CS335 Group Project 2025

Group: 32

Topic: Real Estate & Property Management

Project Overview & Idea Generation

- The goal for our CS335 project was to develop a software system for Real Estate & Property Management based off a vague specification.
- This was broken down into multiple categories of ideas, including but not limited to housing & renting websites, property pricing / evaluation apps and renting platforms like Airbnb

Final Project Decision

- The final choice for the project was a mobile application that allowed Tenants, Landlords, Maintenance Staff and other relevant entities communicate, manage documents, make requests and do their jobs.
- This aligns with the project category, specifically Property Management, as it allows a single properties documentation, tenants and maintenance to be bundled in one easy-to-use software.

Overview of Work

- User Stories
- (Non) Functional Requirements
- UML Models & Diagrams
- UI Mockups
- System Tests
- Navigation Flows

User Stories

- The goal for our project was broken down into multiple possible users, for whom we create user stories.
- These helped outline what the app should be able to do, giving us a starting point to build from.
- These were split up equally between the group

Models, Diagrams & Mock-ups

- Expanding from the User Stories, Models and UML Diagrams were made to describe how each component should work and how the potential users tied into this.
- Software like Draw.io was used to create multiple, detailed UML diagrams that span most of the user stories.
- UI Mock-ups were also created using Balsamiq Wireframes to represent visually what this application might look like, with emphasis on following the existing diagrams, plans and requirements.

System Testing

- A series of tests were created to aid with the functional verification of the software. These include testing Log-In functions, file retrieval and information manipulation.
- These tests would be a valuable resource in a real-world development team, defining standards and goals that implementations should reach before being released to a production environment.

Navigation Flows

- Finally, navigation flows were created to describe the way the app should react to user input.
- These are fundamental in the development stages of an application, allowing quick redesigns of uncomfortable or unusual user flows.
- This optimizes the usability and function of the application to best suit possible end users from the start, guaranteeing a good user experience.

Final Notes

- This project serves as a foundation for a possible software to be created, containing details about the possible end users, implementation, design and usage.
- The report goes into more detail about these implementations and contains explanations for decisions made along the way, defined naming schemes and a functional layout to make interpretation as easy as possible.

Credits

Slides: Seamus Mullan

Video Presentation: Seamus Mullan