SCREEN SKETCHES

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USE CASES

Use Case 1: User Registration and Profile Management

Actor: User
Description:
- Users can register a new account or log in if they already have one.
- During registration, users provide personal information such as their name, email address, phone number, and create a secure password.
- After successful registration or login, users are directed to their profile management section.
- In the profile section, users can add additional details, such as a profile picture, bio, and address.
- Users can also view their booking history, edit their profile information, and change their account settings.

Use Case 2: Service Search and Booking

Actor: User
Description:
- Users can search for various services they require, such as house cleaning, painting, carpooling, and tutoring.
- The app allows users to refine their search by specifying parameters like location, service type, date, and time.
- A list of service providers matching the criteria is displayed, including information such as service provider name, ratings, and reviews.
- Users can select a service provider to view detailed information about the services offered and the pricing.
- Once the user decides to book a service, they choose a suitable date and time, and the app facilitates the booking process.
- Confirmations of bookings are sent to both the user and the service provider.

Use Case 3: Service Provider Registration and Listing Services

Actor: Service Provider
Description:

- Individuals interested in offering their services can register as service providers through the app.
- During registration, service providers provide their personal details, services they offer, pricing, and availability.
- Once registered, service providers can manage their listed services, including adding, modifying, or removing services.
- Service providers receive booking requests from users and have the option to accept or reject them based on their availability.
- Accepted bookings are added to the provider's schedule, ensuring proper time management.

Use Case 4: Messaging and Communication

Actor: User and Service Provider
Description:
- After booking a service, users and service providers can communicate with each other through an in-app messaging system.
- The app notifies users and providers about new messages, ensuring timely responses.
- Users and providers can view their message history, making it easy to refer back to previous conversations.
- This feature fosters clear and convenient communication between parties involved in a service transaction.

Use Case 5: Review and Rating

Actor: User and Service Provider
Description:
- After the completion of a service, users can provide ratings and reviews for the service provider.
- Ratings and reviews help build trust and transparency in the community.
- Service providers can also rate and review users based on their experience during the service.
- These ratings and reviews are displayed on user and service provider profiles to aid in decision-making and improve the quality of services

Use Case 6: Payments and Invoicing

Actor: User and Service Provider
Description:
- Users can make payments for the services they've booked through various payment methods integrated into the app.
- Service providers can track their earnings and generate invoices for the services they've completed.

- Payment history and invoices are accessible within the app for both users and service providers, ensuring financial transparency.

Our app seeks to deliver a seamless experience for users and service providers by solving the aforementioned use cases, easing service discovery, booking, and communication while guaranteeing confidence and transparency within the platform.

NON-FUNCTIONAL REQUIREMENTS

Non-functional requirements (NFRs) are important components of software development since they outline how an application should work rather than what it should do. They specify attributes and traits like performance, security, dependability, usability and many more

PERFORMANCE REQUIREMENTS

1. **Response Time:**
- The app should respond to user interactions (e.g., search, booking, messaging) within 5-10 seconds for optimal user satisfaction.
- Loading times for various sections of the app, such as the service provider listing and user profiles, should not exceed 3-5 seconds.

2. **Scalability:**

The system should be designed to handle a growing number of users, service providers, and concurrent transactions. Scalability should be ensured by cloud-based infrastructure.

3. **Availability:**

The app should have an uptime of at least 99.9%, with scheduled maintenance communicated to users in advance.

4. **Maintainability:**
- The maintainability of the system is vital to accommodate future updates and enhancements, whether adding new features, fixing bugs, or improving functionality.
- The system will be designed in a way that will allow easy updates without causing widespread disruptions to the users .

SECURITY REQUIREMENTS

1. **User Data Protection:**
- All user data, including personal information and communication history, should be encrypted both in transit and at rest.
- Secure authentication and authorization mechanisms should be in place to prevent unauthorized access to user accounts.

2. **Payment Security:**

User payment information should not be stored on the app servers but securely handled by a trusted payment gateway.

USABILITY AND USER EXPERIENCE REQUIREMENTS

1. **User-Friendly Design:**
- The app's user interface should follow best practices in mobile app design, ensuring an intuitive and easy-to-navigate experience.
- The app should support accessibility features to accommodate users with disabilities.

RELIABILITY AND ERROR HANDLING

1. **Fault Tolerance:**
- The app should be resilient to server failures and network interruptions.
- Users should experience minimal disruption during such events.

2. **Error Logging and Reporting:**

The app will most probably be able to log errors and exceptions for debugging purposes while providing users with clear and informative error messages in case of failures.

COMPATIBILITY AND PLATFORM REQUIREMENTS

1. **Platform Support:**

The app should be compatible with Android devices running Android 6.0 (Marshmallow) and above to ensure a broad user base.

