

Ajwa Shahid

My Role

- UX Researcher
- UI/UX Designer
- Android Developer

Duration

January 2023 - May 2023

Team Member

Taha Zakir

Translation

Super Abbu is Urdu for Super Dad

Process

- 1. Problem Identification
- 2. User Research
- 3. Information Synthesis and Ideation
- 4. Prototyping
- 5. Outcome and Reflections



Problem Identification

Pakistan's high infant and maternal mortality rates of 52 per 1,000 live births are exacerbated by limited paternal involvement, particularly in rural areas. Addressing this is difficult as less than 25% of the population has internet access, and 42% are illiterate.

A free voice-based platform, "<u>Super Abbu</u>," was introduced to enable fathers to ask questions about maternal health (answered by a team of doctors) and engage with other expectant parents. While the service was a success, the doctors were quickly overwhelmed by the sheer volume of weekly user queries.

This led to slower doctor response times, negatively impacting Super Abbu users.



Problem: How might we assist doctors who aren't tech-savvy in improving their response times?

User Research

- Target Audience: Medical Doctors (or Residents) based in Pakistan.
- Study Design: One focus group (online on Zoom) of 5 resident doctors and 3 semistructured interviews with medical doctors (online and in-person).

Questions

- 1. Can you briefly describe your current workflow for handling remote patient queries?
- 2. What tools or software are you currently using for professional communication with colleagues?
- 3. Are there any bottlenecks or delays you experience when answering patient queries?
- 4. What features would you like to see in a collaboration application aimed at medical professionals?
- 5. What would be your preferred input modalities to answer patient queries?

Insights

Most familiar with Whatsapp: used for corresponding with doctors and patients alike.

Group chats and answer history as most wanted features

Busy work
weeks and
long hours as
bottle-necks

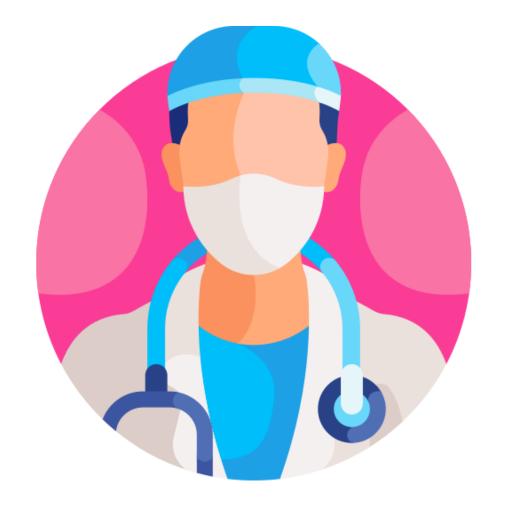
Voice Input most prefered, as it allows multitasking

mirc

Information Synthesis and Ideation

We needed to complete the design and development of an MVP (Minimum Viable Product) as soon as possible to bring the Super Abbu service back online. Thus, we created a persona to stay anchored on the most pertinent user needs.

Persona



Name: Dr. Sal

Age: 48 years

Occupation: Medical Doctor

Hometown: Lahore, Pakistan

Goal: To answer patient queries effectively in his free time.

"I try my best to get back to patients as soon as possible. However, some complex questions require me to consult other doctors, but arranging such a consultation causes a delay due to everyone's busy schedule."

Story

Sal is a 48-year-old medical doctor who works at Sal's Clinic. He is passionate about helping people in his community with his medical expertise. Thus, he joined the Super Abbu team part-time to answer user queries about maternal health through his phone.

