# Urban Housekeeping Services

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**Abstract -** *Today the world is moving towards automation and simplification of various processes that generally needed human intervention and decision making with the help of the advanced technology that we have at our disposal today. One such atempt to automate tedious processes is the advent of "On Demand Service applications" these applications are used by the user to avail services as and when need arise, this concept is getting increasingly popular and has found its use in many service domains, such as hotels booking, food ordering, taxi booking etc. The proposed system is also an on demand application for availing housing services by the users. This will significantly reduce the time and effort required to scout and hire professionals who provides services such as cooking, cleaning, babysitting and other such services required in daily life. As in many on demand applications the goal will be to provide the required service on the user's demand.*

***Keywords: UHS (Urban Housekeeping Services), On Demand Application, Housekeeping, Maids, Hiring Housekeepers.***

## 1. INTRODUCTION

Urban Housekeeping Service is a project to automate the "Process of scouting and hiring professionals who provide housekeeping services" by developing a system that is efficient and user-friendly. The main idea of the project is to maintain and handle all domains involved, from cooking, cleaning to babysitting and many other domains.

There is a need to automate this sector because till now it is managed manually. So, by making a proper system for this process, the overall process can be done efficiently and proper utilization of resources can be done.
It will also aim at providing a clear picture of how the entire process is taking place stepwise so that the chances of frauds and errors can be minimized. UHS will fulfil the purpose of providing easy accessibility to its customers.

In this project, there are many domains included in it, so customers basically have to choose his/her domain in which he/she is interest to get the service and after that we will show a list of housekeepers on the basis of availability and rating (high to low) to the customers and after his/her interest he/she select one of them.

After this we will allocate the housekeeper to the customer. In this project, there is also a feature of the ratings for the customer which will be assigned by us depending on the housekeeper's feedback.

There is a feature of housekeepers' safety and also there are measures for customer security and hygiene. UHS is the need of the hour in today's rapidly growing world. Hence, this project will prove to be a boon to the housekeeping domain by the easy accessibility of all the listed services. Also, this will increase employment opportunity within the country.

## 2. OBJECTIVE

The objective of the Urban Housekeeping Services is to devlope a website so that the users can interact with the system and as per their needs they can hire professionals to avail the services provided by them.

## 3. PROBLEM DEFINITION

The Problem that this project tries to tackle is the amount of time and effort that people have to invest in order to hire individuals for housekeeping, this is especially inconvenient in the urban areas because the whole point of hiring someone to take care of their house is to save their own time as they are already preoccupied in their day jobs or other activities and are unable to perform these tasks such as cooking, cleaning, babysitting etc.

There is another side to this which is from the perspective of the housekeepers, which includes inappropriate behaviour of the employer, issues regarding leaves due to health problems or other unseen events, job security etc.

## 4. EXISTING SYSTEMS

### 4.1 UrbanClap

Urban Clap is also an On Demand Service Application which provide users with services of various different nature from Salon, Spa to Electronics Repair, Cleaning, and Plumbing etc., all on the same platform. Urban Clap does not provide a platform for hiring professionals such as maids, cooks and drivers etc.


**Figure – 1** Urban Clap

### 4.2 TaskRabbit

Task Rabbit is another platform that allows users to post and accept tasks which can range from lawn mowing to babysitting etc. Task rabbit allows the users to act as both service providers and as consumers. Task Rabbit like Urban Clap does not facilitate long term service contracts between the service providers and consumers also there is not classification based on the bases of service provided and any user can accept any task posted by any user in the same locality.


**Figure – 2** Task Rabbit

### 4.3 bookmybai.com

bookmybai.com is a web platform which provides household facilities like senior citizen care, maids, cooks, baby sitters and other such facilities.

But they do not provide facilities like plumbing, drivers, carpenters and electrical appliance technician.