TESTING AND QUALITY ASSURANCE

1. **Quality Assurance:**

Rigorous testing, including functional, performance, security, and usability testing, should be conducted before each app release to ensure its reliability and quality.

DOCUMENTATION AND SUPPORT

1. **User Documentation:**

User guides and in-app help sections should be available to assist users in using the app effectively.

2. **Customer Support:**
- A customer support system, including email or feedback form, should be in place to address user inquiries and issues promptly.
- These non-functional requirements ensure that your Android app not only offers a wide range of functionalities but also delivers a secure, high-performance, and user-friendly experience.

Properly addressing these requirements during the development process will contribute to the success and trustworthiness of your service-oriented app.

DATA MODELS

It is essential for the storage, retrieval, and manipulation of data that data models specify how data is structured and arranged within your app.

USER DATA MODEL

1. User Profile

Each user is represented by a profile that includes fields such as:

- **User ID:** A unique identifier.
- **Username:** A unique username for login and identification.
- **Password:** Securely hashed and salted password.
- **Email:** User's email address for communication.
- **Name:** User's full name.
- **Profile Picture:** URL or reference to the user's profile picture.
- **Phone Number:** User's contact number.
- **Address:** User's address for location-based services.
- **Registration Date:** Timestamp indicating when the user registered.
- **Role:** User or service provider.

SERVICE PROVIDER DATA MODEL

1. Provider Profile

Service providers have additional fields in their profiles:

- **Provider ID:** A unique identifier for service providers.
- **Services Offered:** A list of services the provider offers.
- **Pricing:** Pricing details for each service.
- **Availability:** Schedule showing when the provider is available for bookings.
- **Reviews and Ratings:** Accumulated ratings and reviews from users.

SERVICE DATA MODEL

1. Service Listing

Each service available on the platform is represented by a service listing:

- **Service ID:** A unique identifier for the service.
- **Service Type:** The category of the service (e.g., house cleaning, painting, carpooling, tutoring).
- **Description:** Detailed description of the service.
- **Provider ID:** The ID of the service provider offering the service.
- **Pricing:** Pricing information for the service.
- **Location:** Location information, if applicable (e.g., pickup and drop-off points for carpooling).

BOOKING DATA MODEL

1. Bookings

Records each booking made by a user for a specific service:
- **Booking ID:** A unique identifier for the booking.
- **User ID:** The ID of the user making the booking.
- **Service ID:** The ID of the service being booked.
- **Provider ID:** The ID of the service provider.
- **Date and Time:** The scheduled date and time for the service.
- **Status:** Booking status (e.g., pending, confirmed, completed, canceled).

MESSAGING DATA MODEL

1. Messaging and Conversations

To facilitate messaging between users and service providers:
- **Conversation ID:** A unique identifier for each conversation.
- **Participants:** IDs of users involved in the conversation.
- **Messages:** Messages exchanged within each conversation, with timestamps.

REVIEW AND RATING DATA MODEL

1. Reviews

Stores user reviews for service providers and users:
- **Review ID:** A unique identifier for each review.
- **Reviewer ID:** The ID of the user writing the review.
- **Reviewed ID:** The ID of the user or provider being reviewed.
- **Rating:** Numeric rating (e.g., 1 to 5 stars).
- **Review Text:** Detailed feedback and comments.

PAYMENT AND TRANSACTION DATA MODEL

1. Transactions

Records financial transactions related to bookings and payments:
- **Transaction ID:** A unique identifier for each transaction.
- **User ID:** The ID of the user making the payment.
- **Provider ID:** The ID of the service provider receiving payment.
- **Amount:** Transaction amount.
- **Payment Method:** Payment method used (e.g., credit card, PayPal).
- **Timestamp:** Date and time of the transaction.

These data models serve as the foundation of our app's database and are crucial for archiving, organizing, and retrieving the data necessary for the app's many features. The integrity and effectiveness of our app's data handling capabilities will be guaranteed if these data models are properly defined and implemented.

