

Stud-Out: A Web Application helping students Transition to New Cities

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Abstract: *In today's digital age, apps have become an integral part of our lives. From ordering food to booking cabs, they have made our lives easier and more convenient. With the rise of technology, New Age apps are now helping students studying in a new city adapt to a new, yet experiential lifestyle. According to a report, the top five cities with the highest year-on-year increase in the number of students aspiring to study abroad are Siliguri, Nagpur, Coimbatore, Agra, and Ludhiana. The number of students studying in Indian metro cities from Tier 2, Tier 3, and rural areas is much higher. Looking at how technology is assisting students from small towns to adjust to their new metro lifestyle, this app helps students to connect with local communities, find accommodation, exploring the city, learning about the city, staying safe. With the help of this New Age app, they can easily get familiar to the new city.*

Keywords: higher education, web application, accommodation, PYTHON FLASK, students

I. INTRODUCTION

We've created an application that will combine all feature into a single one. The user will save data, time, and money with the aid of this integrated platform. Let's look at an example where a first-year student from a different state or area visits a specific location. He obviously doesn't know anything about the location. He must spend hours wandering the area in search of a safe haven and a location with consumable food. While taking exams or doing assignments, he or she must keep an eye out for different stationary stores and other daily activities. If a specific program can solve all of these issues, the user's environment will become incredibly simple and open. Our software will list nearby tiffin services, stationary stores, and rental properties for the specific user with their affordable budget. After visiting our program, the user only needs to input his location to access all the necessary resources for his daily life with a single click.

Simply it is a platform designed to help students navigate the challenges of moving to a new city for their studies. We understand the stress of finding housing, transportation, and essential services in an unfamiliar environment. StudOut simplifies the process, offering a centralized hub to connect students with everything they need for a smooth transition. The platform will focus on affordability and convenience, helping student transitions smoothly into their new environment.

The Objective of the application is to create a user-friendly platform that assists students moving to a new city for their studies by providing personalized recommendation for essential amenities such as rental flats, PG accommodations, tiffin services, second-hand vehicles or cycles, used books, libraries, and more. The platform will focus on affordability and convenience, helping students transition smoothly into their new environment.

II. LITERATURE SURVEY

On the subject of the home renting management system, tiffin services, stationary services, second-hand books and vehicles services we read a great deal of research papers and visited a number of websites. There are a number of systems for web applications that rent out houses already in place. I like to learn about these systems and identify their shortcomings in order to create new systems that address the difficulties that both local and global communities encounter while resolving rental-related problems. There are a few issues with the current house rental website that make it less user-friendly. They don't have any services on their applications. It's now easier to use and more interactive due to my corrections, improvements, and addition of a few new features and amenities.

Here is a list of a few of the research papers that were reviewed:

[1] Home Renting Web Based Application

Year of publication: - 2023

Objectives: -

- Simplify the Renting Process
- Improve User Experience

Advantages: -

- Convenience
- Transparency

Disadvantages: -

- Only Home Renting System Is Available

Future Scope: -

- Global Reach
- Improved Accessibility

[2] Hosteller A Platform for Finding and Booking Hostel

Year of publication: - 2021

Objectives: -

- Simplify Hostel Booking

Advantages: -

- Transparency

Disadvantages: -

- Quality Control
- Competition (Booking.com, etc)

Future Scope: -

- Improved Accessibility

[3] Web application for booking paying guest & explore mess and stationery in the nearby location

Year of publication: - 2020

Objectives: -

- Centralized Booking System
- User Reviews and Ratings

Advantages: -

- Transparency

Disadvantages: -

- Local Limitations
- Vehicle facility is not available

Future Scope: -

- Improved Accessibility
- Considering the fact that their system was created in this manner, we created such an application which provides the all-necessary services that can essential for the student for surviving to new city. We overcome those disadvantages that faces by those applications

III. PROBLEM STATEMENT

To Design develop and test StudOut (A Student Move Out) web-Application which helps student to find accessories in new city with the help of Location and their Budget and with Less Time consuming for different interfaces for different task.

