# Project Amita

Team 36

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Client : Anita Rego (Amita Care)

### Acknowledgement

We would like to express our sincere appreciation to our Professor Mr.Ramesh Loganathan and our mentor Ms.Lavisha Bhambri for their guidance and support throughout the course of our project. As we submit our final presentation on this project, we cannot thank you enough for your invaluable feedback and expert advice.

Your timely and constructive feedback on our project has been instrumental in shaping our ideas and improving the quality of our work. Your insightful suggestions and expert guidance have enabled us to overcome the challenges and obstacles we faced during the project.

We would also like to extend our gratitude to our client, who entrusted us with this project and provided us with the opportunity to apply the knowledge and skills we have gained in this course.

This project has been an incredible learning experience for us, and we are deeply grateful for the support and mentorship you have provided us. Your teachings and mentorship have not only helped us in completing this project successfully, but they have also equipped us with the skills and knowledge needed to excel in our future endeavors.

#### About Amita

AMITA is a tele-mental health intervention and psychotherapy platform that brings together a comprehensive range of services starting from online consultations to therapy sessions accessible from any part of the world. A one- stop destination for mental health services, it is equipped with a database of certified mental health professionals qualified to assist you with a variety of mental health and wellness issues.

Resolve emotional issues and improve their mental health and sense of well-being, all in a supportive and safe space.



#### Overview

**Problem Statement** - We need to create a mobile application based on the Amita care website <a href="https://www.amitacare.com/">https://www.amitacare.com/</a>.

The user should first login/Register with his credentials.

The user can get a preliminary diagnosis based on his symptoms using the Knidian (Symptom Checker) Al.

Our app allows the user to book a therapy session, and choose the Therapist/Doctor by looking at profiles of all the available doctors, and choosing the one best suited for their needs.

User can check his previous/ upcoming appointments scheduled and can join the meet through the web via the link sent through the mail.

If the user has provided his ABHA number at the time of registration, his preliminary diagnosis and appointment is added to his medical history stored in the government database.

#### Motivation

**Motivation** for doing this project is to create an application for the website since according to <a href="https://wwo.com/">https://wwo.com/</a> Mobile users spend 88% of their time on mobile apps and just 12% of the time on mobile websites.

Application being more user friendly as compared to website will allow to expand the client's user base.

This will eventually provide ease to the user to book an appointment on the go with the doctor and to check his previous as well as his upcoming appointments too.

Ultimately this removes the constraint of having a laptop or a desktop to join the meeting therefore increasing the user database.

### Scoping - Timeline

#### 1. February

- a. First and Second week Researching on speech to text, text to speech and text to sign language according to Indian sign language system.
- b. Third week Understanding client's new requirements on creating mobile application. Finalising app design
- c. Fourth week Creation of Login via email and Registration page.

#### 2. March

- a. First week Integration of Knidian Checker Al. Adding doctor's detail to the application. Getting ready on all R1 requirements
- b. Second week Adding reset password and ABHA creation functionality. Login via Phone No. / OTP. Tokenization.
- c. Third week Creating Profile page and home page with today's plus upcoming appointment details.
- d. Fourth week Creating interface for the client to book an appointment including adding google calendar to select dates.

#### 3. April

- a. First week Adding additional functionalities on the appointment page like displaying available time slots for the appointment for each therapists. Also updating/rendering appointment details.
- b. Second week Adding Payment feature via Razorpay and implementing coupon system.
- c. Third week Testing all the functionalities and making any required changes.
- d. Fourth week Creating the presentation and live demonstration.

## Completed/ Pending Tasks

Milestone	Current Status	Sprint	Release
Understand Client Requirements		Dev sprint	R1
Finalize App design and Client Approval		Dev sprint	R1
Login Page		Dev sprint	R1
Register Page		Dev sprint	R1
Forgot / Reset Password		Dev sprint	R1
Integration of Knidian Symptom Checker		Dev sprint	R1

## Completed/ Pending Tasks

Milestone	Current Status	Sprint	Release
Profile Page of the User		Dev sprint	R2
Adding ABHA creation feature on register page		Dev sprint	R2
Coupon System		Dev sprint	R2
Tokenization and Caching the user token to "Remember Me"		Dev sprint	R2
Adding doctor's details to the application		Dev sprint	R2
Logout Feature		Dev sprint	R2

## Completed/ Pending Tasks

Milestone	Current Status	Sprint	Release
Slot Selection and Date Selection with Google Calendar		Dev sprint	R2
Coupon System		Dev sprint	R2
RazorPay Integration System		Dev sprint	R2

#### Tech Stack Used



 <u>Flutter</u> - Flutter is Google's SDK for crafting beautiful, fast user experiences for mobile, web, and desktop from a single codebase.