SCREEN FLOW DIAGRAM

The screen flow diagram below depicts how users will interact with our app's various screens as they traverse through it.
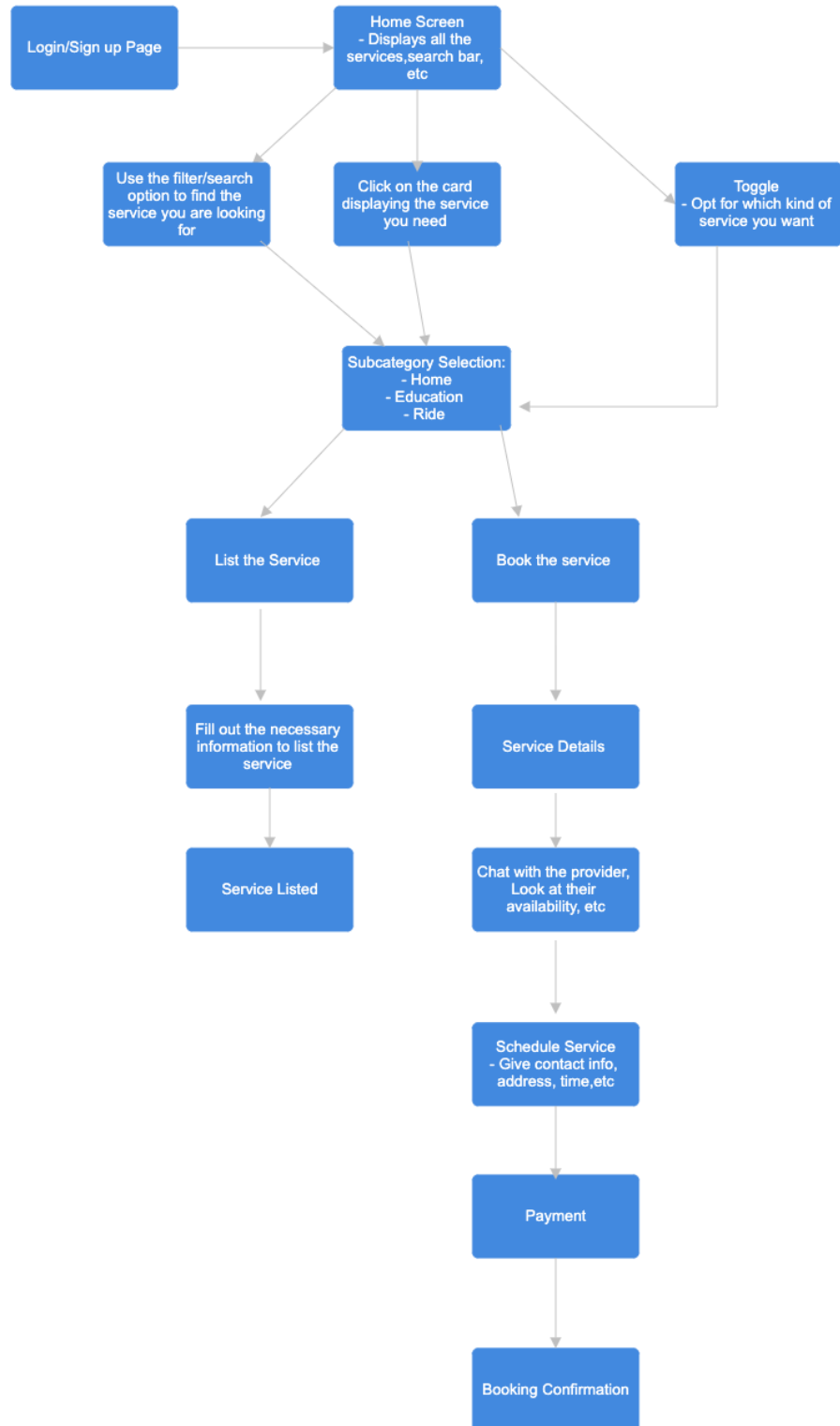
LOGIN & SIGN UP PAGE: When users launch the app, this is where they will begin. They can sign in to an existing account or create a new one.

HOME SCREEN: Users are led to the home screen after logging in, where they can see a list of all the services accessible in a card view. This panel will also have a search bar and other options.

THREE WAYS TO NAVIGATE FROM HOME SCREEN

1. **Filter/Search Option:** Users can search for a specific service by using filters or the search bar.
2. **Click on Service Card:** Users can learn more about a service by clicking on the card presenting it.
3. **Toggle from the Bottom of the Mobile App:** Another navigation option appears to be present at the bottom of the app, which could be a menu or navigation drawer.

CHOOSING SUBCATEGORY

 Users can select a subcategory that corresponds to the service they require after clicking on a service card or using the filter/search option.

SUBCATEGORY SPLIT

1. **List the Service:**
   - If the user is a service provider, they can list their service. Filling out the relevant information to create a service listing is required.
   - Once the information is entered, the service is published and available for booking by clients/users.
2. **Booking the Service:**
   - If the user is already a customer, they can book a service.
   - This takes consumers to the service details page, where they may find out more about the service.
   - Users can communicate with the service provider, check their availability, potentially negotiate terms, and ask inquiries.
   - Users that opt to proceed can schedule the service by entering contact information, address, time, and so on.
   - Users are led to the payment process after scheduling.
   - Users receive a booking confirmation once their payment is complete, completing the transaction.

SKETCHES

We share our preliminary rough designs that serve as visual conceptions for the desired look and feel of our app in the next part. These designs serve as a basic foundation for the app's design and user interface; they may alter and be more interactive as we develop our app, but they are an excellent starting point for how we want our app to look. The color theme has not yet been determined, however this is how we want our graphics to appear, which is why the sketches do not follow a color theme.

