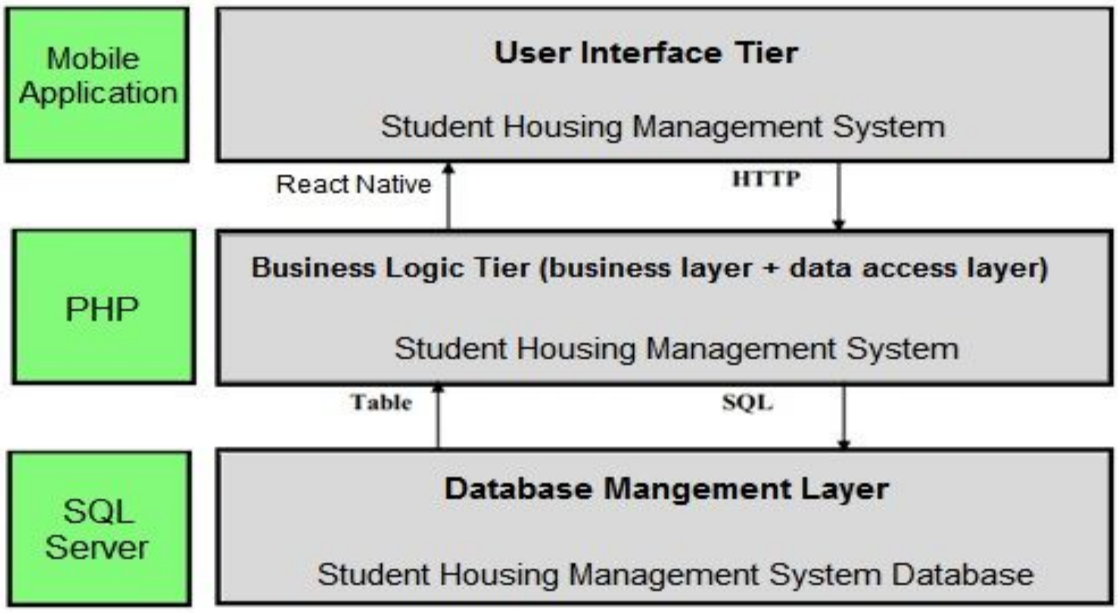
3. Non-functional Requirements

- 90% of users shall be able to use any function within 5 minutes.
- Maximum response time shall not exceed 3 seconds.
- System shall be able to accept 5,000 concurrent users.
- System shall support Arabic language.
- System shall disallow non-students to access any function of the system.
- System shall be available 99% of the time.
- 75% of the system should compose of reusable components.

4. Design Constraints

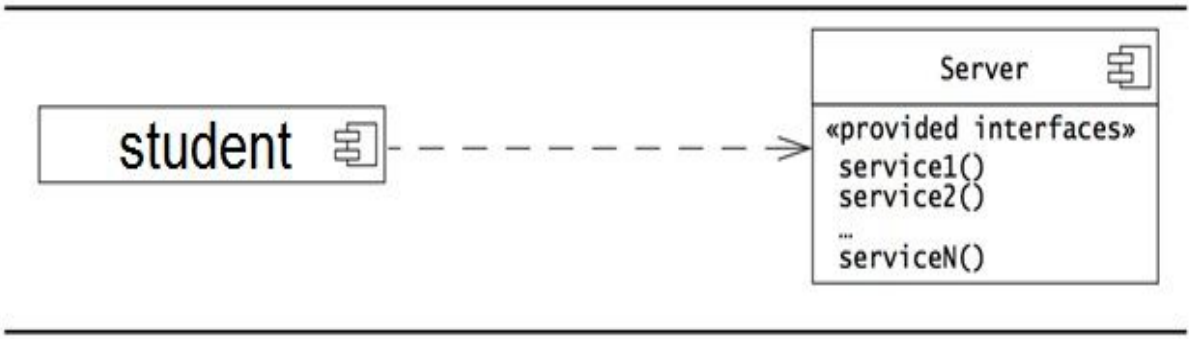
- System shall be accessed using smartphone by downloading from the store.
- Students shall access the system using the ID and Password of their university account.

5. Logical subsystem design



6. Architectural style

Client/Server architectural style was chosen due to its flexibility with dealing with backend resources and the ability to connect different type of technologies to one source of data through internet.



7. Plan

Phase I	- Student sign in. - Student register room - Student view room details.
Phase II	- Student make maintenance request. - Student see request state.
Phase III	- Student make complaint. - Student see complaint replay.

7. Contribution

Job	Member
Scope	Wadhah
Functional requirements	Wadhah
Non-functional requirements	Wadhah
Design constraints	Wadhah
Use-case diagram	Mohammed
Logical subsystem design	Mohammed
Architectural design	Mohammed