WolfLease: A Leasing Platform

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GitHub Repo

Live Demo

Introduction

WolfLease is essentially a platform that minimises the time and work required for the complete leasing process by discovering suitable flats for sublease or lease. The portal, which was created with the help of tech stacks such as Angular and Node.js for the front end and Django for the back end, offers new users two roles: the owner, who can list out their available apartments for lease along with all the amenities, available rooms and bathrooms, and the expected rent; and the user, who can express interest in the listed apartments and get in touch with the owner, who can view the users who have expressed interest in their apartments.

Workflow

The process a user takes from login to logout is shown in the flowchart for the WolfLease flat sublease platform. The workflow is explained as follows:

User Login: Users start by logging into the WolfLease platform, requiring authentication for secure access.

User Authentication: The system verifies credentials, allowing access to the platform's features upon successful authentication.

Search for Apartments: Authenticated users can search for sublease apartments, specifying criteria like location and facilities.

View Apartment Listings: Users view and compare apartment listings that match their search criteria.

Post Flat for Sublease: Users can post their own apartments for sublease, providing details for potential subleasers.

Define Preferences: Users can set lifestyle preferences (e.g., smoking/non-smoking) to find compatible roommates.

View Roommate Profiles: Users can review potential roommate profiles to assess compatibility.

Express Interest: Users can express interest in subleasing a room or apartment, initiating communication with leaseholders or potential roommates.

Logout: Users can securely log out once they finish their tasks, ending their session.

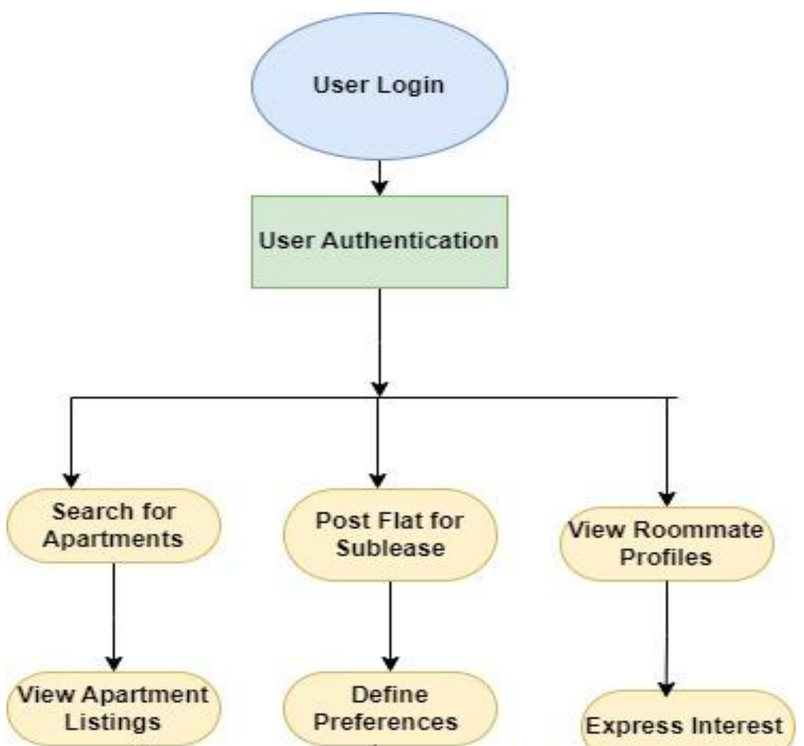


Fig 1: System Workflow

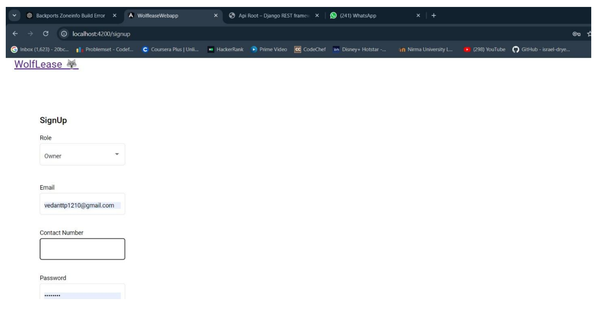
Enhancements

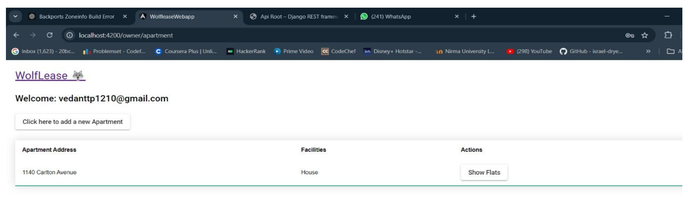
- **User Authentication:** Implemented a robust authentication feature, enabling users to log in and securely authenticate their profiles.
- **Enhanced Frontend:** The frontend has been developed using AngularJS and NGINX, providing a more interactive and user-friendly experience, while seamlessly connecting with the backend.
- **Scalable Deployment:** The application has been encapsulated within a Docker container, allowing for easier scaling and deployment in various environments.
- **Improved Validation:** We introduced multiple validations throughout the application to enhance data integrity and user experience while removing unnecessary fields from models to streamline functionality.

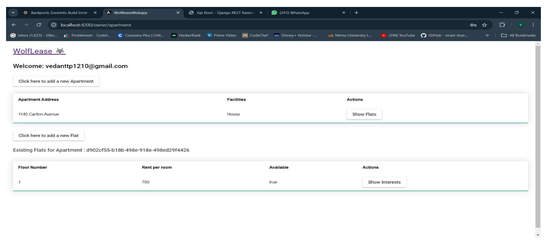
Future Scope

- **Google Maps API Integration:** Utilize Google Maps to offer users an interactive map displaying apartment locations, thereby improving the search experience.
- **Email Authentication:** Introduce secure email authentication for user logins to enhance security and verification processes.
- **Chat Feature:** Include a chat function that allows users to communicate directly, making discussions about subleases more convenient.
- **Rating and Review System:** Establish a mechanism for users to provide ratings and reviews for apartments and roommates, helping to build a trusted community.
- **Real-Time Notifications:** Implement real-time notifications for new listings or messages from prospective roommates, keeping users actively engaged.

Snapshots







Test Cases

The current implementation includes 3 test cases. We anticipate the total to exceed 25 test cases, ensuring thorough validation of each new feature for a robust user experience.