LOGIN & SIGN UP PAGE : A login and sign-up page is required for our mobile application, which requires user identification and registration. These pages serve as entry points for users to access their accounts or create new ones if they do not currently have one.
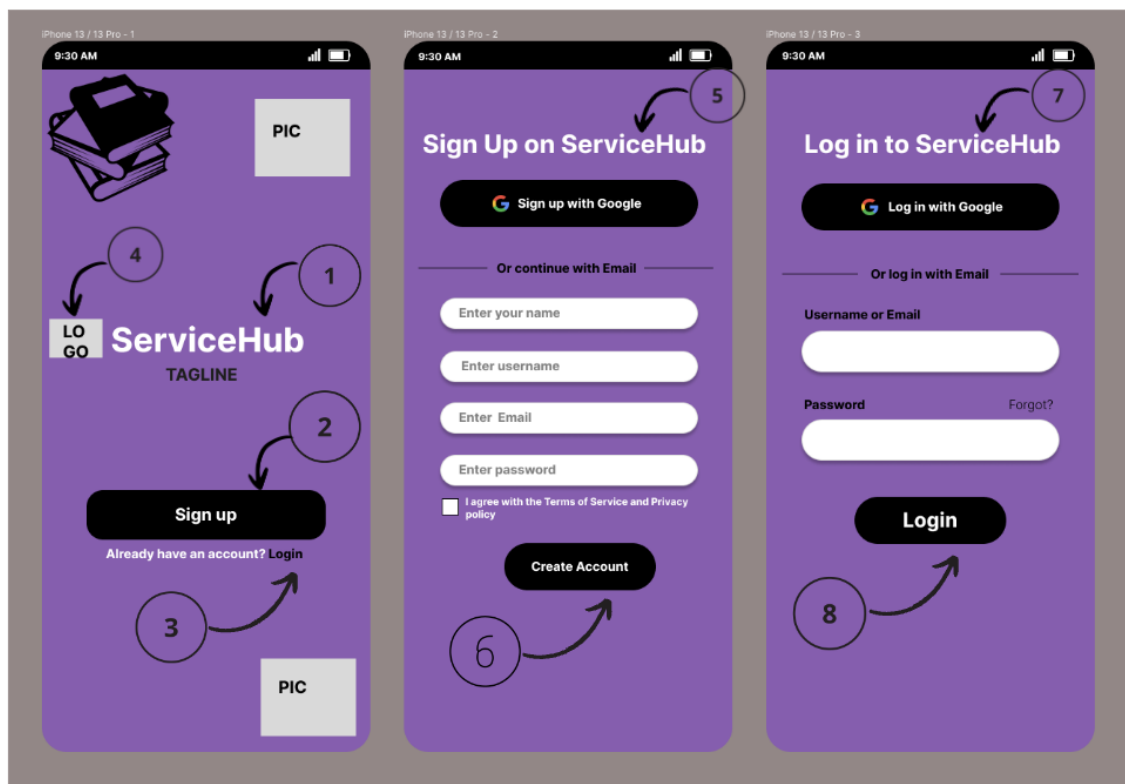

1. **App Name with Tagline:** This is our application's primary identifier.The tagline is a short, memorable statement that captures the essence of our app.

2. **Sign Up Button:** This is an important user interface component for onboarding new users. It's a clickable button that prompts those who don't already have an account to begin the registration process.

3. **Already Have an Account? Login:** This text element serves as an option for users who have previously created an account to access their profiles.

4. **Logo:** The app logo is a visual representation of our brand and serves as a symbol of our application.

5. **Sign up option using Google:** Users can streamline the registration process by utilizing their Google account. It's a type of social sign-up, which is useful for users who don't want to submit their information manually. By selecting this option, the user will be directed to the google login page.

6. **Create Account:** Users who do not want to use their Google account to register can utilize the "Create Account" button instead. By clicking this button, visitors will be taken to a registration form where they may enter their personal information such as their name, email address, and password.

7. **Login to ServiceHub using Google:** This feature, like the "Sign up option using Google," allows users to check in to our app using their Google credentials. It's a type of social login that streamlines access for people who already have accounts but prefer the ease of Google sign-in.

8. **Login:** For users who have already made accounts, the "Login" text element is critical. It allows users to access the app's sensitive parts by prompting them to input their login credentials, such as their email address and password. It is an essential component of user authentication..

ACCOUNT PAGE: In our mobile application, an Account Page is a critical component where users may control their personal information, preferences, and account-related actions. It acts as a central location for users to access and manage their account settings.

