

Ahmedabad
University

School of
Engineering
and Applied
Science

CSE 519: Human Computer Interaction Final Project Report

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Team MaidForYou

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Chapter 1: Introduction

1.1 Motivation :

In India, approximately 32.4% of the population can be categorized as economically middle class and upper middle class. Almost all these families have a house help. The current \$7 billion industry is highly unorganized and is plagued with non-professionals. In India, domestic workers constitute one of the major segments of the informal economy but there is very little awareness about the problems they face. Even if the problems are raised, they are very subtly ignored by the economically upper class people. Hence the need for a platform to connect the domestic workers with their employers.

Our mission is to provide maids for all households across the country. Covid-19 pandemic caused a large unemployment, especially among this sector of the working class. Since then there has been a gap between the maids and the employers. We aspire to solve this problem by being an intermediary, but by keeping the user and the helper in complete control. We want to build an entity that establishes a communication between the two. This application will aim to provide flexibility to helpers by working at their convenient time or helping them get an extra income along with helping the users if they have an urgent situation, or want help for a particular short-term task. We are striving by our constant innovation to change this industry.

1.2 Overview of Project:

The Project focuses on building a user-friendly, easy to use platform using various principles of Human Computer Interaction platform that allows users to book various services of the project. The application focuses on making the experience of the user minimalistic, packed with various new features and presenting them to the user. MaidForYou provides a platform for two users, one who needs the service and one who provides the service. In simpler terms it creates a connection bridge between the domestic help and their employers. With the various features provided in the application, both the users will easily be able to understand and use the application. For the safety of the users, features such as Payment details, etc have also been provided.

1.3 Market survey

The following are a few examples of the currently existing systems for similar problems:

- [Urban Company](#): Urban Company is known to provide home services to people across all over the country. The company is known to offer services such as salon, cleaning, pest control, repairing etc. Rather than focusing on a niche market, Urban company has focused more on many such categories.
- [Bookmybai.com](#): This website is focused to provide house help which might vary from a babysitter to a caretaker for adults. This website has some key services provided such as baby massager, married couple etc which is an extremely specific market.
- [Quikr.com](#): This website is not just focused on providing maids, it also has a market for selling used products, cars, apartments etc. This company ties up with several local maid placement agencies and places the maids according to the requirement of the user. It has an intermediary agency and the house helpers cannot have direct control like companies such as Urban Company provides.

Chapter 2: Details of Tools

2.1 Description of features of Figma

We have used Figma for the complete designing of the application. The tool is available for free over the internet and it provides live collaboration to all the group members.

Furthermore, the tool provides:

1. **Accessibility and collaboration:** Figma allows the users to collaborate where the user is shared. There are a lot of features available which makes Figma perfect for collaboration. It makes the overall experience smoother. It provides features of collaboration which ensures the collaborating workers are in loop, there is a space for giving feedback to the users etc. It provides features such as:
 - Get the latest updates: Project Pages serve as your team's hub. ...
 - Centered around people: Easily see contributors and projects on Team and Organization Pages.
 - Discover work by creator: Browse the latest files each user has contributed to on their profile.
2. **Flexibility to iterate and produce deliverables:** Figma is flexible and can be used as a collaborative whiteboard for sketching initial ideas and iterating everything from wireframes to high-fidelity mockups. There is a wide variety of open source templates to get familiar with the idea and brainstorm the same. There is an entire range from low-fidelity to high-fidelity approach based on the stage of prototyping you lie. A list of plugins make these tasks completely handy and easier for the user to get hands on the same products and explore more.
3. **Ability to build prototypes and test:** Figma allows the users to build interactive prototypes and publish them. Moreover, these prototypes can be tested directly on smartphones. Testing Figma prototypes allows the user to collect quantitative and qualitative feedback from product users to check for drawbacks and evaluates your design in a way that prevents the user from making poor design choices.
4. **Establishing a single source of truth:** Figma is an excellent way to define product design systems that reside completely online. It's a single source of truth by default. No more wondering, "Is this the latest version?". This means that there are no

updates whatsoever and the Figma is always refreshed powered with the latest technologies and is up to date with the current trends without going through the hassle of updating the applications such as Adobe XD in order to access latest features. Here we can directly plug and play.

2.2 Comparison Table with Other Tools

Name	 Figma	 XD	 Framer
Platform	Browser, iOS, Android, Mac and Windows	Mac and Windows	Browser, iOS, Android, Mac and Windows
Live Collaboration	Yes	Yes (license required)	Yes (upto 2 editors in free tier)
Connectivity requirement	Internet needed	Internet preferred (not needed)	Internet needed
Comments	The user can comment on collaborators' work.	No such option available	Comments option is available

Chapter 3 : Project Planning and Preparation

3.1 Pen Paper Designs

Login/SignUp Page

Welcome to MaidForYou

Sign up or sign in to your account

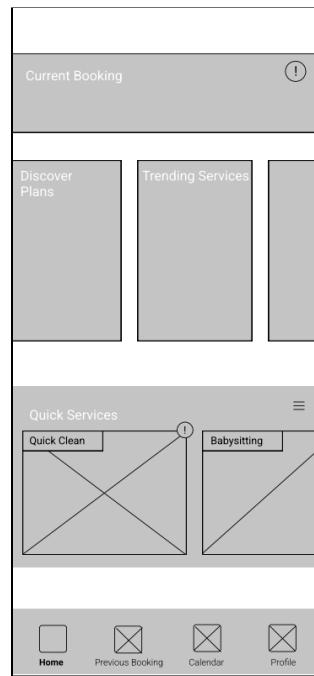
Email

Password

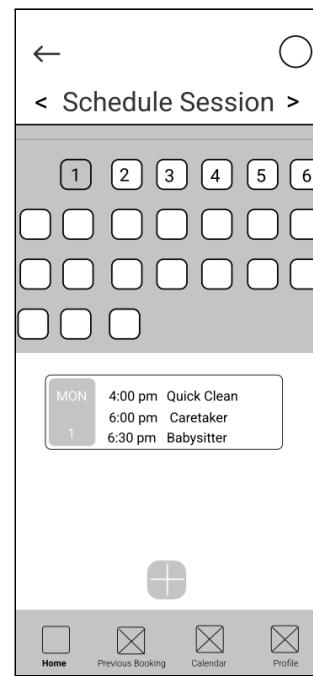
Confirm Password

Sign In

Home Page



Scheduling Page



Profile Page

Your Profile

Name _____

Address _____

City, State _____

Mobile No. _____

Edit Profile Details

Help you can offer

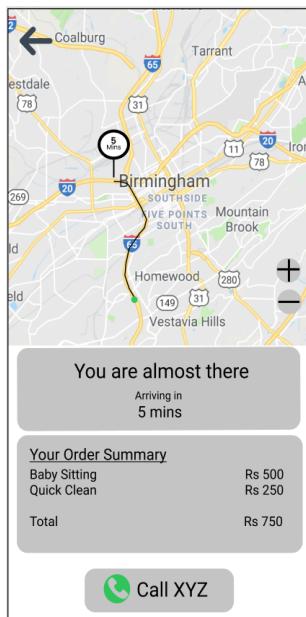
- Quick Cleaning
- Baby sitting
- Laundry
- Care taker

Availability

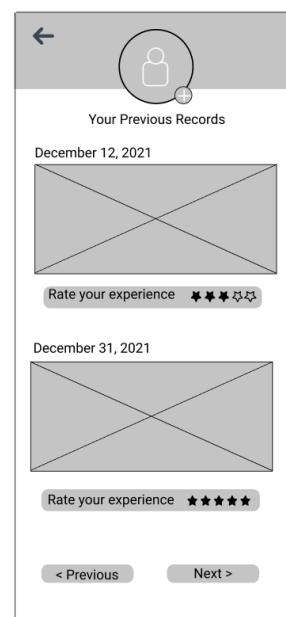
- Morning shift
- Noon Shift
- Evening Shift

FAQs
ABOUT US
TERMS OF USE
PRIVACY POLICY

Tracking



Previous Records



Help Desk

Help

FAQs

FAQ 1	▼
FAQ 2	▼
FAQ 3	▼
FAQ 4	▼
FAQ 5	▼
FAQ 6	▼
FAQ 7	▼
FAQ 8	▼
FAQ 9	^

Answer to the above question will be mentioned here in detail.

Settings

Settings

Currency

INR - Indian Rupees

Manage My Account

Change Password

Privacy

Notifications

Theme

Address Book

Address Book

Address Book

My Account

Add New Address

Contact Information

First Name *

awdwadsfaa

Last Name *

wafsfdsfed

Company

wafsfdsfd

Phone Number *

wafsfdsfd

Address

Street Address *

City *

State/Province *

Please select a region, state or province.

Zip/Postal Code *

Country *

United States

Save Address

Saved Addresses

ABC,
034 XYZ Bunglows. opposite random landmarks. Pincode: 028361

Services

7:02

Search Result X

V ↑↓

- Name
₹
Amet minim mollit non deserunt.
- img Name
₹
Amet minim mollit non deserunt.
- img Name
₹
Amet minim mollit non deserunt.
- img Name
₹
Amet minim mollit non deserunt.

Subscriptions

7:02

Subscription

img Daily
Amet minim mollit

img Weekly
Amet minim mollit

img Yearly
Amet minim mollit

Task

img Task 1
Amet minim mollit non deserunt.

img Task 2
Amet minim mollit non deserunt.

Payment

7:02

← Payment

Method 1 Method 2 Method 3

Card Holder
 Card Holder

Card Number
 Card Number

Expiration Date CVV
 mm / yy CVV

Accept Terms and Conditions

Pay Now

3.2 Persona Development

1) Service User

Dr. Venkatesh Reddy



AGE 26
EDUCATION PhD. in Mathematics
STATUS Single
OCCUPATION Assistant Professor
LOCATION Pune, Maharashtra
TECH LITERATE High

“ The only thing I'm focused right now is bettering myself.

Bio
Venkatesh is a young professor who lives alone far from his hometown for his job at Pune. He is completely focused on research work. He is passionate about inspiring young students and drives them towards exploring new Technology.

Core needs

- Needs to be focused on the research and has no time in other chores.
- Cleaning on a daily-basis and perhaps someone trustable or verified.
- The price of the service is very important

Pain Points

- Inconsistency of current maid, and lack of options to replace her.
- He has to manage all chores when his maid is on leave.
- Not much choice and comparison is available because the area is remote

Personality
Extrovert Thinking
Intuitive Perceiving

Brands


Payment medium
 Cash/Cheque  Digital Payment

Platform
 Website  Mobile App

2) Service Provider

Khyati Parikh



Indian Maid Agency™

Trustworthy

Cleanliness

Attentive

Caring

Loyal

Bio

Khyati is a hard working female working half-day at a commercial officein the weekdays. She works as a cook on the weekends for a few houses. Khyati is trying to work as much as possible to educate her child. She is flexible with her time and work.

Personality

Extrovert	Introvert
Judging	Perceiving
Sensing	Intuitive

Goals

- Take proper care of the baby and be very attentive and patient.
- Givebest possible cleaning services.
- Be on time and make the customer satisfied with my work.
- Get appropriate payment.

Brands

NOKIA **Getatoz.com**

Paragon

Pain Points

- Do not get payed enough for the quantity and quality of work provided.
- Not treated with respect by everyone.

Payment medium

G Pay

paytm

CASH PAYMENT

Age : 32
Education : High School
Work: House cleaning,
Baby sitting,
Laundry
Location : Ahmedabad, Gujarat
Status : Married

3) Service User



SUJIT SARKAR

Goals:

He wants to become the regional manager of the company he is currently connected with.

Pain Points:

He does not like a messy household but also does not like doing the chores on his own. He hates his boss. He does not like to talk to strangers, and hates going to clubs with friends.

Personality:

Sujit is introvert, intuition type of an individual. He is perceptive and thinking type.

Motivations:

He wants to make his family proud. He wants to get married soon. He wishes to live a luxurious life in the future.

Short Bio:

Sujit, a 25 years old smart working and ambitious individual who lives in Ahmedabad. He is originally from Kolkata. He lives alone in a rented home. He has a typical 9-5 job. He gets homesick very often and hence prefers home-made food over any canteen. He can afford keeping a housekeeper and so prefers having someone for doing all the chores.