PROPOSED METHODOLOGY

We demonstrate a web application (StudOut) for booking rental flats, PG accommodations, tiffin services, second-hand vehicles or cycles, used books, libraries, and more by their location and budget. The application combines all services parts into a single integrated platform. The previous system was separate and random, but it has now been combined into one application. This not only assists clients, but also allows users to host their accommodation on the platform. Our website requires users to enter their location and Budget to get services. Our application will have several cloud storage services. This cloud service allows users to locate all their needs and services in a specific area. To reserve and check availability of services, users can contact the seller of services directly. Our cloud-based solution allows hosts to adjust availability features. Our real-time tracking allows users to locate services and their needs based on their location. A student's daily activities include searching for stationery, vehicles, tiffin Services. so, our application now helps users to find places near them easily. Our application provides notifications for availability and updates to the users. The seller who advertises on our platform must keep their status and ratings and Feedback updated. Our Application Also Includes the Admin Module, which has Dashboard of the Entire Application, which includes total number of Sellers, Customers, listing, etc. It keeps information about the Sellers and Customer's that who is Activated or deactivated, Status of profiles, etc. the admin can also the delete or remove the seller and Costumer from the Application.

Modules of the Application:

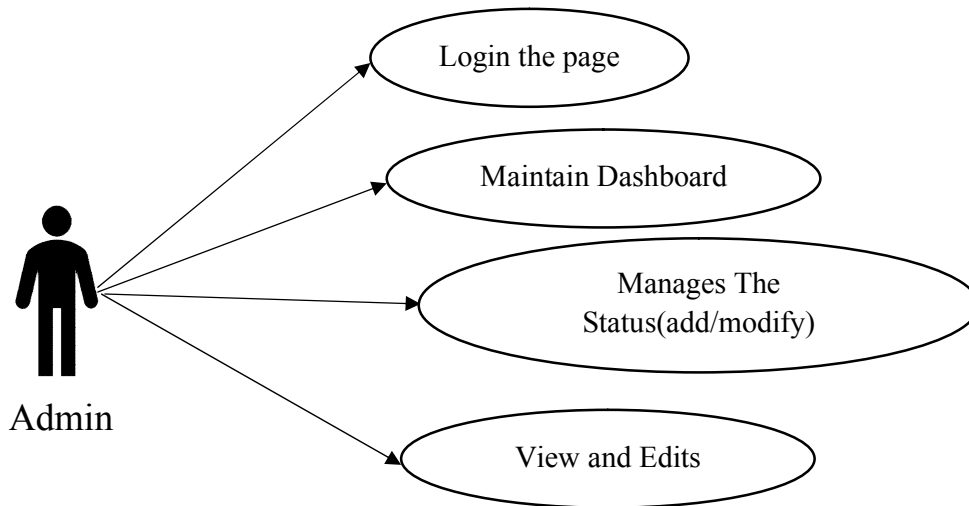
Admin Module:

Dashboard: The Dashboard works as; Admin can see all the details about the user/customers and Seller like Total number of Customers and Sellers.

Region: In this the Admin can manages the status of customers and sellers (add / modify)

Record: In this the Admin can edit and view the registered seller and customers and new Registrations

Use case Diagram for Admin Module



Seller Module:

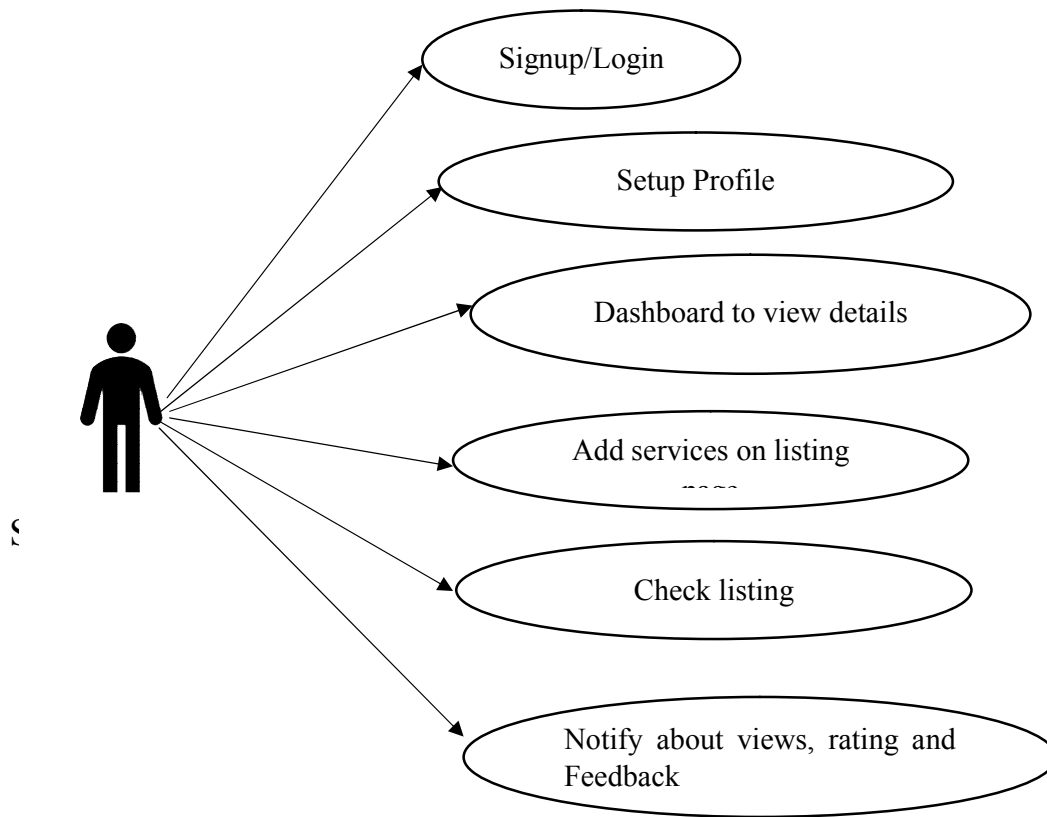
Dashboard: In the seller Dashboard the Seller can view all the information and details like Services Listed list, Booking for services, Views, Feedback, etc

Profile setup: In this the seller can sign up or login to the application and setup their profile with all required information. Then verify the profile.

Listing details: In this the seller can add or list their services into their profile or page.

Listings: In this it will shows the listing page as [MY LISTING] and shows all services list which seller can provide on their profiles.

Use case Diagram for Seller Module:



Customer Module:

Signup / Sign in: In this the user can signup and sign to the application.

Profile Setup: In this section the user can set the his/her profile with all necessary details.