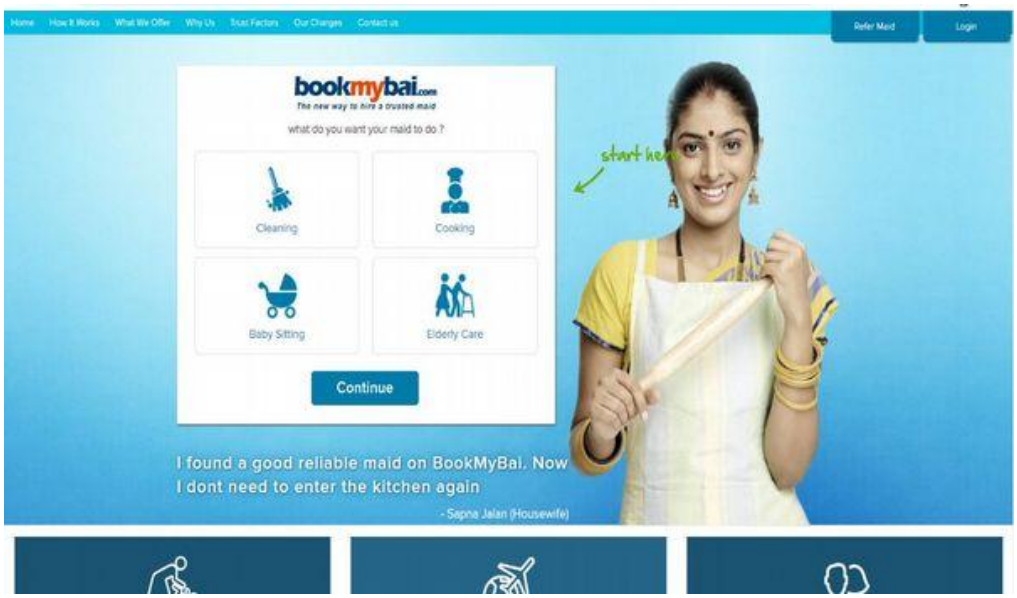


**Figure – 3** Book My Bai

## 5. PROPOSED SYSTEM

This project provides a system which can be utilized by the parties interested in hiring professionals for various housekeeping activities and other miscellaneous day to day activities by listing all the available service providers nearby and allowing the user to select one that suits their interest.

The platform will remove the complexities of legal background checks for the user and make it abstract i.e. the user will not have to worry about doing any background probes on the professionals that they are hiring as all the profiles that appears on the application will be pre-verified.

The platform will also integrate with a payment gateway to enable users to make safe and fast payments on the go. The application will also provide the user with an option to cancel their request with ease.

The system consists of two actors:

1. User
2. Admin

**User: -** Is the one who uses the application for hiring purpose. User can refer the housekeeper too.

**Admin: -** Is the one who manages the whole system, basically the admin manage the whole database of the housekeepers, and also deals with the customer requests and complaints. Admin will also verify the profiles of the housekeepers and then add them the database.