Flutter works with any development tool (or none at all), and also includes editor plugins for both Visual Studio Code and IntelliJ / Android Studio



<u>Dart</u> - Dart is an open-source, general-purpose, object-oriented programming language
with C-style syntax developed by Google in 2011. The purpose of Dart programming is to
create a frontend user interfaces for the web and mobile apps. It is under active
development, compiled to native machine code for building mobile apps, inspired by other
programming languages such as Java, JavaScript, C#, and is Strongly Typed



 <u>Database</u> - We are using AMITA's custom server. We don't have complete access to it (hence can't modify or add to the backend) but we do have API's to call the backend for particular details, etc.

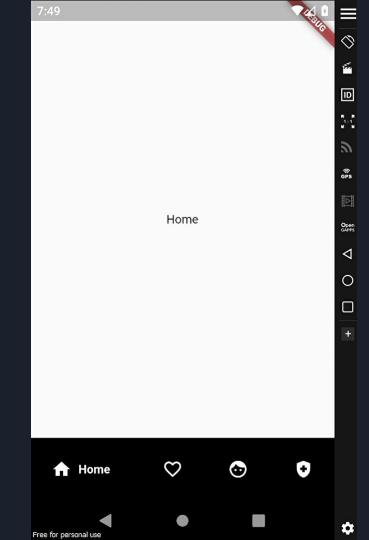
## UI/UX Design

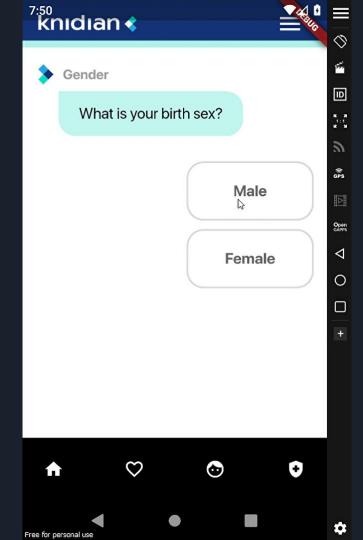
Our project required us to follow a specific color palette consisting of white, grey, yellow, and orange, which had to align with the design pattern of the website they already have.

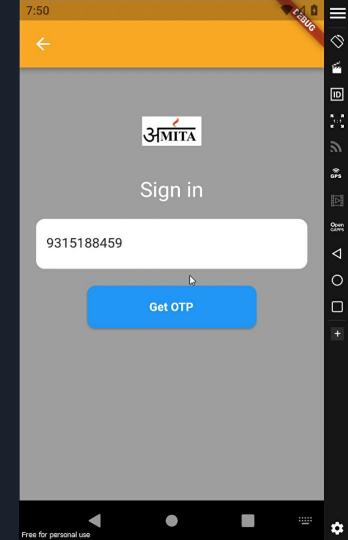
Additionally, we were instructed to keep the frontend of the website simple and calm, without any excessive dynamic activities. This was important as the primary user base of the website were patients-often disabled ones, and we wanted to ensure that the interface did not come across as too flashy or complicated, which could potentially make them uncomfortable and lead them to abandon the website.

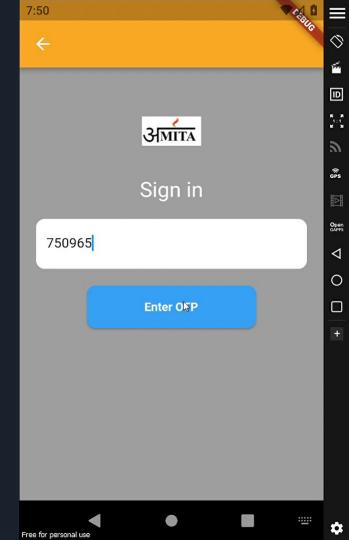
Overall, our goal was to create a user-friendly interface that catered to the needs of our target audience.