Sreen 2 - Leha
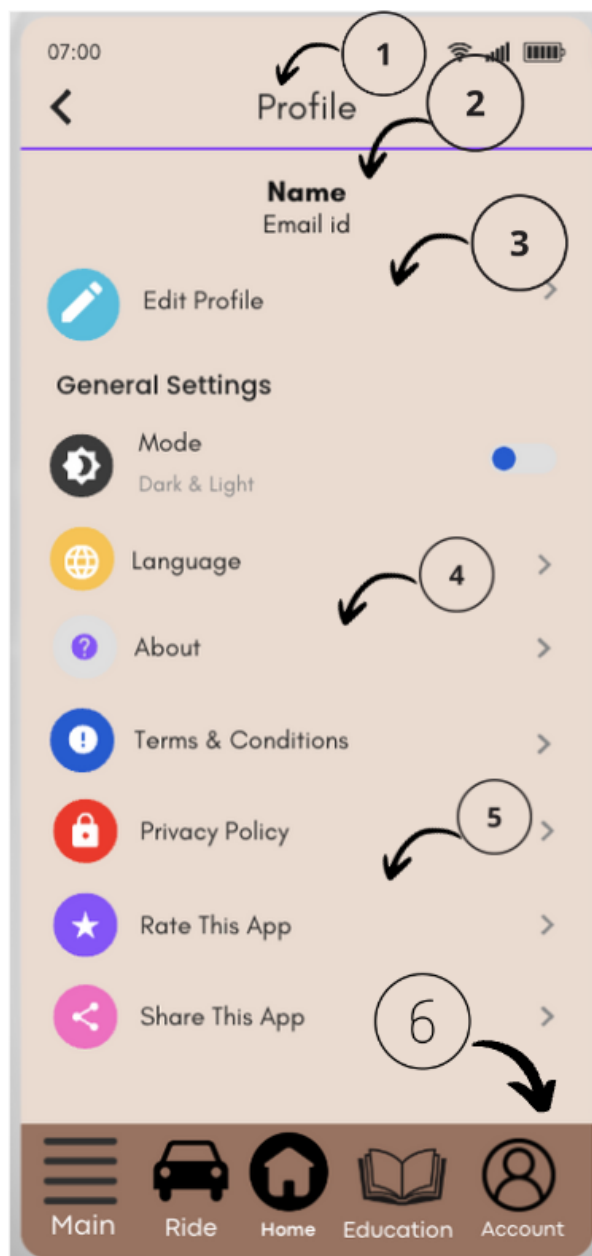
1. **Profile:** This section serves as a hub for all user-related information and settings within the application. Users can access and manage their account details, preferences, and other relevant information from this page.

2. **User Information:** The "User Information" label clearly shows the user's name and email address within the profile section. This gives users rapid access to their basic account information and allows them to identify their account at a look.

3. **Edit Profile:** Users can change their profile settings by clicking the "Edit Profile" button. Changing their profile image, updating personal information, modifying privacy settings, and customizing their account to better suit their interests are all examples of this.

4. **About:** The "About" section is intended to give users detailed information about your application. It will mostly consist of a "About Us" page or a section where users can obtain FAQs (Frequently Asked Questions) and extensive explanations of how the application works, its features, and its benefits. This area seeks to help users better understand the application and discover solutions to frequently asked questions.

5. **Rate the Application:** This feature invites users to rate the application in order to share their opinions and experiences with it. This is frequently accomplished through the use of a star rating system or a review prompt. User feedback is critical for enhancing the program and determining which elements require improvement or adjustment.

6. **Submit a Feedback Form:** In addition to rating the application, we are contemplating giving users the ability to leave feedback or report any errors or challenges they may encounter. This will most probably be linked under the "Rate the Application" section. Users can utilize feedback forms to voice their ideas, report problems, and suggest improvements in a systematic manner. It's a useful tool for gathering user insights as developers.

HOME PAGE: The home page of our mobile app is the first screen that customers view when they launch the app, and it is critical in establishing the tone for their experience.

Screen 3: Eshanth
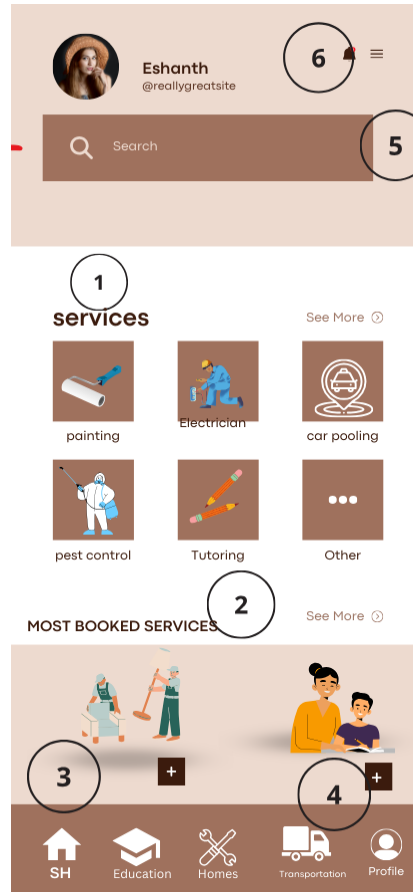
1. **Services:** This showcases a diverse range of core services, including painting, house cleaning, carpooling, tutoring and many more.