Quote:

"Sometimes hard work does not pay but smart work does."

Preferred Brands:

- Instagram
- Myntra
- Flipkart
- Twitter

Behavior:

Sujit is a smart worker and hence enjoys his work much more than his peers. He usually works late nights in the office or completes his work after hours at home. He is the only child in his family and has been pampered throughout his life. He does not have a habit of doing house chores on his own. He is not a very social person and hence has very less interaction with his neighbors.



4) Persona User

Richa Sinha



AGE 47
EDUCATION Masters in Business
STATUS Married
OCCUPATION Liquidity Manager
COMPANY Citibank
LOCATION Mumbai
INDUSTRY EXP High

“ Efficiency is doing things right. Effectiveness is doing the right things **”**

Personality

Introvert Thinker Analyst

Bio

She currently lives in Mumbai. She finished her master in businesss and has just been working as the Liquidity Manger at Citibank. She is currently married and has two kids. She likes to go out with friends on trips.

Core needs

- Need to find reliable people that she can hire for her household help.
- All the members should coherently work as a team.
- The efficiency of the service is very important.

Frustrations

- Lack of transparency and often fluctuating prices of services.
- No reliability in current solution, and finding a new helper being the epitome of headaches.
- Not much choice and comparison not available.

Brands

Uber facebook zomato UC UrbanClap PORTER YouTube CRED

Payment medium

Cash/Cheque Digital Payment

Prefffered platforms

Website Mobile App

3.3 Scenario Description:

Scenario 1:

Dr. Venkatesh likes things organized but has no time to manage the same. It was a typical weekday for him, when his maid decided to go on an indefinite leave. Unfortunately, Venkatesh was not able to find an alternative maid due to his lack of contacts in the city. First two days went by miserably for him, since he had to dedicate a lot of time apart from University to maintain his home and keep it clean. On suggestion of a colleague he comes across **MaidForYou** where he is astonished by its use case as he could feel the absolute necessity. He signs up and fills in the details. He comes across all the services out of which he selects a weekly subscription of **Quick Clean** to try a top-rated maid in the area. After interviewing the maid, he hires her. He feels completely unburdened on the next day and changes his subscription model to monthly after a week. He becomes completely care-free about the same and now can completely focus his energy on teaching.

Scenario 2:

Khyati Parikh is an enthusiastic domestic and commercial helper who is in real need of money for her child's education. Unfortunately she is not able to earn enough for it. She has been trying to search for some domestic work but she is not satisfied with the payments. She was suggested a mobile application **MaidForYou** by one of the peons. She takes a look at the application and signs up. She fills all her details regarding what kind of work she will want to do, what are her free time slots and her payment expectations. She starts getting a few requests from the people in need of workers part time. She got some interviews and a few of them assigned to her and she has been getting work 3-4 days a week. She hopes that with time, the work will increase along with her ratings. She is satisfied with her payments too.

Scenario 3:

One evening, after getting home from work, Sujit opens the main door to a dirty and messy house. He is reminded that his maid was on leave for the day and that she won't be coming to clean up his house till the next week. He looks through the house and understands that the house needs to be tied up not for accommodating any guests but just for himself to live in. Seeing this situation in the house Sujit opens up '**MaidForYou**' application to look for maids that may be urgently available in his locality. He opens the app and logs in with his mobile number and OTP. He then selects the option of 'hire a maid'. Furthermore, the

application asks him for his address and his requirements in order to filter out the best available solutions for his need, like, whether he wants a male or female worker or what kind of service/work he wants from the worker. He then books a work appointment with a maid and gets the maid's details for him to recognize her when she arrives.

Scenario 4:

It is Sunday, and Richa has enjoyed her weekend thoroughly. At 9 pm, she receives a call from Maltiben, her maid. She is informed that she, along with her husband Ravi (who worked as the cook) wouldn't be able to continue to work at Richa's place as Ravi is placed in a new restaurant. She is irritated by the thought of starting the process of finding home-staff all over again. Annoyed, she comes across **MaidForYou**'s ad on YouTube. She is surprised by the mere existence of such a wonderful idea. She downloads its application and enters basic details of herself, her address, and her preferences. She looks through the list of long-term maid-couples available and selects 3 of them to interview the other day after looking at their expectations. She meets them and hires the second couple for the job. She is in love with the app's simplicity and refers the same to her friends

3.4 Use case Development

Use Case 1:

- 1) The user downloads the app and opens the same.
- 2) The system provides the option to Sign Up, or Register into the app.
- 3) The user signs up to the app with his email-id.
- 4) The system authenticates using the email-id protocol and asks for user details.
- 5) After the user fills up the details for the same, the system displays the services it provides.
- 6) The user opts for the service he seeks.
- 7) Then, the system asks for a subscription plan to the user.
- 8) After the user selects the appropriate option, the system displays a list of helpers registered in the user's area.
- 9) The system sorts the list of helpers in accordance with the rating of the helper.
- 10) The user selects from the given list. He/she is set up with an interview with the user.
- 11) The system notifies the interview to the helper.
- 12) After the meeting, the user can confirm whether he/she wants to employ the helper.
- 13) The user changes the subscription plan.

14) The system notifies the helper, the helper can confirm the same.

Alternate courses:

3) The user chooses to Sign Up, the email already exists or is invalid.

3.1) The system displays the error message

3.2) The system returns to Step 2

12) The user tries to confirm the helper - but the helper is already confirmed by another user

12.1) The system displays the error message

12.2) The system displays the list of available helpers

12.3) The system returns to Step 9

13) The user changes subscription-plan but the helper is occupied/rejected.

13.1) The system displays an error message.

13.2) The system returns to step 9.

Use Case 2:

1) The user downloads the app and opens the same.

2) The system provides signup and log in for the users.

3) The user signs up with their mobile number.

4) An OTP is generated by the system and receives the user.

5) The user enters the OTP and the system verifies it.

6) The user is asked to fill up basic profile information.

7) One then fills the type of work he wants to do, free time slots and their payment expectations.

8) The system notifies requests regarding domestic help from customers.

9) The user will get an option for accepting or declining the request made by the customer.

10) Once the request is accepted, an OTP is generated.

11) The user gets a google map direction page for his/her ease.

12) Once reached, it is then followed by a confirmation with OTP received at both ends.

13) Once the work is completed, the user confirms the completion and gets the payment.

14) The user can rate the experience with the customer later.

Alternate courses :

3) The user chooses to sign up but the mobile number is already in use.

3.1) The system prompts 'Mobile No already in use'.

- 3.2) The system asks to log in instead.
- 3.3) The system returns to Step 2.
- 5) If the OTP entered is incorrect
 - 5.1) The system prompts an error message.
 - 5.2) The system asks for regenerating OTP.
 - 5.3) The system returns to step 4.
- 8) If user does not receive requests on the basis of his time and payment choices
 - 8.1) The system notifies the user to change his priorities.
 - 8.2) The system returns to step 7.

Use Case 3:

Here is the use case of the scenario, where the user books a maid for the household chores.

- 1) The user logs in to the application using the phone number
- 2) The system has constraints for the phone number
- 3) The user receives the OTP for login
- 4) The system verifies the entered OTP
- 5) The user now looks for a worker to help
- 6) The user selects his locality using the application.
- 7) The user selects the urgency of the service.
- 8) The user chooses from a lot of options about the type of worker he wants and the money he is willing to pay the worker
- 9) The system presents a list of available options for the specific details entered by the user
- 10) The user chooses the best suitable option.
- 11) The user receives other details about the worker.

Alternative Case:

- 2. If the entered number is not appropriate
 - 2.1 . The system prompts an error message
 - 2.2. The system returns to step 1
- 3. If the entered OTP isn't correct
 - 3.1 The system prompts an error message
 - 3.2 The system returns to step 3

Use Case 4:

- 1) The user downloads the app and opens the same.
- 2) The system provides the option to *Sign Up*, or *Login* into the app.
- 3) The user signs up to the app with his/her Google profile.
- 4) The system authenticates using the GAuth protocol and asks for house details (size, address, number of family members, etc)
- 5) After the user fills up the details for the same, the system asks for user preferences (male vs female vs couple, time of arrival, maximum salary, etc).
- 6) Then, the system asks whether the system requires a short-term helper or a long-term helper.
- 7) After the user selects the appropriate option, the system displays a list of helpers registered in the user's area.
- 8) The system sorts the list of helpers in accordance with the user preferences.
- 9) The user selects from the given list. He/she looks at the expected salary and books an interview for the same.
- 10) The system notifies the interview to the helper.
- 11) After the meeting, the user can confirm whether he/she wants to employ the helper, and choose the mode of payment.

Alternate courses:

- 3) The user chooses to Sign Up, but the system finds that an account already exists with the entered Gmail address.
 - 3.1) The system displays the error message
 - 3.2) The system returns to Step 2
- 10) The user tries to confirm the helper - but the helper is already confirmed by another user
 - 10.1) The system displays the error message
 - 10.2) The system displays the list of available helpers
 - 10.3) The system returns to Step 9

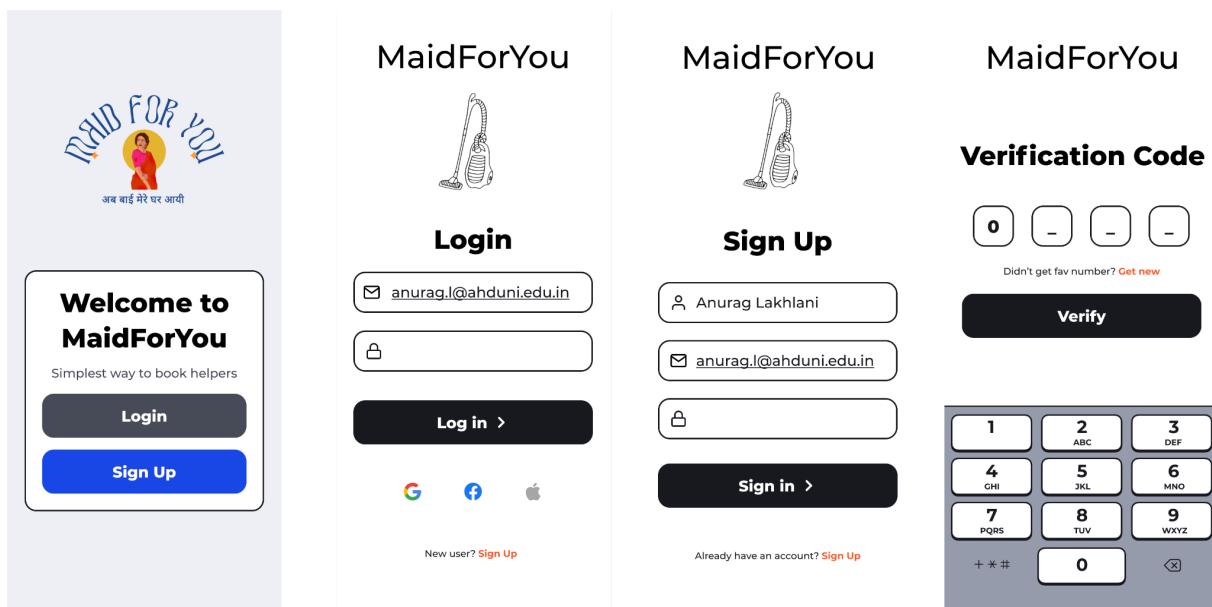
Chapter 4: Project Features

1. Login Page:

a. Functionality:

- i. Allows a user to gain access to the application by entering their username and password or by authenticating using a social media login.
- ii. If the user has an account - log in to the application using the credentials.
- iii. If the user is opening the application for the first time - then give an option to sign up and create an account.