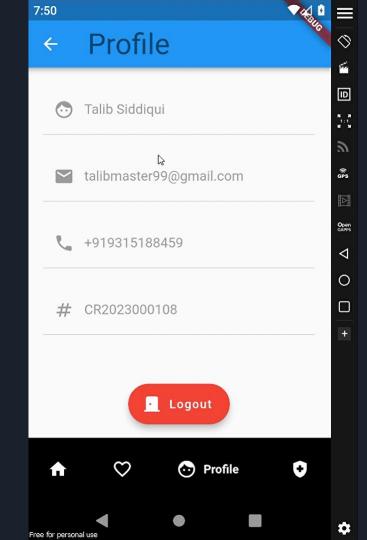
## Screenshots

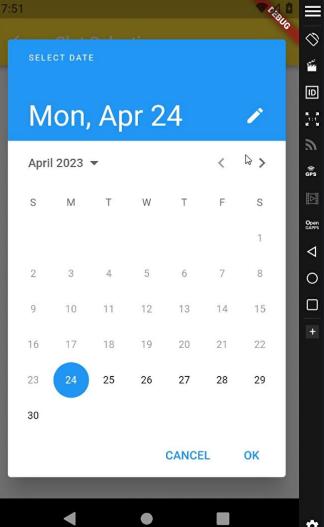




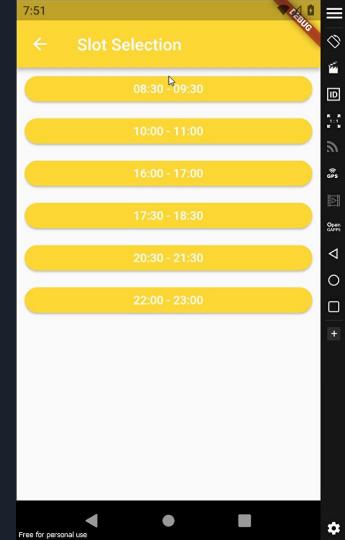


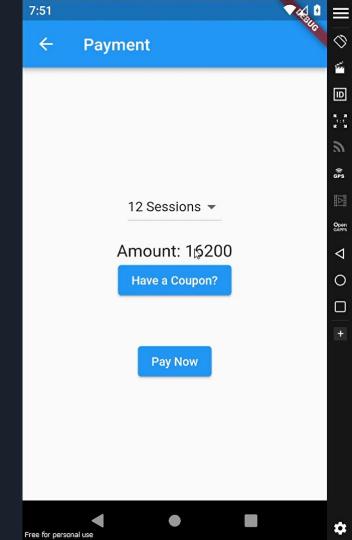


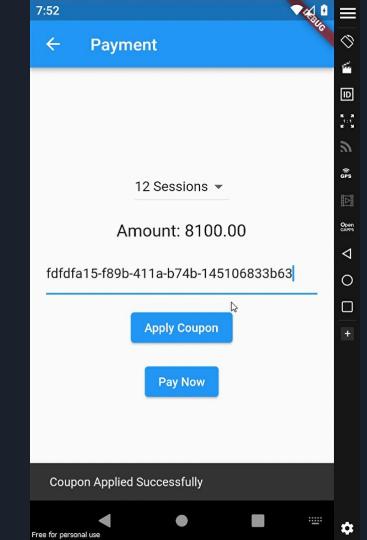




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#### Research Done

Majority of Research was done for the initial project, The Sign Language translator, where we explored:

- Computer Vision, the dataset required, annotations to be done, explored some libraries like TensorFlow,OpenCV and algorithms like YOLO v3.
- Speech Synthesis offered by Google Cloud
- Looked into trained models that converted ISL to text and vice versa

For the current client Requirements, we explored:

- Flutter, Dart, Android Studio
- Methods to integrate a Symptom checker program to our app
- Methods to integrate with Ayushman Bharat Health Account(ABHA), which later we
  couldn't do since it requires a doctor's Health ID which our client hasn't gotten yet
  from the Govt. of India
- Working and integration of Razor Pay and implementation of the coupon system

### Challenges Faced

- Change in client requirements:
   We were initially assigned the Project to work upon a Sign Language Translator.
   Around the end of Feb, the client completely scrapped the original idea, and asked us to work on a mobile app instead.
- Being new to app development, with none of our team members having a solid background in the latter brought upon a bit of a hurdle costing a few days/weeks to get a hang of the OOP Structure and Syntax along with android development and Flutter.

### Challenges Faced contd.

- Having a Non Tech Client only slowed things down as there were usual confusions and ambiguities with beating around the bush of her requirements.
  - We had to explain her why we needed the resources from her for testing purposes, etc which she repeatedly had to ask her technical advisor for.
- Scheduling meetings with the client and their technical advisor has been a challenge due to their frequent travel and busy schedules and them never being free at the same time.
- As the client did not allow us access to the original database, we were given access to a test server, which in fact never worked properly.

#### Challenges Faced contd.

- Additionally, the technical advisor often forgot delivering important information, such as data/API keys which we asked, and was slow to respond even when reminded multiple times.
- One of the most crucial keys, for the payment portal was provided on the 24th April,
   the same day code freeze is due making it a bit too hectic to finish.

Thank You!