**IST 659 FALL 2023**

**Project Proposal: Housing Management System**

**1.**  **Business Description**

The main aim of the project is to create a comprehensive and efficient database that simplifies the process of managing student housing, ensuring both property owners and student tenants experience the highest level of convenience and satisfaction. The database will contain records of House information, Leasing details, Tenant details, and Apartment reviews.

This system will help the students and property owners in the following ways:

**.** It allows students to check out and select the houses that perfectly suit them during their studies.

**.** It allows property owners to track the occupancy, lease agreements, and rental history.

**Assumptions:**

. One assumption is that there is a steady supply of student housing units available in the locations of interest, such as dorms, apartments, or rental properties.

**.** The another assumptions is that students have easy access to essential services like public transportation, shopping, and academic institutions.

**2.**  **Problem Statement**

Current housing management solutions for students lack the efficiency and accessibility required to address the diverse needs of the student population. Students, as the primary end-users, often struggle to access comprehensive and user-friendly housing data, hindering their ability to make well-informed decisions about their housing arrangements. Lease providers, including landlords and property management firms, face challenges in managing tenant records and property availability, resulting in a less-than-optimal leasing process. Additionally, university administrative teams and law enforcement agencies encounter difficulties in responding promptly to emergencies or immigration-related issues due to a lack of a centralized and robust housing information system.

There is a pressing need for an integrated and student-centric housing management solution that empowers students with accessible housing information, streamlines the tenant-landlord interaction, and offers a comprehensive database to support university administrative teams and law enforcement in ensuring the safety and well-being of students. Addressing these challenges is essential to enhance the overall student housing experience and promote efficient housing management for all stakeholders.

**3.** **Proposed Solution 3rd slide**

This Housing Management System offers an enhanced user experience for all its stakeholders by facilitating online interaction and information exchange. This system effectively addresses multiple administrative challenges, simplifying data storage, maintenance, and accessibility. It eliminates the inefficiencies associated with physical record-keeping, optimizing space usage.

Lease providers benefit from streamlined access to tenant and property records. They can easily reach out to existing and potential renters while keeping property availability status up-to-date, ensuring a seamless leasing process.

For students, the system enables easy queries to find housing options based on their preferences. They can check room availability, explore houses in specific localities, and access reviews, making the housing selection process more convenient and informed.

**4.** **Users**

The system's primary end users are students, as they rely on it for easy access to housing information. They utilize it to search for rental properties, comprehend the lease terms and conditions, get corresponding area information, and read reviews from former occupants to make informed housing decisions. Lease providers, such as landlords and property management organizations also use the system to effectively manage their tenant records. They can quickly contact existing or potential renters and update the status of their properties' availability, ensuring a smooth leasing process. The database management system can also be used by the university administration team and law enforcement in emergencies or when dealing with immigration issues. This system provides a comprehensive list of student housing, allowing for prompt and efficient responses as needed.

**5.** **Potential Entities and Attributes**

**Area -**

Name

No. of houses

Zip code

Population Count

No. of bus stops

Distance from university

Preferred by

**Leasing offices -**

Name

Office address

Zip code

Email

Phone number

**House -**

House number

No. of floors

No. of rooms

Price range

Furnishing type

Availability

Lease type

**Tenants -**

Tenant type

Name

Email

Phone number

Nationality

**Reviews -**

Apartment area

Leasing provider

Utility availability

Facilities nearby

Safety level