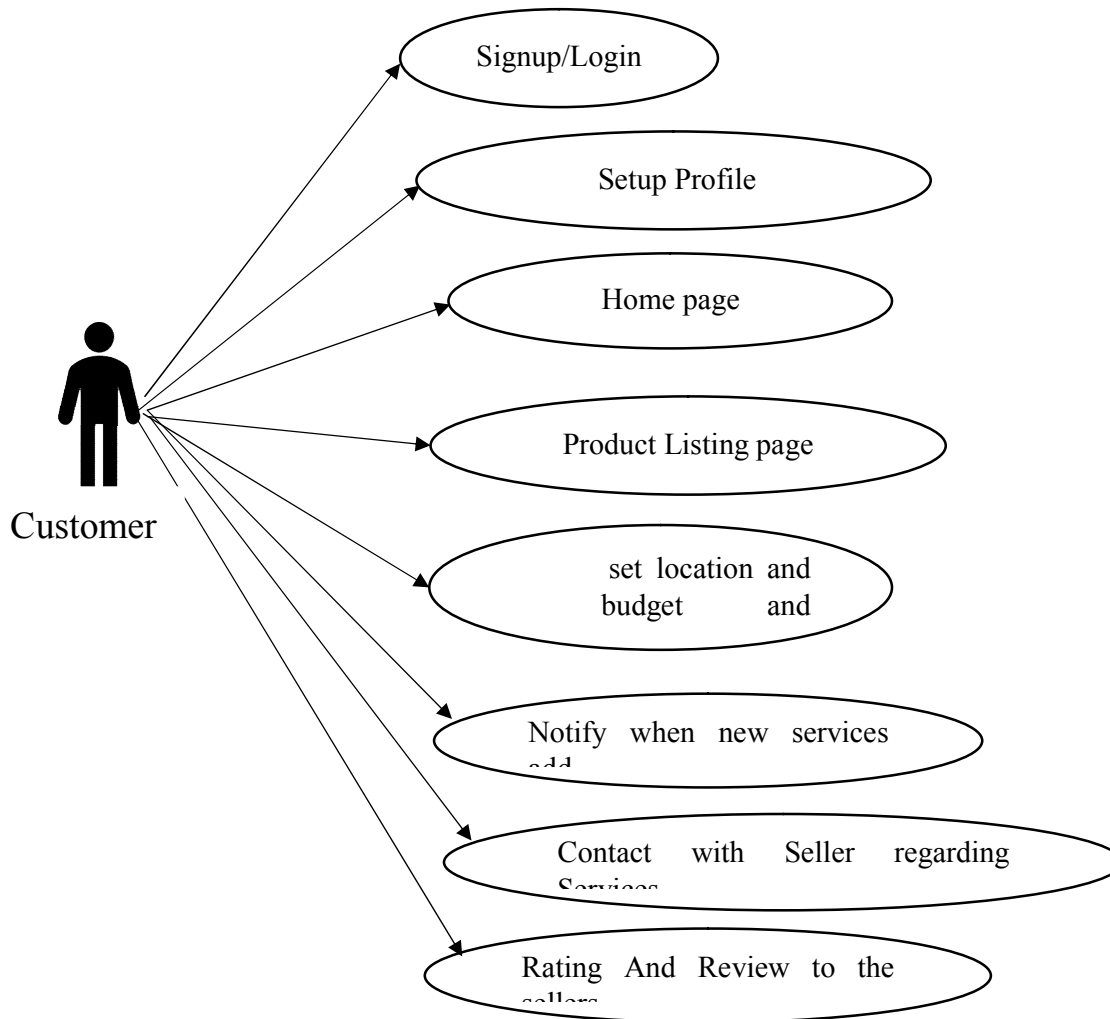
Home page: user can redirect to the home page to find and search the services.

Product listing page: Here the user can view the services list which they want or search.

User Notification: The User can Notify about the new services and all updates via email or Mobile number.

Feedback: The user can Rate and review to the Seller.

Use case Diagram for Customer Module:



Technology Use:

The frontend and backend components make up the two main sections of the project plan. The frontend design of the system is created using HTML, CSS, JavaScript, Tailwind CSS. The database and backend portion are created and designed using Python Flask and SQLite3.

Frontend:

HTML
CSS
JAVASCRIPT
TAILWIND CSS

Backend:

PYTHON FLASK

Database:

SQLite3

System Architecture:

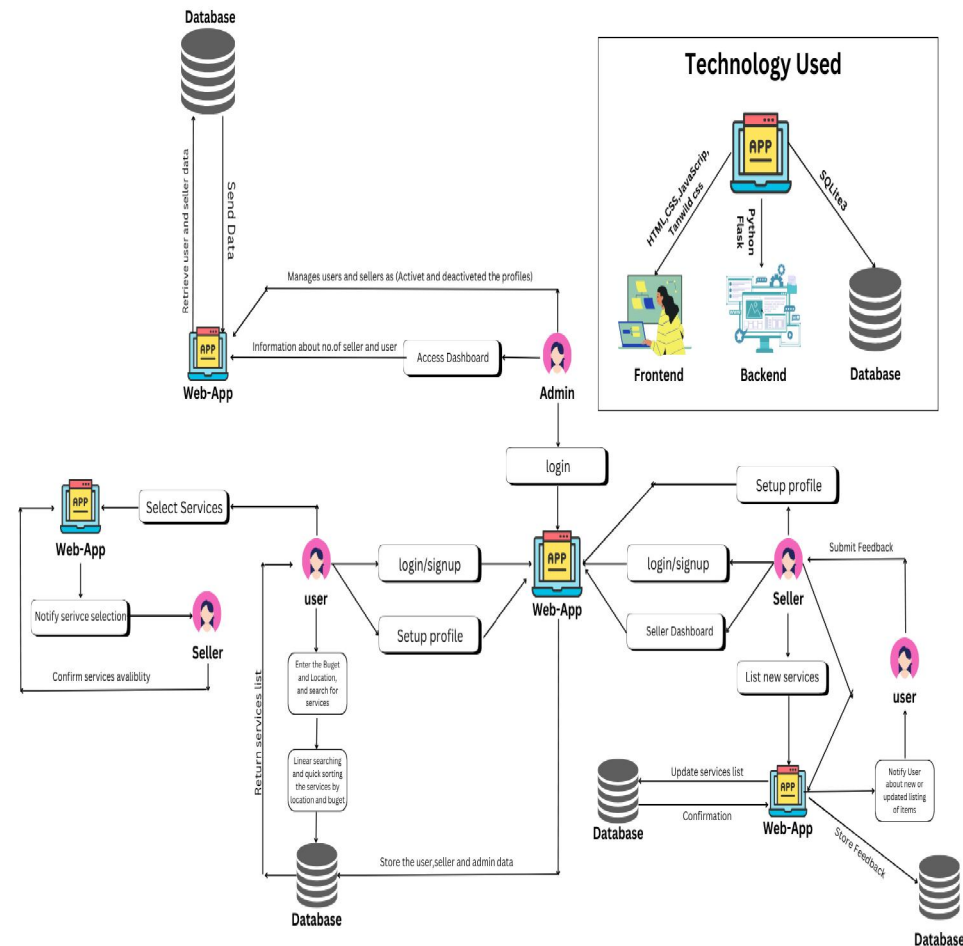


Fig. System Architecture of StudOut

Algorithms use:

Personalized Recommendations:

K-Nearest Neighbors (KNN): Simple and efficient for recommending services based on user preferences.

Search & Filter:

Linear Search: Easy to implement for searching through lists of services.

Quicksort: For sorting search results based on price or rating.

Direct Reporting:

SQL Queries with GROUP BY: To aggregate and filter data like rental options or PGs based on location.

Review System:

Average Rating: Calculate the average of user reviews for each service.

Sentiment Analysis: Use basic NLP tools to categorize reviews as positive or negative.

Affordability:

Budget Filter: Simple checks to display only services within the user's specified budget.

IV. FUTURE SCOPE

In the future, we can convert the project as Web Application to Mobile App. As well we can build this project with Artificial intelligence (AI) or Machine Learning (ML) to make it more expensive and used it with more technologies. Or we can add more functionalities and services over it.

V. CONCLUSION

StudOut provides a valuable solution to the challenges faced by students transitioning to a new city. By offering a centralized platform for essential services and fostering a supportive community, StudOut aims to make the transition smoother and more enjoyable for the student and any other user.

REFERENCES

- [1]. IJSRST –An International Peer-Reviewed Journal (Hostel and PG Finder Application)
- [2]. IRJET- International Research Journal of Engineering and Technology
- [3]. (Web application for booking paying guest & explore mess and stationery in the nearby location) IARJSET- with DOI Engineering, Scientific journal
- [4]. (Hosteller -A Platform for Finding and Booking Hostel) IJSRST –An International Peer-Reviewed Journal