b. Implementation



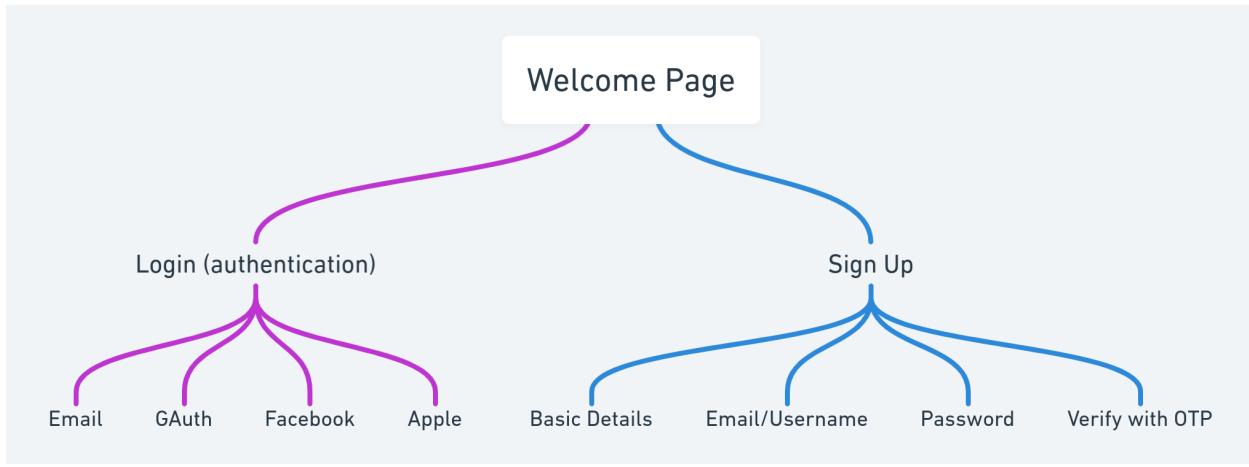
c. Universal Usability: Diverse and Cognitive Perceptual Ability

- i. When you open the application, you are provided with two options -> whether to Login or Sign Up
- ii. The principle of Decision Making is used under Diverse and Cognitive Perceptual Ability
- iii. The user has to select the option that applies to his/her situation - whether the user has been using the app or is opening the app for the first time

d. Interaction Style: Form Fill-in interaction

- i. While logging in or signing up - the user has to enter the username and password
- ii. The user also has the option to sign in using social profiles like Google, Facebook or Apple ID
- iii. Form based interaction style suits the best in this kind of use-case

e. Hierarchical Task Analysis:



2. Profile

a. Functionality

- i. The profile page asks the user to choose his/her role - Service User or Service Provider.
- ii. Profile page for Service User asks the user to fill in basic information.
- iii. Profile page for Service Provider asks the user to fill in basic information along with selection of availability of time and help they are willing to offer.
- iv. Any user can edit their profile information by the option available on the top right corner.

b. Implementation

Your Profile



Kantabai

Email address*

Password*

Gender*

 Female

Phone number*

Home  Search  Saved  Profile 

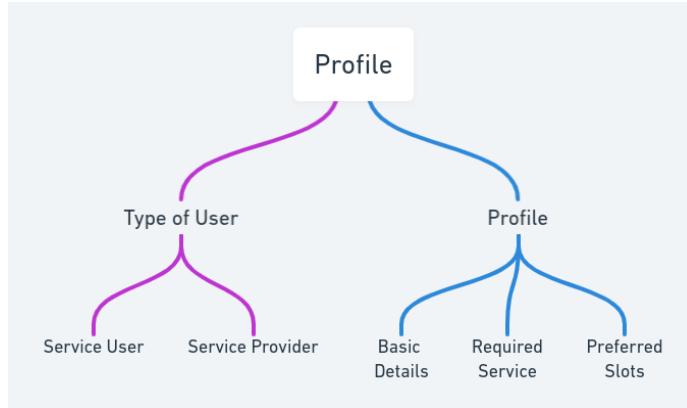
c. Universal Usability : Personality Differences

- i. The menu for filling up the database is irrespective of the personality.
- ii. There is only basic information required, which suits every personality type.

d. Interaction Design : Form Fill-in & Menu Selection

- i. The user is assisted to fill in the basic information .
- ii. A list of items is already given to the user to ease and shorten the learning process.
- iii. The design structures the decision making process for the users.

e. Hierarchical Task Analysis



3. Multiple-access of features from Homepage:

a. Functionality

- i. The home page showcases a number of Popular Services provided by the application.
- ii. There is a list of popular helpers in the users area. This will reduce the user's burden of finding a helper nearby.
- iii. Every helper is sorted based on the number of ratings and stars achieved by them.
- iv. There is a search feature that allows the user to search for any particular service.
- v. There is a chat option too on the top bar. This will let the user chat with the helpers and even with the MaidForYou help desk.
- vi. On selecting the chat option, we are provided with a list of people to chat with and a search option.
- vii. If the user selects a search option, when he types the string it will fetch all the possible users to chat with.
- viii. The user then on selecting chat, views the previous chat with that person and a chat box to write a new message

b. Implementation

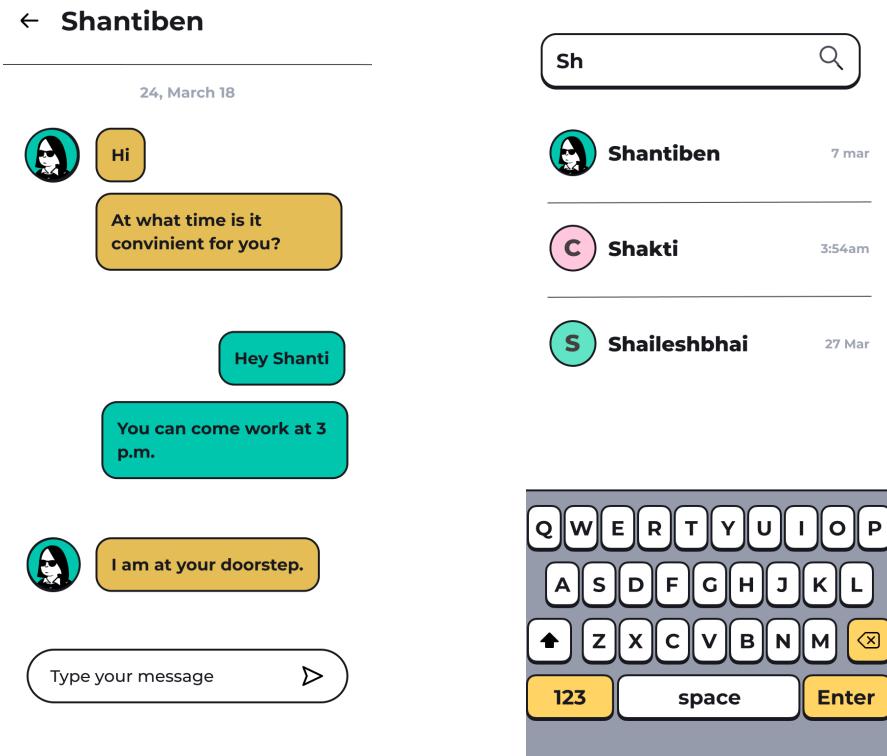
The image displays two screenshots of a mobile application interface.

Popular Services Screen:

- Header:** Popular Services
- Services:**
 - Quick Clean:** 2 hours (Icon: Person cleaning)
 - Full-day Clean:** 8 hours (Icon: Person cleaning a room)
- Section:** Popular Helper in your Area
- User Profile 1:** Sunitaben (Quickclean Star), 95 ratings (5 stars)
- User Profile 2:** Kantabai (Emerging Star), 25 ratings (5 stars)
- User Profile 3:** Kumar (Full Clean Expert), 137 ratings (5 stars)
- Bottom Navigation:** Home, Search, Saved, Profile

Chat Screen:

- Header:** Chat
- Search Bar:** Search with love ...
- Messages:**
 - Shantiben:** I am at your doorstep (time 2)
 - Help Desk:** Your refund has been.. (3:54am)
 - Kantaben:** Rated 5 stars! (27 Mar)
 - Kumar:** Rated 1.5 stars :((12 feb)
 - Team MaidForYou:** Welcome to MaidForYou (1 Jan)
- Bottom Navigation:** Home, Search, Saved, Profile



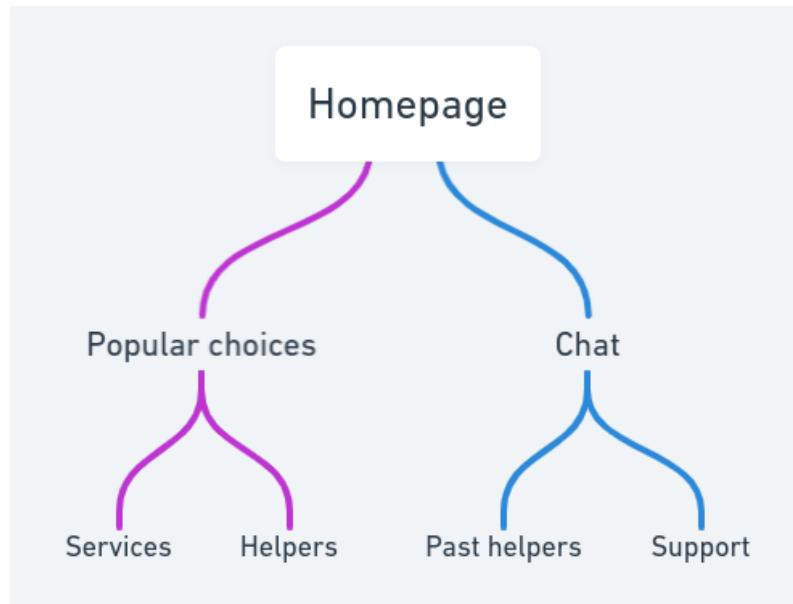
c. Universal Usability: Cultural and International Diversity

- i. This functionality implements universal icons and similar chat interfaces that people from different cultures have already experienced.
- ii. Icons such as search, home, chat, and hamburger menu have been implemented.
- iii. The search and back icons are also familiar.
- iv. The chat interface is clearly visible for the user to identify between user and sender's message.

d. Interaction Design : Menu Selection and Direct manipulation

- i. The chat provides the menu which is a list of users to interact with and search option so the user can find the user to talk to and arrive at decision making directly.
- ii. The search option provides the user to do direct manipulation and display the user that he is searching for.

e. Hierarchical Task Analysis

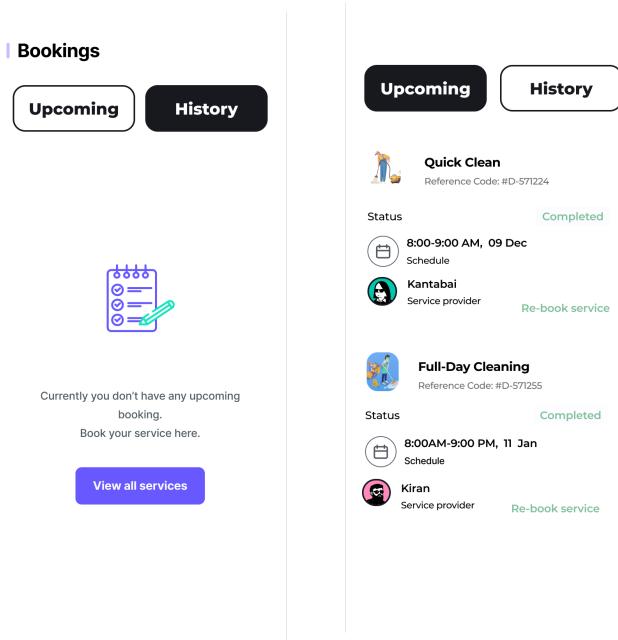


4. View Bookings

a. Functionality:

- i. The booking page provides users to view his upcoming bookings.
- ii. If there are no upcoming bookings, the user can view the list of services available, which will redirect him to the home page.
- iii. The user also can view the history of his bookings, which displays the status of the service which might be “Completed”, “Canceled” etc.
- iv. Also a button of “Re-book service” is provided for the user to avail option of the services he loved and re-book them.