2. **Most Booked Services:** Here you can explore our "Most Booked Services" section to discover the services that are currently in high demand.

3. **Home Page:** This is the central home page within our app, as labeled in the sketch

4. **Profile:** To access your user profile, simply click on the profile icon in the menu. Manage your account details, preferences, and more from there.

5. **Search Bar:** Utilize our convenient search bar to find a specific service or service provider tailored to your requirements.

6. **Notifications:** Stay connected with service providers or seekers using our chat feature, accessible through the icon in the app. It's your direct line of communication for seamless interactions.

CHATBOX PAGE: A chatbox option for our mobile application is a user interface feature that allows users and the service provider within the app to communicate via text in real time. We will

implement one of the following options: a little window or widget on the screen, perhaps at the bottom or a corner of the app interface, that allows users and providers to communicate about their service.

Screen 4: Eshanth
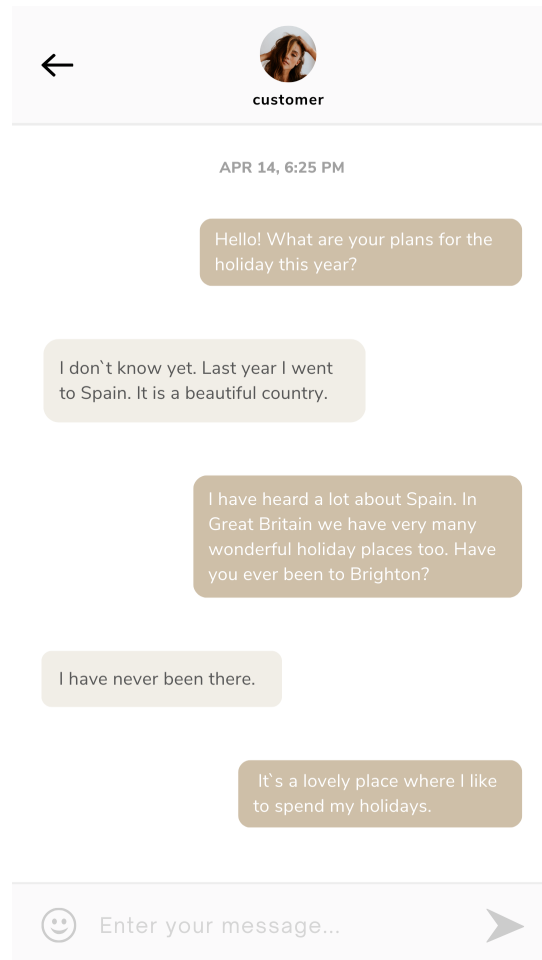
The above implementation is a chatbox, and a chat between typically a user and a provider.

SERVICE PAGE: It is a critical page that allows users to explore and book the app's numerous services, as well as list a service for that service category. It functions as a user-friendly interface via which customers may browse available services, list their services, examine details, and make appointments or bookings.

Screen 5 : Varun

1. **Logo for Home Service:** Acts as an interactive icon that, when clicked, takes users to the home services section, offering a visual and intuitive way to navigate

2. **Logo for Car Pooling:** Works as a clickable image that leads users to the carpooling services, allowing for an engaging, image-based user experience.

3. **Logo for Education:** Functions as a clickable graphic that navigates users to the education or tutoring services, making the interface user-friendly.

4. **Description for Home Service:** Briefly explains the types of home services offered, helping users quickly understand what this section is about.

5. **Description for Carpooling:** Summarizes the carpooling services provided, offering users quick insights into the feature before clicking.

6. **Description for Education:** Provides a quick summary of what the education or tutoring section offers, preparing users for what they'll find next.

7. **Settings Button:** Allows users to adjust their profile settings, giving them control over personalization and preferences.

8. **Contact Button:** Provides an immediate point of contact for users experiencing issues with the app, enhancing customer service.

9. **Home Button:** Serves as a quick navigation option to return to the home screen, offering users a simple way to start over or change focus

10. **Logo:** Serves as the brand identity for your application, providing a sense of familiarity and trust for users.

