

Project Name:

Student Housing Management System(Sukoon)

Project Sponsor:

Dr. Al-Hassan Mohamed

Project Manager:

Eng. Omar Khalifa Hammam || Eng. Abdelhameed Yousef

Date:

October 7, 2025

Project Purpose and Justification:

The goal of this project is to help university students easily find suitable housing options without wasting time or effort and to protect them from unfair broker exploitation.

The system will provide a smart database containing available housing options based on user preferences such as price, comfort, location, services, and roommates.

This helps students make better housing decisions quickly and safely while improving their overall housing experience.

Project Description:

This project involves developing a **mobile application** that allows students to search for and select housing options that best match their needs and preferences.

The app displays several choices with full details, pictures, and reviews, helping users compare and choose the most suitable accommodation with minimal effort.

Project Objectives:

- Complete the full development before the end of 2027
 - Reach 100,000 active users in the first year after launch
 - Support up to 50,000 users using the app at the same time
 - Be the most trusted and accurate housing app for university students
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Deliverables:

- Fully functional mobile application available on Google Play and App Store
 - Real-time updated housing database
 - Simple and attractive user interface
 - Admin dashboard for managing housing data
 - Automatic notification system for updates and payments
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Milestones & Timeline:

- Team selection: 1 month
- Project structure and idea analysis: 1 month
- Competitor and market research: 2 weeks

- ERD design and task distribution: 1 week
 - Development and coding: 6 months
 - Testing and final delivery: 1 month
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Technical Requirements:

- Platform: Mobile application for Android and iOS built using Flutter and Dart, connected to Firebase for database and authentication.
 - Operating System: Compatible with Android 10+ and iOS 13+.
 - Hardware: Works smoothly on smartphones with at least 4GB RAM and a mid-range processor.
 - Database: Use Firebase Cloud Firestore to store user accounts, housing details, and reviews.
 - Performance: Support at least 1,000 concurrent users with response times under 3 seconds under normal load.
 - Security: Role-based access control (Student – Owner – Admin); data fully encrypted in transit and at rest.
 - Integration: Connects with the university's student information system to verify users and sync data.
 - User Interface: Clean, responsive, and easy to use for students and administrators.
 - Automation: Sends automatic notifications for housing updates, payment reminders, or contract renewals.
 - Backup and Recovery: Automatic regular backup of critical data with quick recovery options to reduce downtime.
 - Logging and Auditing: Keep records of all user activities and system updates for tracking and security audits.
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Limits and Exclusions:

- This project will not include a web or desktop version; only the mobile app is developed.
 - Integration is limited to the university's internal systems only; no external or third-party integrations are included.
 - No real-time GPS tracking of students is included in the system.
 - Hardware purchases or upgrades (like new servers or devices) are excluded and handled separately.
 - User training beyond the in-app guide and help section is outside the project's scope.
 - Future updates or new features will be part of later project phases.
 - The project must follow the approved timeline and budget; additional resources need official approval.
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Approval:

- Project Sponsor: _____ **Date:** _____
- Project Manager: _____ **Date:** _____