b. Implementation



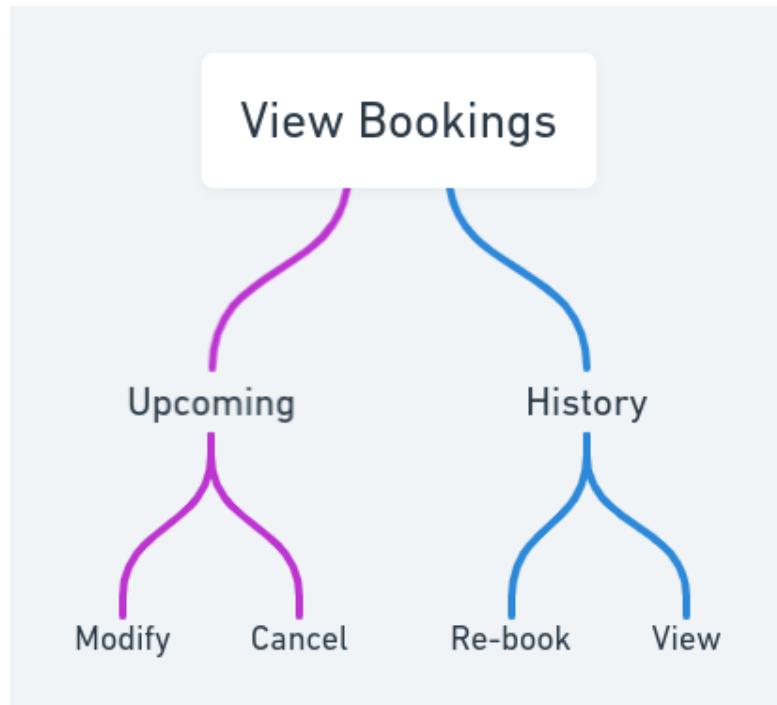
c. Universal Usability: Diverse Cognitive and Perceptual Abilities

- i. This functionality uses Long-term and semantic memory, as it saves the history of user's past bookings and helps in decision making by providing a re-book button making it easier for the user to avail the service again.
- ii. This functionality also provides upcoming bookings, so that the user does not have to remember the service he has booked.

d. Interaction Style : Menu-selection

- i. The user is provided with the list of his upcoming and history of his bookings.
- ii. The user is provided with direct options to choose from such as re-book.
- iii. It can be helpful to novice users and helps provide a clear structure for easier decision making.

e. Hierarchical Task Analysis

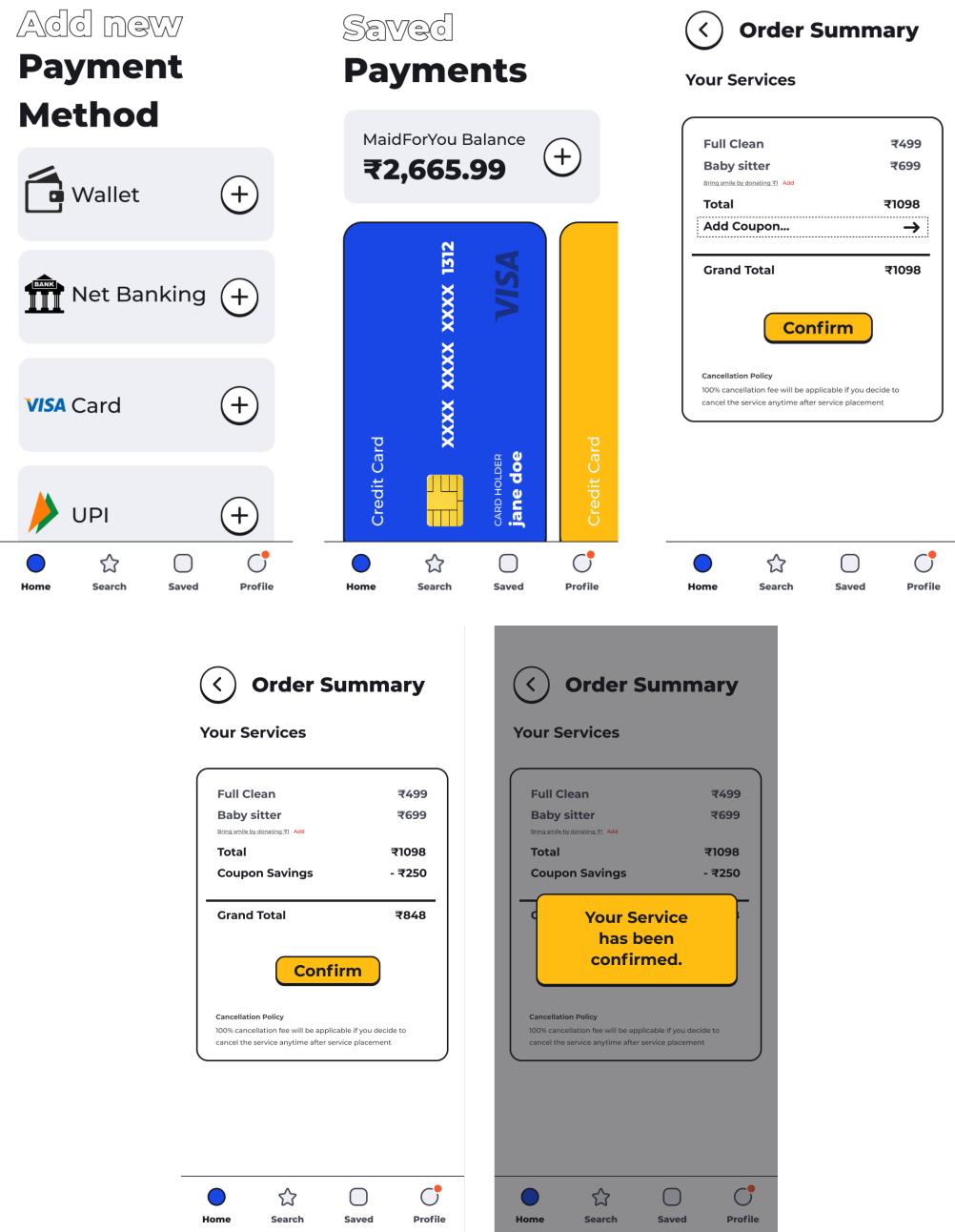


5. Payment Options

a. Functionality

- i. The payment page provides the user with saved payment modes or to use a different payment mode.
- ii. The saved payment option shows the user all his saved debit/credits cards or his UPI id.
- iii. The user will just have to enter the CVV of the respective card and click the “Pay Now” option.
- iv. For using other modes of payment, the user can select any of the options from the available ones.

b. Implementation

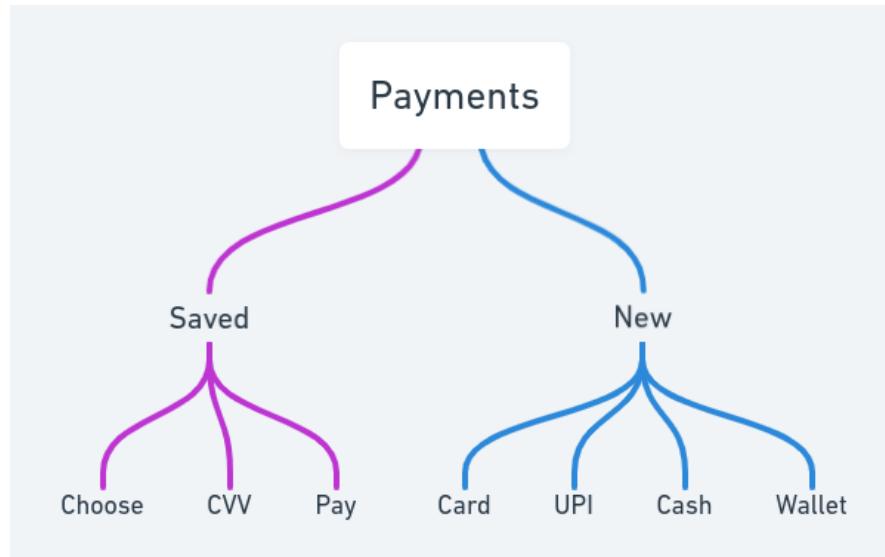


c. Universal Usability : Diverse Cognitive and Perceptual Abilities

- The Payments menu remembers your saved cards so that the user does not have to go through the hassle of adding the cards again which shows long term and semantic memory.
- The payments options provide users with a list of all payments that are accepted and hence will help in decision making.

- d. Interaction Design : Menu Selection and form fill -in**
- The user needs to select either the saved card or select from a menu of available options of payments.
 - The user is also required to enter the card details which is categorized as form fill-in interaction style.

e. Hierarchical Task Analysis:

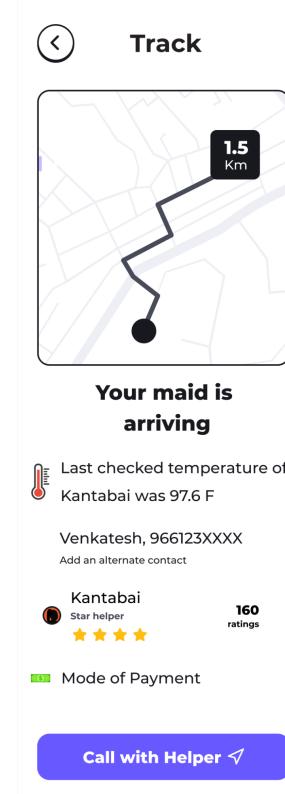


6. Tracking

a. Functionality

- The tracking page displays the google map that helps you track your helper once left for your service.
- It shows the user the last checked temperature of the maid. This ensures safety for the user.
- The user can opt for an alternate number if he wishes to.
- The name of the helper along with the stars and ratings and the mode of payment mode confirmed by the user is also displayed.
- The user can also call the helper to communicate on matters like late arrival or for wrong direction taken by the helper.

b. Implementation



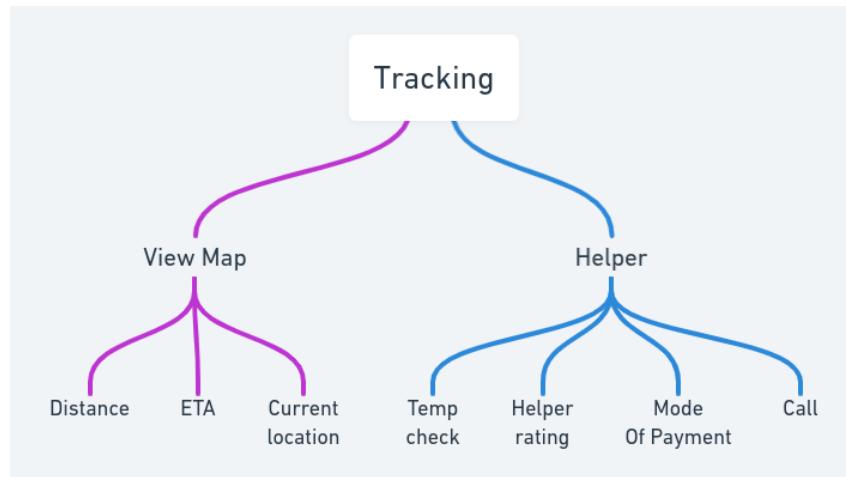
c. Universal Usability : Cultural and International Diversity

- i. This interface is provided with a standard map, which everyone irrespective of their culture could identify and locate the helper.
- ii. The user is provided with familiar symbols such as thermometer (for temperature of Helper), profile, rating of the helper, and mode of payment. This provides universal usability to people without knowing the language of the application.

d. Interaction Style : Direct Manipulation

- i. The user is provided with an interface, where the map is updated in real time and is able to view the location of the helper.
- ii. The constant changes in user interface on map shows a visual representation and estimation of the same.

e. Hierarchical Task Analysis



7. Address Book

a. Functionality

- i. The address book displays the addresses saved by the user. This reduces the user's burden to re-enter the address every time he books a service.
- ii. It also provides functionality to add a new address. The user can add the full address and also label the address category.