Screen 6 - Varun
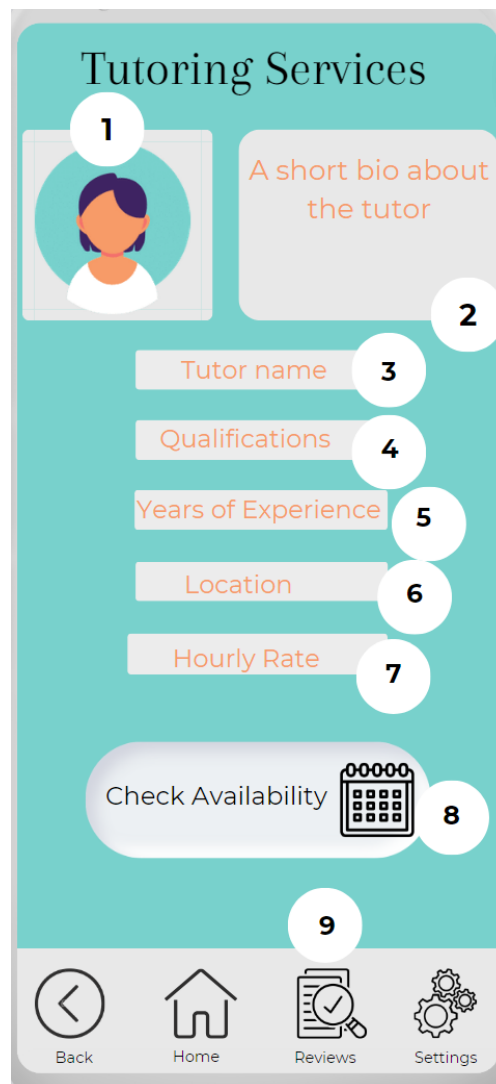
1. **Profile:** Displays the tutor's face or avatar, offering a personalized touch and making the profile more relatable.

2. **Bio:** Provides a brief overview of the tutor's background and skills, helping students and parents quickly understand who the tutor is.

3. **Tutor Name:** Clearly identifies the tutor, serving as the main title of the profile for easy reference and searchability.

4. **Qualifications**: Lists the tutor's academic and professional credentials, instilling confidence in the tutor's expertise.

5. **Years of Experience:** Indicates the tutor's level of experience, helping users gauge the tutor's familiarity with teaching.

6. **Location:** Shows where the tutor is based, which is crucial for scheduling and understanding if local or remote tutoring is possible.

7. **Hourly Rate:** Clearly states the cost of hiring the tutor, enabling students and parents to consider their budget.

8. **Check Availability Button:** Allows users to quickly see when the tutor is free for bookings, streamlining the scheduling process.

9. **Reviews:** Features testimonials and ratings from previous students, offering social proof of the tutor's effectiveness and reliability.

SERVICE HOME SCREEN PAGE: The service homepage is a user-friendly portal for discovering multiple services under a certain category. Users may simply find, browse, and use services that are suited to their specific requirements and preferences.

Screen 7 - Niharika

1. **Title and Logo:** The app showcases our project's title in a sleek and intuitive interface, complemented by our meticulously designed logo. This ensures a visually appealing and memorable first impression for users.

2. **Service Title:** The service title serves as the core identity of our app, representing the essence of what we offer. It encapsulates the unique value proposition that sets us apart in the realm of educational services.

3. **Service Title:** Throughout the app, our service title is consistently emphasized to reinforce its significance. This strategic placement aims to create a lasting brand impression and ensure that users are always aware of the exceptional service they are engaging with.

4. **Requesting a Tutor:** In this section, users can seamlessly request a tutor to cater to their specific learning needs. Detailed benefits of this feature are provided, highlighting how it streamlines the process, matches students with qualified tutors, and fosters a conducive learning environment. Step-by-step instructions guide users through the simple process of initiating a tutor request.

5. **Becoming a Tutor:** This section elucidates the advantages and opportunities associated with becoming a tutor on our platform. Prospective tutors are informed about the potential for personal growth, the chance to make a positive impact on learners, and the financial benefits. Clear, step-by-step instructions elucidate how to embark on the journey of becoming a valued tutor within our community.

6. **Request Button Functionality:** The 'Request' button serves as the gateway to connecting users with the perfect tutor. Upon activation, it seamlessly navigates users to a dedicated page where a curated list of available tutors is presented. This intuitive feature ensures a user-friendly experience, simplifying the process of finding the ideal tutor.

7. **Form Submission for Tutor Request:** Clicking the 'Request' button initiates a seamless transition to a dedicated page where users provide essential details. A carefully crafted form prompts the users to furnish their personal information along with the specifics about the subject they're seeking assistance in. This streamlined process ensures that the user's requirements are accurately matched with a compatible tutor.

CHECKOUT PAGE: To guarantee a seamless and secure user experience, our mobile application necessitates an impeccably crafted checkout page. This pivotal element not only enhances convenience but also instills trust, ensuring a hassle-free transaction process for our valued users.

