

National University of Computer and Emerging Sciences

FAST

PROJECT PROPOSAL

Submitted to: Prof. Wafa Basit

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* **Abstract**

This document outlines the development of a "Society Management System" website for residential communities, aiming to modernize operations and enhance communication.

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* **Introduction**

The Society Management System website is a comprehensive solution designed to manage the day-to-day operations of a residential society. It can be used to track maintenance requests, manage finances, organize events, and other crucial aspects of society management. In an age of digitalization, this platform aims to provide residents, committee members, and management personnel with an efficient and user-friendly online tool for better communication, organization, and governance within society. It will be accessible to all residents and will be easy to use.

* **Background**

Traditionally, society management has been done through manual processes, which can be inefficient and time-consuming. The proposed website will automate most of these processes, making it easier for the management committee to keep track of things and make informed decisions.

* **Problem statement**

Societies and community organizations often struggle with the effective management and dissemination of event information, tracking of resident information, managing finance and news updates among their members. There is no central platform for residents to communicate with the management committee. Existing methods, such as manual communication and fragmented social media posts, are inefficient so, there is a need for a centralized and user-friendly software solution to address these challenges.

* **Scope**

To develop a web-based society management system that will improve the efficiency and effectiveness of the society's operations, provide a platform for communication and collaboration between the society's members and management, and improve the overall transparency and accountability of the society's management.

* **Features**
* **House Owner Contacts** provide access to homeowner contact information.
* **Upcoming Events** that keep residents informed about society events.
* **Maintenance Bills** that enable residents to manage and pay their maintenance bills online.
* **News Headlines** that deliver the latest society news updates.
* The **Dynamic complaint Box** allows residents to submit their concerns for prompt resolution.
* **Maulvi Booking** facilitates the arrangement of Nikah and Funeral services.
* The **Society Map** offers an interactive layout of the community.
* **Dynamic amenity Reservations** that let residents book community facilities.
* **Emergency Helplines** that provide important contact numbers for immediate assistance.
* **Resident Voting** that allows participation in digital community voting.
* The **Vehicle Monitoring** system enhances security by tracking vehicles.
* **Property Transactions** that support buying, selling, and renting properties within the community.
* **Campaign Contributions** that enable residents to support community initiatives.
* **Visitor Management** streamlines the registration and tracking of visitors.
* The **Feedback System** that collects resident suggestions and feedback.
* **Feasibility Study**

The **feasibility report** for our proposed society management web application reveals a promising opportunity to enhance the residential community experience. Through careful analysis, we've determined that the **technical aspects** are achievable, with the necessary technology and expertise available. **Financially,** the project indicates cost-effective development, ensuring efficient use of resources to benefit our community in a sustainable manner. **Operationally,** the software seamlessly integrates with community processes, offering improved efficiency. **Legal and regulatory** compliance is assured, and a realistic project timeline is established. **Resource availability** is favorable, and environmental and social impacts are minimal. With a comprehensive risk management plan, we recommend pursuing this project, as it offers valuable features that will greatly benefit our community while ensuring its long-term success.

* **Completeness criteria**

Ensuring that homeowner contact information, event details, maintenance bills, submitting complaints, resident voting, integrating resident feedback for system improvements and all other data are accurate, up-to-date, and securely maintained to prevent errors, unauthorized access and enhancing user satisfaction. Acknowledge that the amenities reservations feature and Vehicle Monitoring System is not applicable and provide alternative solutions or processes for residents to access and use community facilities.

* **CHALLENGES**
* The first challenge is to define the requirements for the website. This includes understanding the needs of the housing society.
* There is a dire need to choose the right technology and resources for the project, taking into account the requirements, the time, and the skills of the team.
* There is a need to implement security measures such as authentication and authorization.
* There are challenges like deadlines, tracking progress, and communicating with team members.
* Testing for functionality, performance, and security.
* The website needs to be maintained on an ongoing basis.
* The website needs to be designed to meet the needs of a diverse audience, including residents, visitors, and staff.
* The website should be balanced, which means implementing security measures without making the website difficult to use.
* This website needs to be responsive to user inquiries and resolve problems quickly and efficiently.
* The successful development of this website hinges on the incorporation of a real-time client.
* Some other challenges are:
  + Mismatched skills of the team members
  + Lack of efficient team communication
  + Integrating the parts of code assigned to each member.
* **KNOWLEDGE AREAS REQUIRED**

As our project is a website for housing society following areas of knowledge are to be used

* Programming skills
* Web Development (knowledge of JavaScript, HTML, and CSS).
* Graphical user interface skills
* HCI (Human Computer Interaction)
* Project management skills
* Communication Skills
* **Nature Of End Product**

The end product would likely be a web-based application that residents of the community can access to perform various tasks and access information related to their community. It would serve as a centralized platform for community management, communication, and engagement.

* **Learning Outcomes**

The learning outcomes of this project are to gain experience in all aspects of the software development lifecycle, learn about various software engineering tools and techniques, develop skills in problem-solving, teamwork, and communication, and gain a deep understanding of the challenges and opportunities of developing software for a real-world application. Additionally, it will improve our ability to communicate and assist us in comprehending the thinking of our clients, which will strengthen our understanding of requirement engineering. We keep HCI (human computer interaction) principles in mind as we go along, which improves both our designing and development abilities.

* **Miscellaneous**

The miscellaneous items for the project proposal include hardware, software, data, security, scalability, maintenance and support, budget, timeline, risks, assumptions, and constraints. These items are essential for the successful completion of the project.

* **REFERENCES**
* Park View Website (A housing society website to provide ease for its residents).
* Bahria Town Website (A housing society website to provide ease for its residents).
* Defence Housing Authority Website (A housing society website to provide ease for its residents).