## 6. SYSTEM DESCRIPTION

### 6.1 System Flowchart

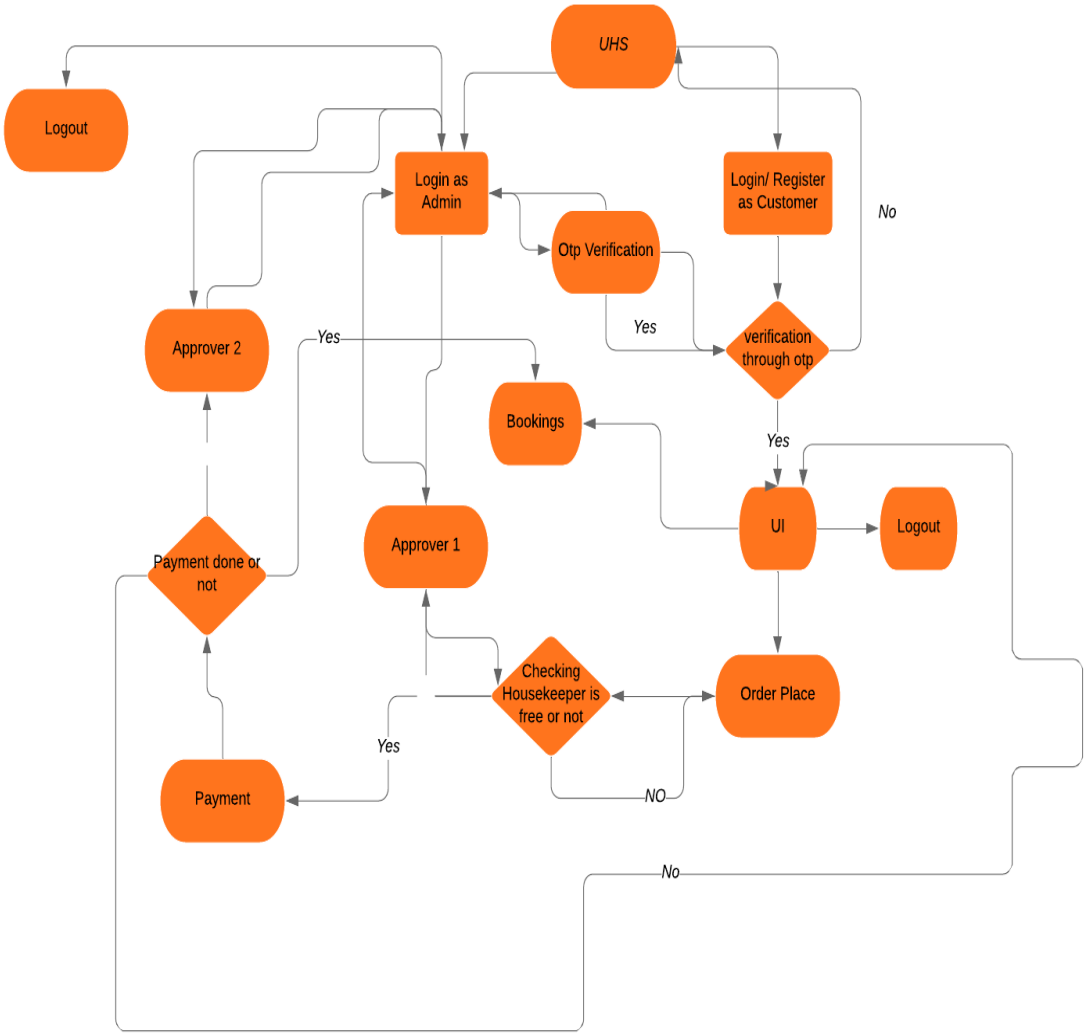


**Figure – 4** System Flowchart

### 6.2 E-R Diagram

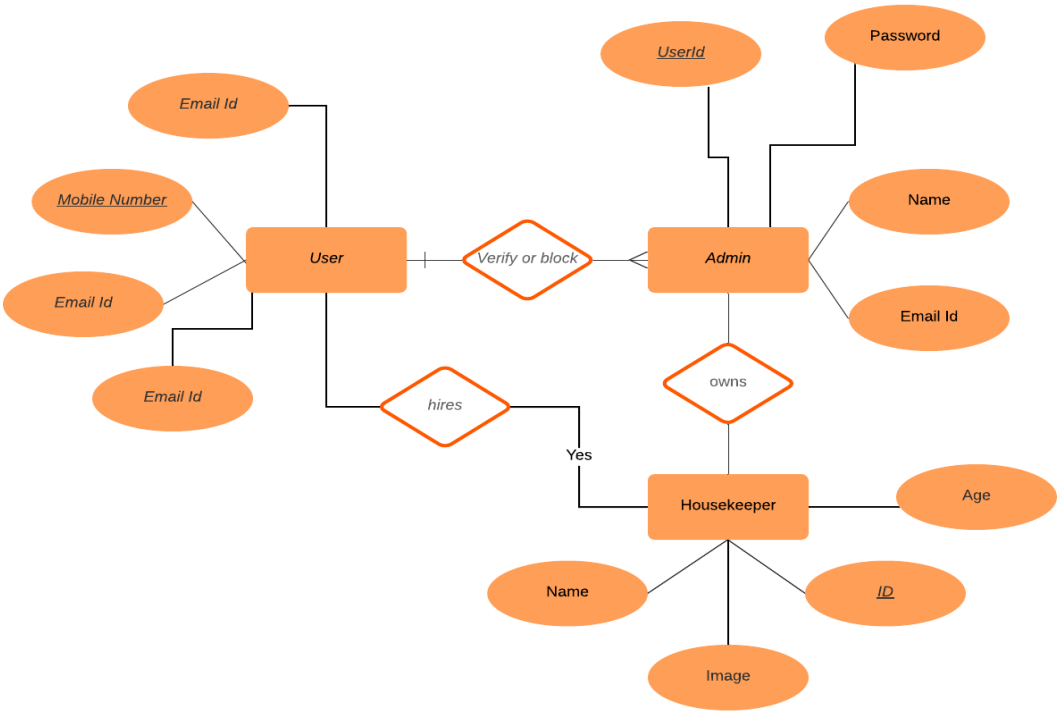


**Figure – 5** E-R Diagram

### 6.3 Use Case Diagram


**Figure – 6** User Use Case Diagram


**Figure -7** Admin Use Case Diagram

### 6.4 Sequence Diagram

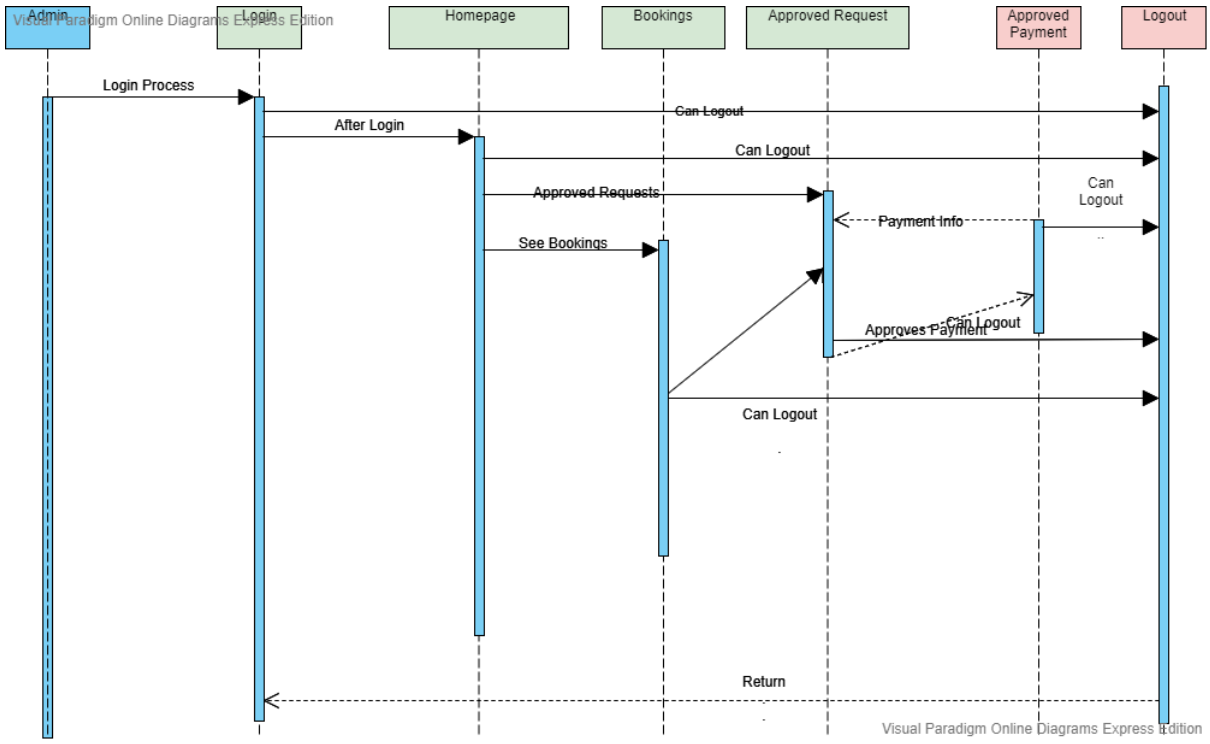


**Figure -8** Admin Sequence Diagram

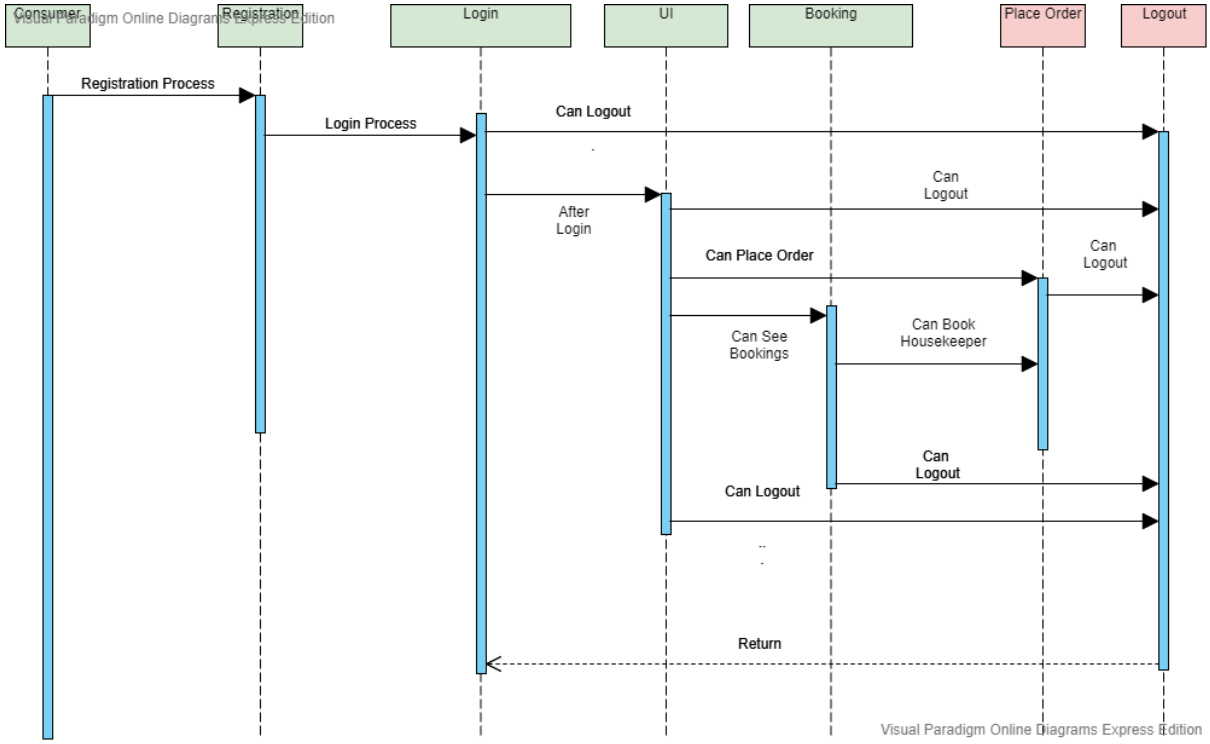


**Figure – 9** User Sequence Diagram

### 6.5 DFD (Level 0)

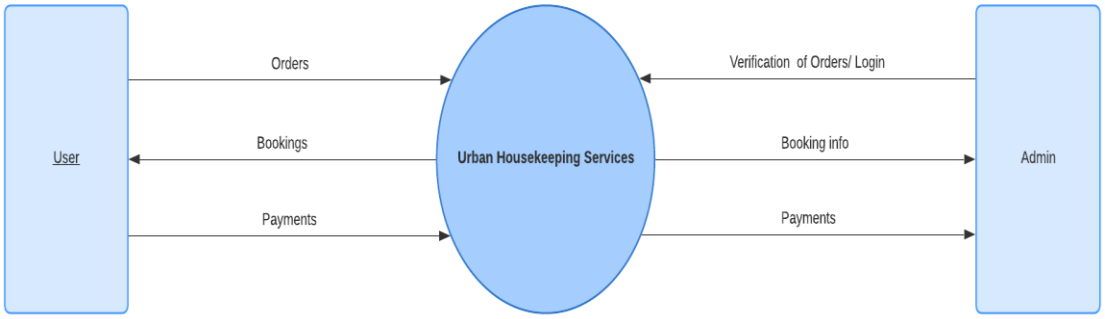


**Figure – 10** Zero Level DFD

## 7. REQUIREMENT SPECIFICATIONS

### 7.1 Implementation Details:

- Code : JavaScript
- Front End : React JS
- Back End : Node JS, Express
- Database : MongoDB
- Web Browser : Chrome/Firefox/Safari

### 7.2 System Specifications:

- CPU – Intel Core i3/i5 3.60 Ghz
- RAM – 4/8 Gb
- GPU – NVidia/AMD/Intel Integrated

## 8. CONCLUSIONS

Urban Housekeeping Service application will be able to solve various problems faced by the people working day jobs or involved in other activities due to which are unable to spare time for scouting and hiring housekeepers by providing a platform for the same.

This application will also help in ensuring user satisfaction and reduce the stress of the professionals who get hired through this platform and provide them with a platform which will significantly increase their chances of getting hired.

## 9. FUTURE SCOPE

For the further development of the system an mobile application for Android or iOS can be developed which can make use of the GPS built into the mobile devices to enable service providers to navigate to the location of the user more easily, and also a location based recommendation system can be implemented.

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