Screen 8 - Niharika
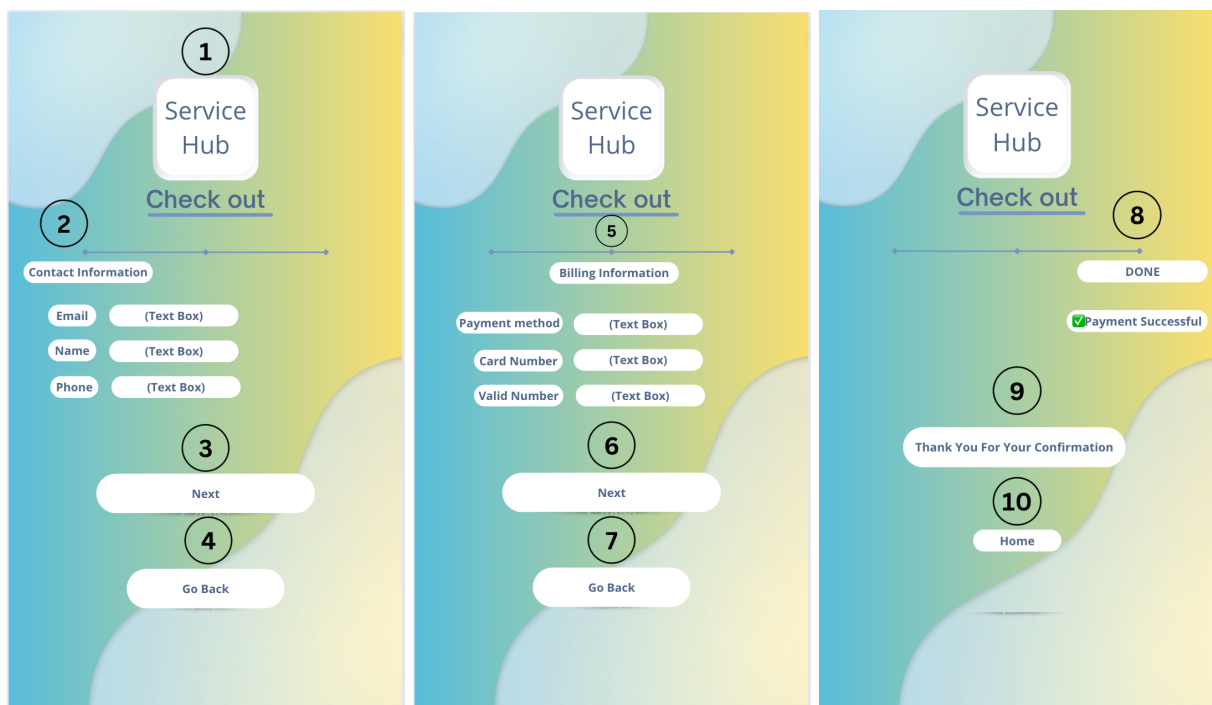
1. **Logo and Title:** Users are pleasantly welcomed on the first screen by the recognizable "ServiceHub" emblem, setting the stage for an easy and reliable experience. The title and the visually appealing logo work together to create a powerful brand presence that ensures rapid identification.

2. **Contact Information Input:** The checkout procedure has a simple form where you can enter important contact information. Users are invited to give their name, phone number, and email address. In order to promote effective communication and service delivery, this stage makes sure that we have correct and trustworthy information.

3. **Next Checkout:** Upon clicking "Next," users seamlessly progress to the subsequent section of the checkout process. This intuitive navigation ensures a fluid and efficient experience, allowing users to move forward in their transaction with ease.

4. **"Go Back" Button:** For users who may need to revise or reevaluate their previous entries, the "Go Back" button provides a convenient way to backtrack in the checkout process. Clicking this button allows users to make any necessary adjustments before proceeding further.

5. **Billing Information:** In this section, users are prompted to provide their preferred payment method, along with pertinent billing details. This includes entering their card number, expiration date, and the valid security code. This step guarantees a secure and straightforward transaction process.

6. **"Next":** To move forward with the checkout process, users simply need to click "Next." This action signals the system to process the provided billing information and progress towards the finalization of the transaction.

7. **"Go Back":** Should users wish to revisit or modify their billing information, the "Go Back" button offers a quick and hassle-free way to do so. Clicking this button allows users to make any necessary adjustments before continuing with the checkout process.

8. **"Done":** Upon successful processing of the payment, users are greeted with a reassuring "Done" message. This confirmation assures users that their transaction has been completed successfully, instilling confidence in the reliability of our service.

9. **"Thank You":** Post-payment, users are met with a heartfelt "Thank you for your confirmation" message. This gesture of appreciation reinforces our commitment to excellent service and leaves the users with a positive and memorable impression of their interaction.

10. **Return Home:** To return to the app's main interface, users can simply select the "Home" option. This provides a seamless transition back to the starting point, allowing users to explore further or engage with other features of the app.