b. Implementation

Address Book

Saved Address Add New Address

Address 1

Residence Name
Area
City
Pin code

Address 2

Residence Name
Area
City
Pin code

Address Line 1
Address Line 2
Landmark
City
State
Pincode
Address Category

Add Address

Address Book

Saved Address Add new Address

Address 1

Residence Name
Area
City
Pin code

Address 2

Residence Name
Area
City
Pin code

Address Line 1
Address Line 2
Landmark
City
State
Pincode
Address Category

Add Address

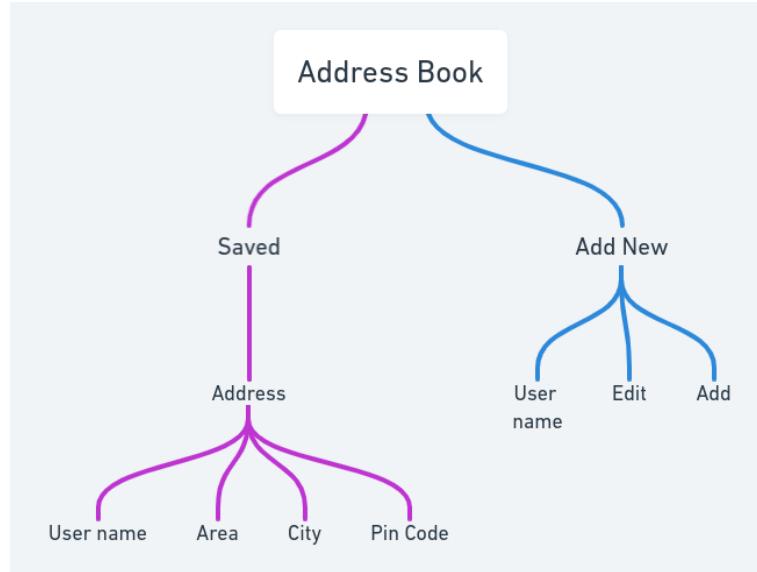
c. Universal Usability : Diverse Cognitive and Perceptual Abilities

- i. The user selects the address where he needs the helper. This is a part of the decision making process.
- ii. The perceptual load of the user reduces as one does not need to re-type the address every time while booking.

d. Interaction Style : Form Fill-in

- i. The user is needed to enter specific details required for his address.
- ii. This is where the user inputs the value and adds the address.

e. Hierarchical Task Analysis

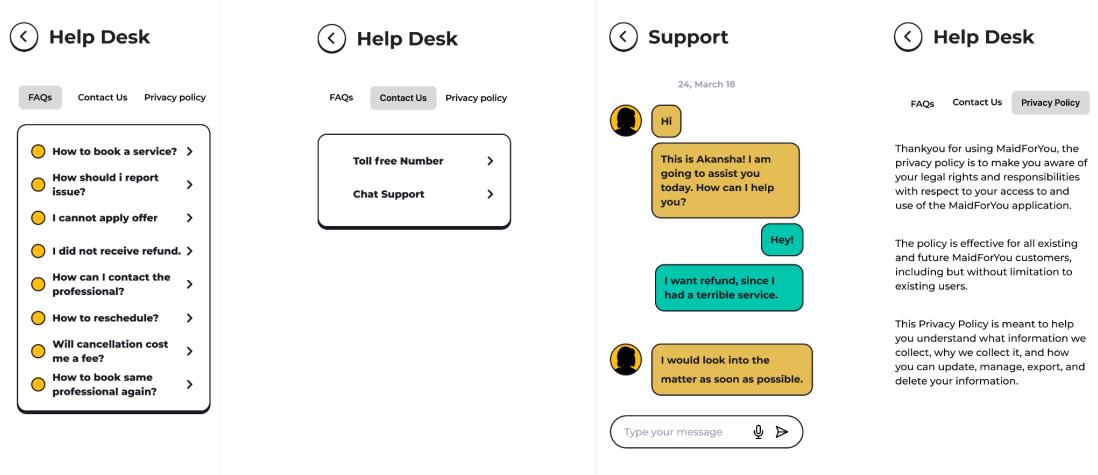


8. Help & Support

a. Functionality

- i. The help desk page has three features - FAQs, Contact Us and Privacy Policy.
- ii. The FAQs page shows the frequently asked questions by different users along with the answers offered by the application. This can help solve similar questions by different users with ease.
- iii. The Contact Us page gives the Toll free Number of the application to the user and has an option for chat with customer care.
- iv. The chat support page is for users to chat with customer care for any issues or confusions. For those who are unable to type can send a voice message.
- v. The Privacy Policy page lists the policy of the MaidForYou application.

b. Implementation



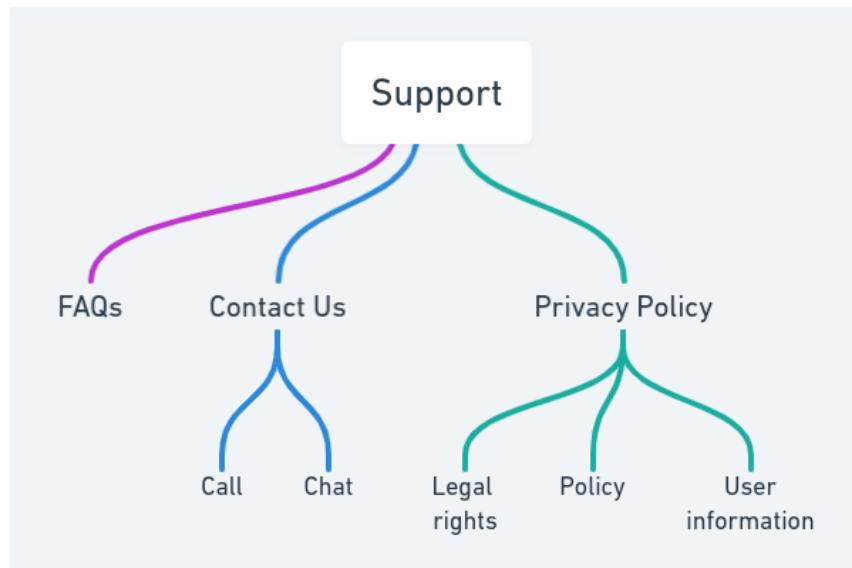
c. Universal Usability : Older adults

- The FAQs section provides how to perform basic functionalities in the application, especially for older adults who are unfamiliar with the technology.
- Assistance is provided to such users, if they could not figure out some task via chat and call.
- If the user does not understand or know how to chat, the contact us page also has an option to directly call the custom care.

d. Interaction Style : Menu Selection

- The user is provided with a menu to select from all the FAQs that are of users interest.
- The user is also provided an option to contact the help desk and read the privacy policy.

e. Hierarchical Task Analysis

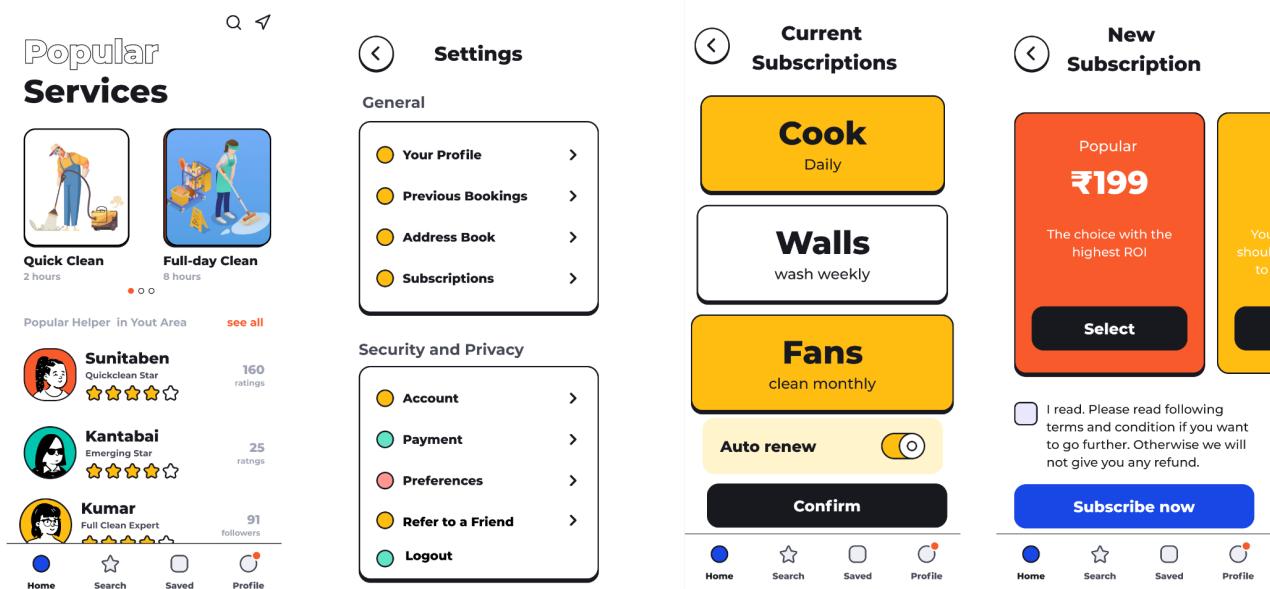


9. Subscriptions:

a. Functionality:

- Allows you to make multiple subscriptions single time so there is no need to schedule on a daily basis.
- Provides optionality to select New Subscriptions in order for the user and select the most desired option and Subscribe Now.

b. Implementation:



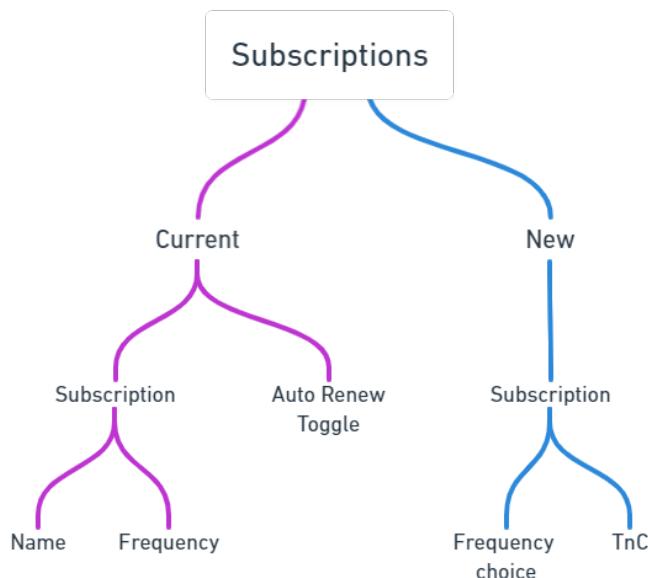
c. Universal Usability: Older Adults

- i. The font size and the text of the services is kept larger so that Older adults can make selection without making any error.
- ii. The fonts are also in contrast so that the text is clearly visible.
- iii. The area of selecting a service is also kept larger so according to **Fitt's Law** it could make it easier for the older adults to choose the options from the same.

d. Interaction Design: Menu Selection

The user can choose from the available list of subscription options. This structures the decision making process of the user.

e. Hierarchical Task Analysis:



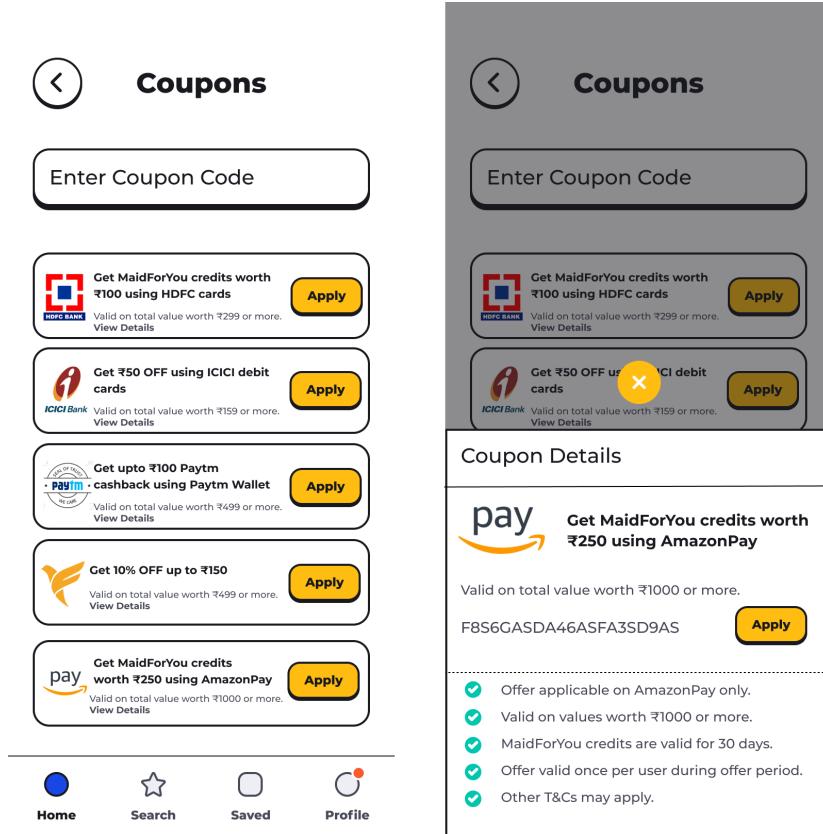
10. Coupons:

a. Functionality:

- i. The order summary page has an option to add any coupon to get a discount.
- ii. There are multiple coupons that the user can use based on the payment mode.
- iii. The user can also enter a coupon code if he has one.

- iv. The coupon details are also available which gives details about the payment mode, maximum discount, terms and conditions, validity of offer, etc.

b. Implementation:



c. Universal Usability: Diverse Cognitive and Perceptual Abilities

- The user is given an option to apply coupons which in turn helps in **Decision making**.
- The user is given a wide range of coupons in order to find his preferred option.

d. Interaction Design: Menu Selection

The user is given a list of options from which he can choose a coupon that is valid for him and identify from the given menu.

e. Hierarchical Task Analysis:



11. Bookings:

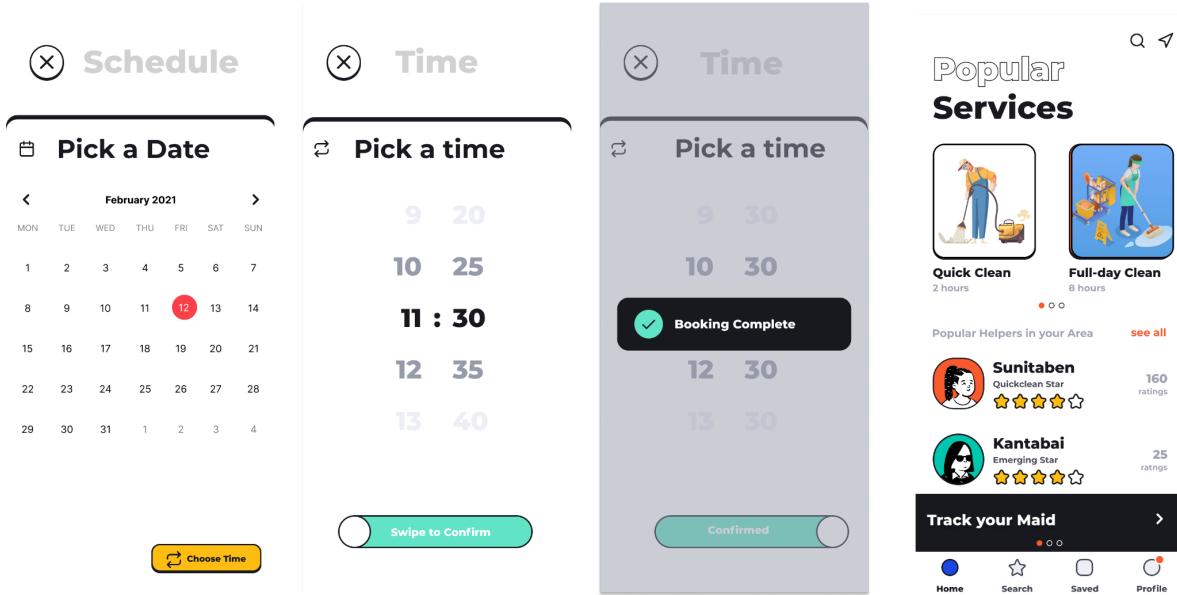
a. Functionality:

- i. Allows the user to book the service of his choice by providing a menu of the list of the offered services.
- ii. Provide a detailed overview about the services.
- iii. Allow the user to select Subscription or schedule only for a particular day.
- iv. Pick a date and time of user's convenience and slide to confirm booking.
- v. Track your current booking from the home page itself.

b. Implementation:

The screenshots illustrate the booking process on a mobile application:

- All Services:** Displays a list of service categories: Full Cleaning (₹299), Quick Clean (₹99), Baby Sitting (₹699), and Adult Care (₹599). Each category has 'Details' and 'Schedule' buttons.
- Details:** Shows the 'Full Cleaning' service. It starts from ₹299 and provides up to 6 hours of cleaning services. An image shows a person mopping a floor.
- Options:** Lists service options: Crown Service (5-star, ₹599/day), Premium Services (4-star, ₹499/day), and Still a Service (4-star, ₹299/day).
- Schedule:** A calendar for February 2021. The week starts on Monday. The month view shows days 1 through 28. Below the calendar are buttons for 'Options', 'Subscribe', 'Schedule', and 'Choose Time'.



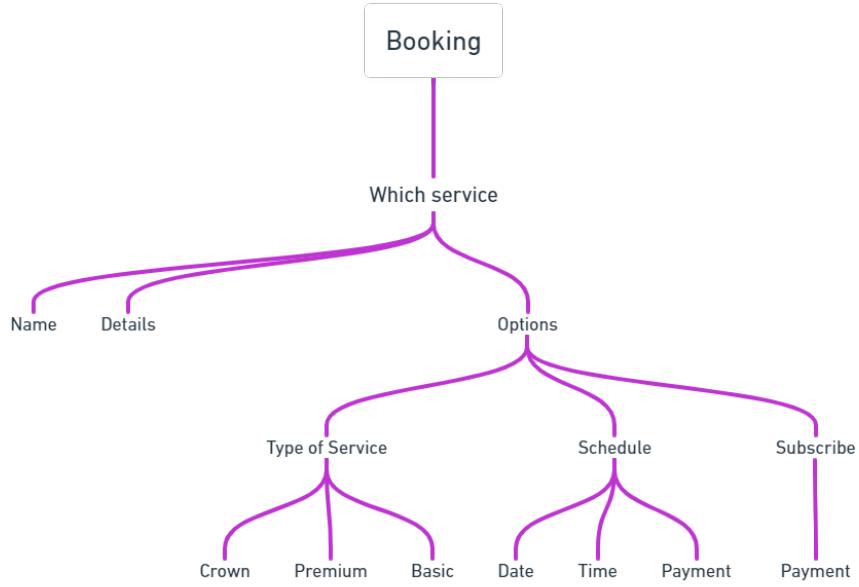
c. Universal Usability: Cultural and International Diversity

- i. The users are given an interface which is familiar to them and symbols of schedule, time, and options are used such that everyone can identify with the same.
- ii. Familiar Interface such as swipe or choose a date or tracking facility is made so that the user can be familiar with the same so the user can operate with the same irrespective of one's background.

d. Interaction Design: Menu Selection and Direct manipulation

- i. The user is provided with a list of options from which he is allowed to select one's desired option according to the need.
- ii. The user is allowed to make direct manipulation on features such as picking date, selecting time and slide to confirm which provides an instant feedback to the user.

e. Hierarchical Task Analysis:

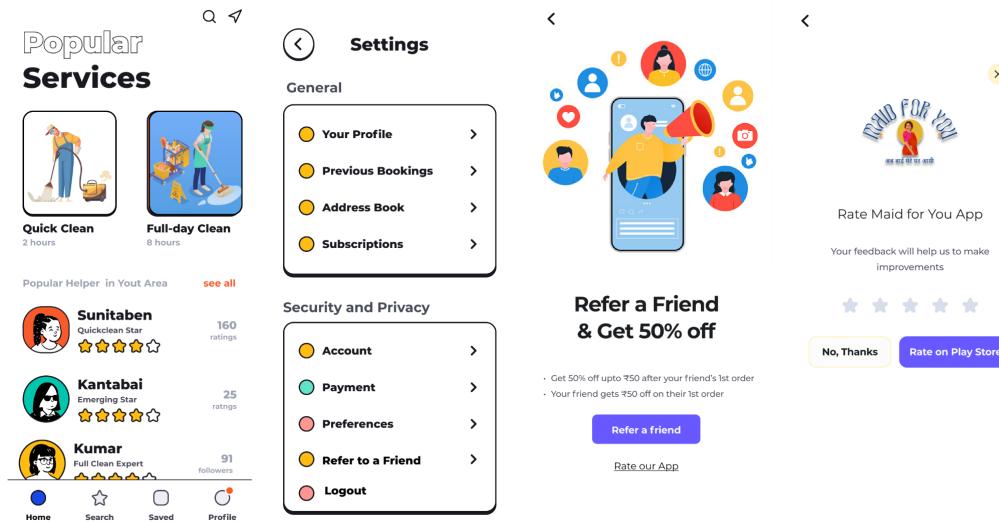


12. Refer to a Friend:

a. Functionality:

- i. It allows the user to generate a unique referral code which upon sharing allows the user to share and avail discount coupons.
- ii. It allows the user to Rate the application on respective application stores.

b. Implementation:



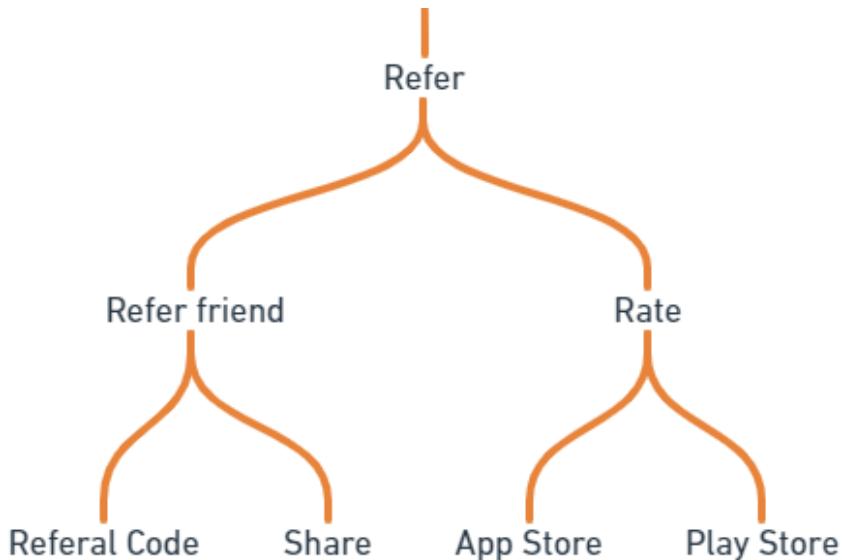
c. Universal Usability : Personality Differences

- i. The user is provided with the option to refer a friend, but this feature is not compulsory for the users which might be introverted in nature.
- ii. It also bodes well with people with extroverts.
- iii. It also gives the option to not opt to “Rate the app” if the user is not comfortable sharing his identity and choose **No Thanks** instead of rating the application.

d. Interaction Design: Direct Manipulation

- i. The user directly manipulates the interface since the **Refer a Friend** option will directly redirect one to preferred mode of social media.
- ii. The same is the case with **Rate the application** where the user will be redirected to the respective application store to rate the application.

e. Hierarchical Task Analysis:



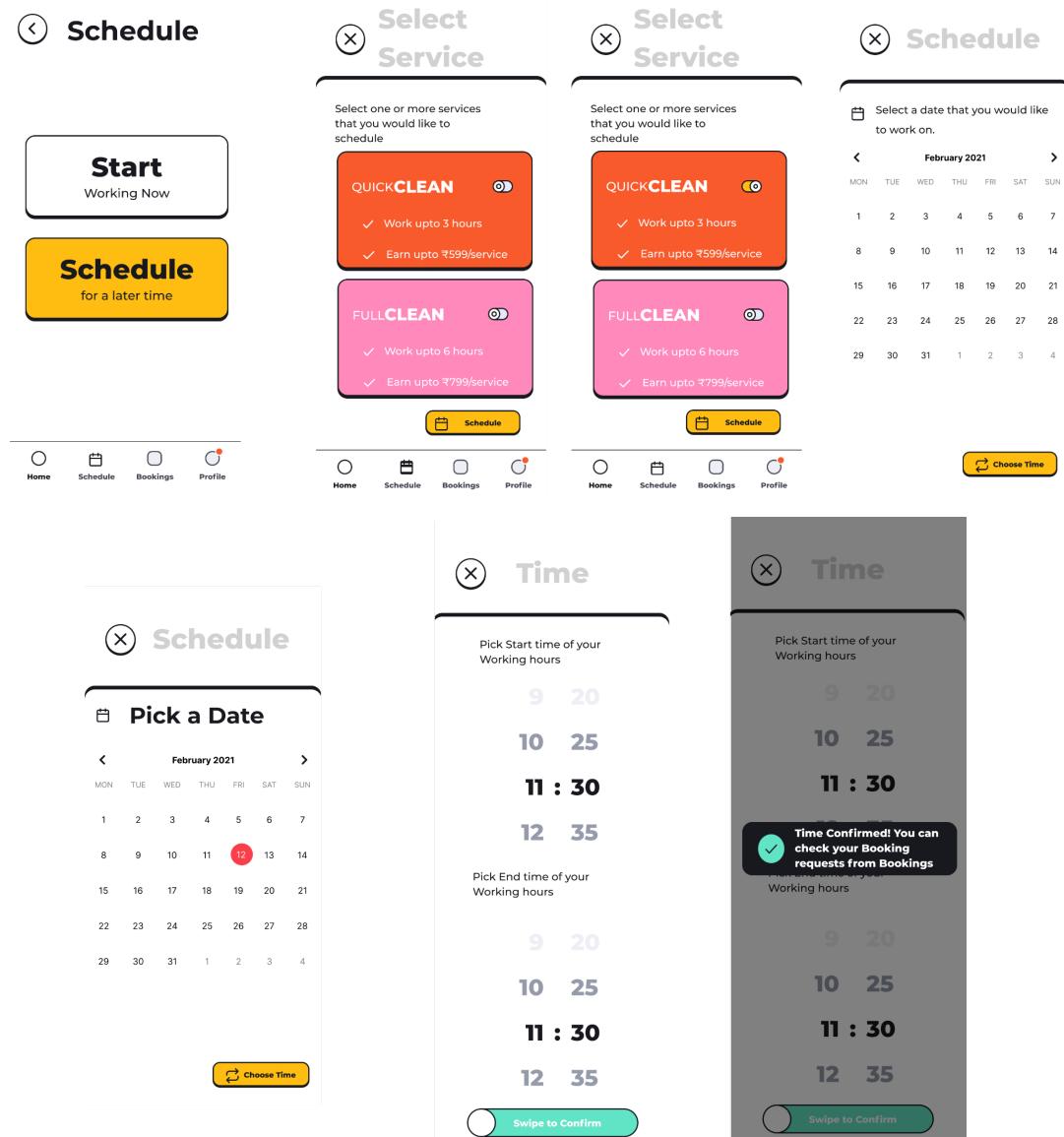
13. Start or Schedule Working :

a. Functionality:

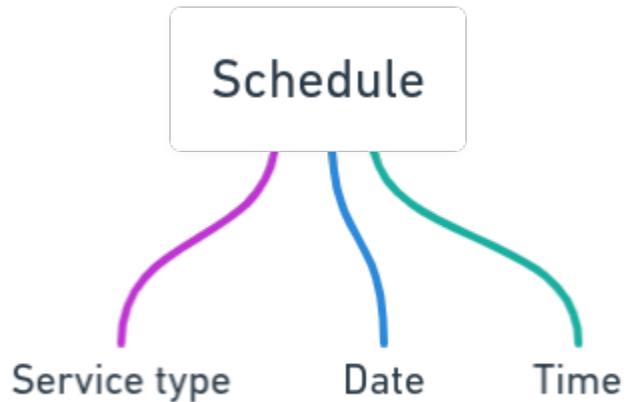
- i. This functionality is made for Helper point of view where the helper can decide working hours.

- ii. This functionality provides the option for the user to Start now or schedule later, where one is given freedom to select convenient time and date according to their schedule.
- iii. The user can select from one or more services that he would like to work on that particular day.

b. Implementation



- c. **Universal Usability : Diverse, Cognitive and Perceptual Abilities**
 - i. The user interface is designed such that the user does not have to remember the process. The user easily understands what to do and thus there is no mental load on the user to use the feature.
 - ii. The imagery memory of a calendar and digital clock eases the working of the feature.
 - iii. ‘Time Confirmed’ is the exact feedback a user would want after confirming their service.
- f. **Interaction Design: Direct Manipulation & Menu Selection**
 - i. The design of this page creates a visual representation of the calendar and digital clock. This makes it easy for users to use and remember the process easily.
 - ii. Options are available to choose from for the user for easy learning.
 - iii. The overall design aims for a structured decision making process for the user.
- g. **Hierarchical Task Analysis:**



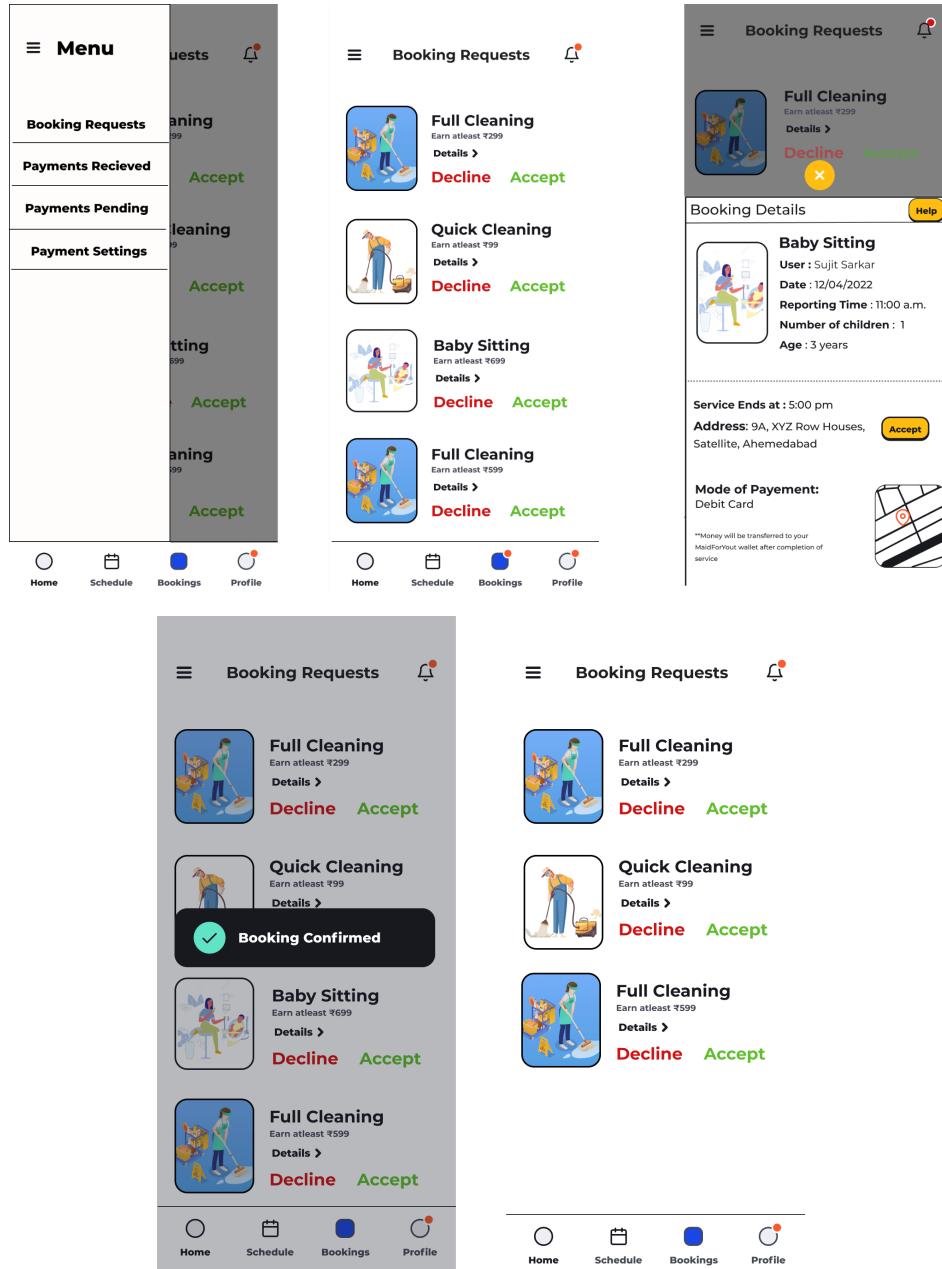
14. Booking Acceptance :

a. Functionality:

- i. The Booking Acceptance feature is created keeping the helper user in mind. It allows the helper to scan through the work options available to them. The details of the work with payment incentive is also provided.

- ii. Furthermore, an option of accepting or declining the booking request is also given.
- iii. The helper will be able to view detailed information about the work by clicking on details and then after confirming the booking.

b. Implementation:



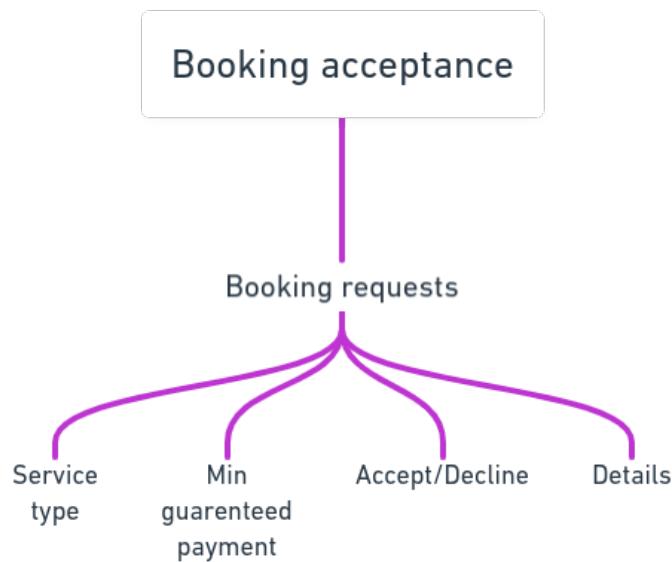
c. Universal Usability: Diverse Cognitive and Perceptual Abilities

- i. The helper is given an option of accepting or declining the work along with the detailed information and incentives which will help in **Decision making**

d. Interaction Design: Menu Selection

- i. The helper will be able to choose from different options made available based on the requests for the work.

e. Hierarchical Task Analysis:

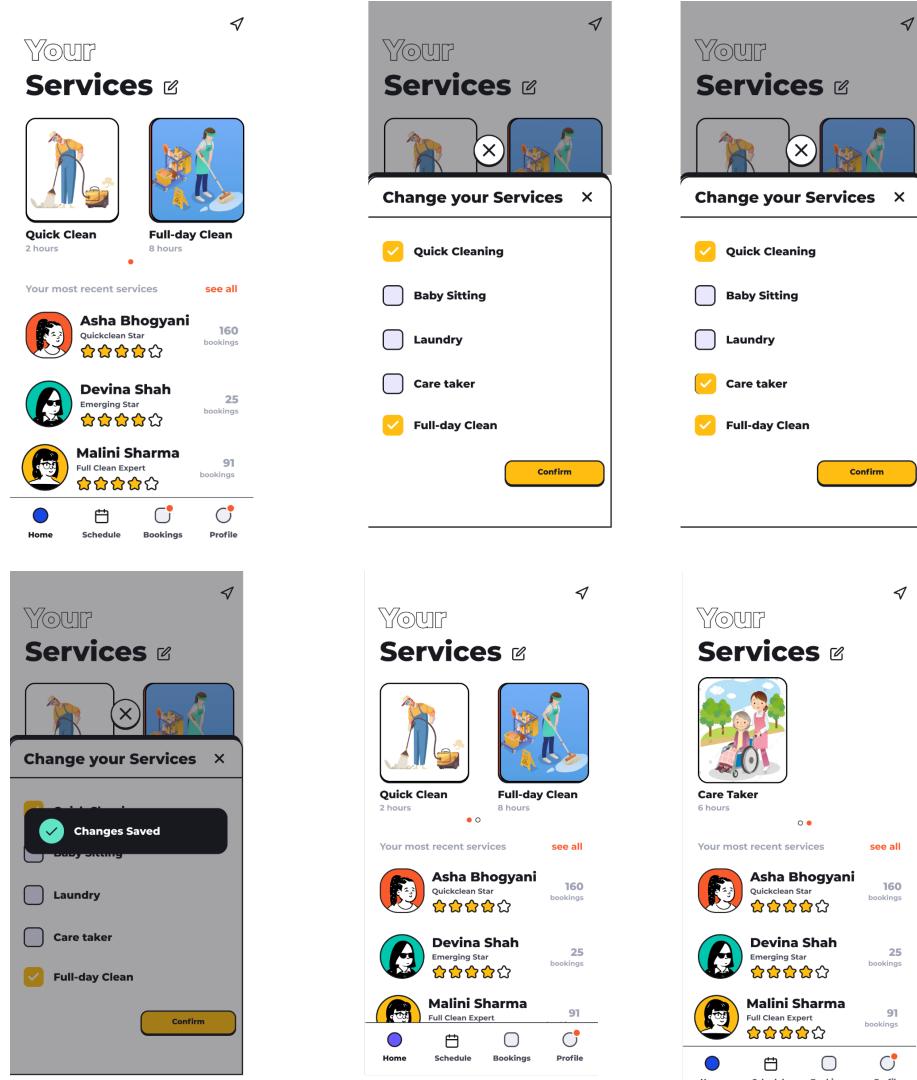


15. Edit Services offered by the Helper

a. Functionality

- i. The helper is provided that option to change any or any number of services that is provided by the helper.
- ii. The Edit button is given to the user, where the user selects multiple services at his own choice and saves them.
- iii. These services are only displayed on his home screen.

b. Implementation



c. Universal Usability : Diverse Personalities

- This feature allows the user to select the services according to their comfort zone, and not be forced to do a single job.
- This might be the case for instance in Baby - sitting where some personality types might not be comfortable doing that particular service hence they are given other options which suit that personality type.

d. Interaction Style : Menu Selection

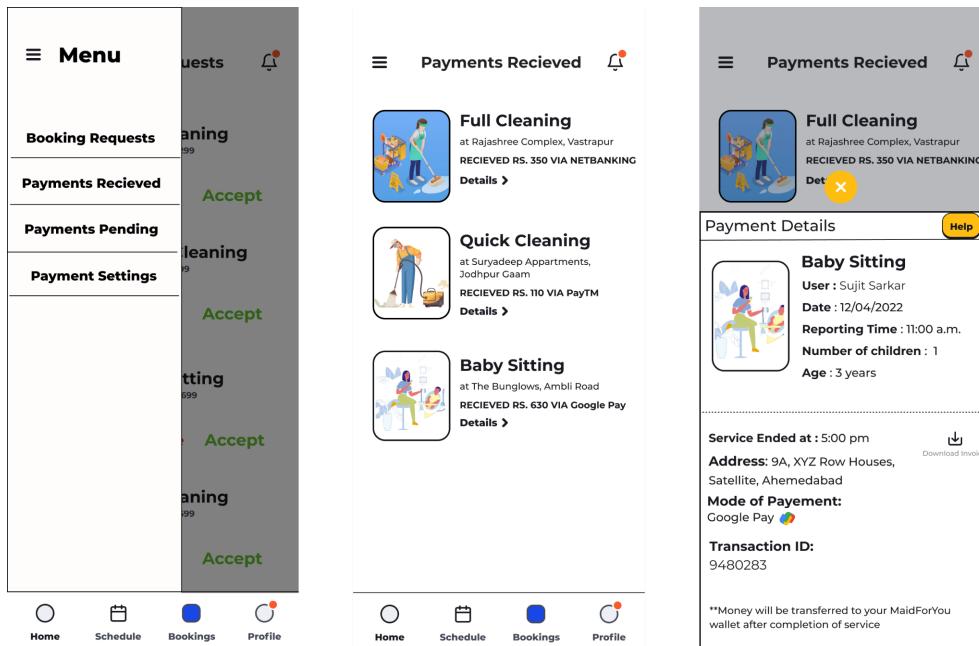
- The user is allowed to select from the list of given menus from where he can store his preferred choices.

16. Payment Received:

a. Functionality:

- i. This feature will allow the user(helper) to check the payments that he/she has received after the completion of the work.
- ii. The user will be provided with a history of all the payments that have been accounted for in his/her account. The service details and the transaction details will be visible to the user.

b. Implementation:



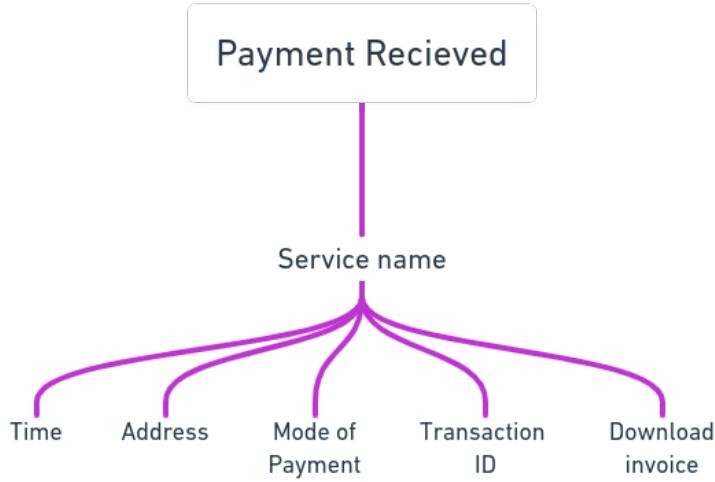
c. Universal Design: Diverse Cognitive and Perceptual Abilities

- i. Money, for users in this case, has a lot of importance and hence manages the fear, anxiety, mood and emotion of the person.
- ii. Knowing and confirming that the money has been transferred to the user's account would help the user feel safe and secure using the application.

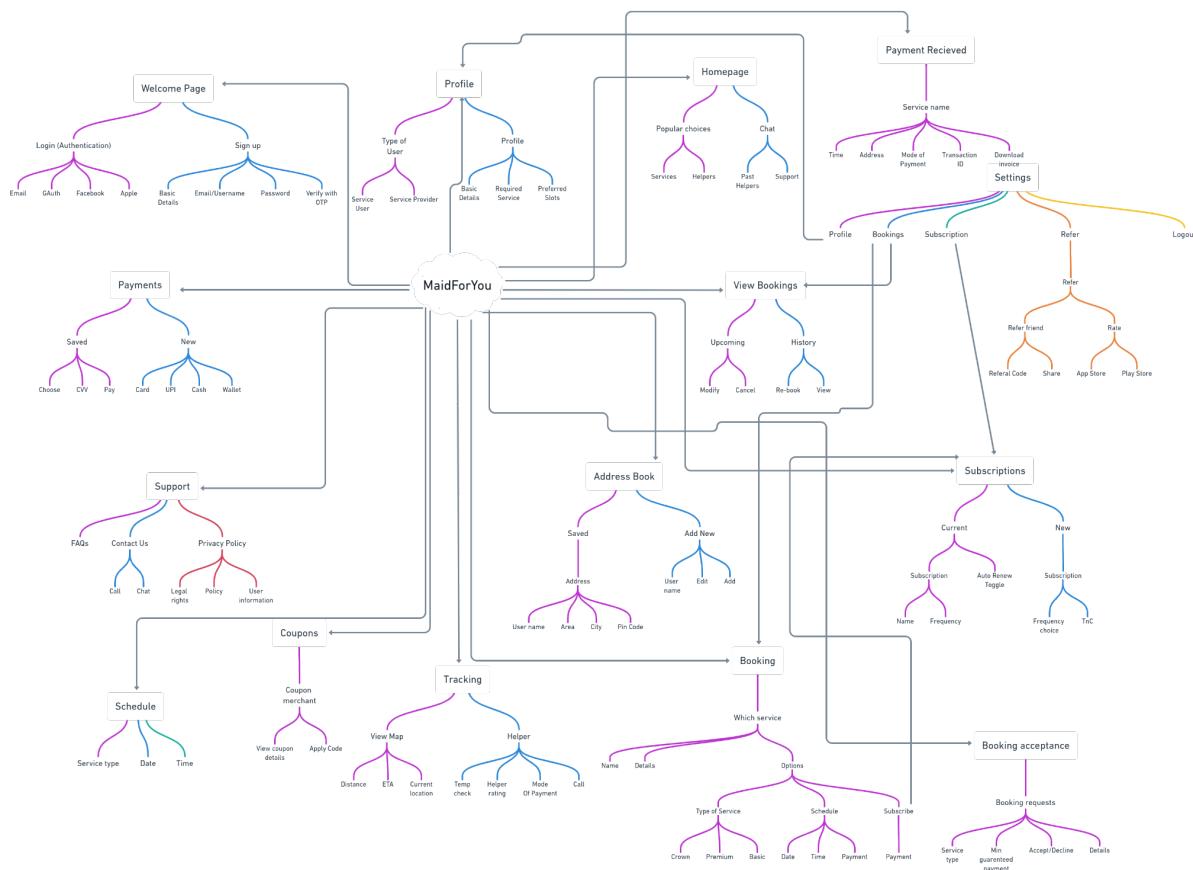
d. Interaction Style: Natural Language

- i. The user is provided with simple data about the details of the money that he/she has earned in simplest terms for a layman to understand.

e. Hierarchical Task Analysis:



Integrated Hierarchical Chart (*Click on chart for better resolution*)



Chapter 5 : Difficulties Encountered and Resolved

We encountered various difficulties while discovering the field and also implementing the same. We had to make a few decisions regarding designs and make a few engineering decisions to remove those difficulties and problems where we were stuck.

5.1 Engineering Decisions

We were stuck in various technical decisions, since our main goal was to make an end product.

1. The first decision was to opt for which tool, but due to its unique features and easy plugins we decided to opt for Figma. Figma being a highly diverse tool, we had to narrow down our learnings so that we could focus on what was necessary for our requirements.
2. Whether to build a fully fledged application having front-end and back-end or just focus on the User Interface was our second difficulty, where we decided to opt for the latter, since the project emphasizes to improve UI/UX design and we can focus more on front-end rather than splitting the efforts.

5.2 Design Decisions

Our main aim in this area was to keep our design minimalistic, we used several concepts of Human computer Interactions but we faced several challenges implementing them

1. We had to make Decisions, of what to include since we did not want to pack our product with redundant features.
2. Decisions such as hierarchy of sub-tasks were decided for which we had to classify which comes first or what will the user feel.
3. Take valuable feedback from different people and from the perspective of our persona, and if their feedback is contradicting we have to find a common ground which fulfills both of their needs.

Chapter 6 : Real - life Implementation Perspectives

There are several problems which we are likely to encounter if we implement this product in real life.

1. Though our product is well built in respect to the aspects of HCI perspectives, it is nearly impossible to build an exact same interface in real life, since it ensues coding, which might sacrifice the design as all components are not likely to be the same.
2. Looking at the market survey we see that there are a lot of existing products in the same sector and many have failed, so this product has to be built very confinely for it to be successful.
3. The application in real-life will also have to have a back-end, database in addition to the frontend which is likely to take more man hours building this product.
4. The front-end we have built might not satisfy the client and though we know HCI better than the client, the final call of the design still lies with the client.
5. Identify a set of more features that makes our product unique and feasible for implementation in real-life.

Chapter 7 : References

1. [Figma: Online Tool](#)
2. [Book My Bai: Reference Site for Design Requirements](#)
3. [Sulekha: Reference Site for Design Requirements and Application usage](#)
4. [GK Maid Services: Reference Site](#)
5. [Youtube Video for Learning Figma](#)