Frustrations

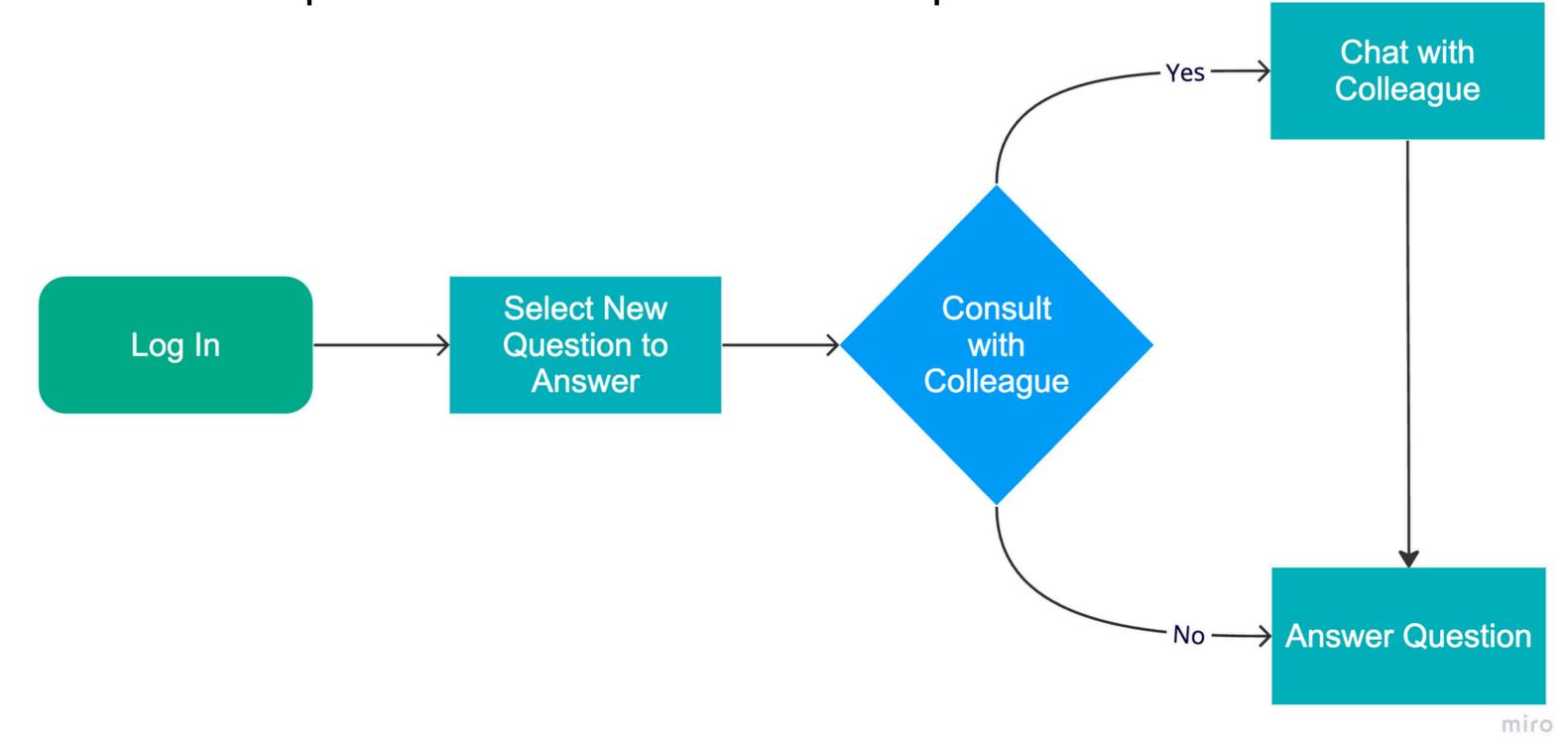
- Not tech-savvy. WhatsApp is the only application he is familiar with and comfortable using.
- Incredibly busy work-life. Generally, finds himself answering Super Abbu patient queries at the end of his workday.

Need

A mobile application that allows him to collaborate on and respond to patient queries efficiently.

Task Flow for MVP

- The doctor browses the list of New Questions and selects one.
- The doctor uses the provided interface to answer the question.



Prototyping

I created the high-fidelity prototype on Figma due to the newly introduced Dev Mode, which would quicken up our workflow.

The focus of this design was familiarity. I wanted to design a familiar, user-friendly, and intuitive interface for the doctors so that they efficiently answer patient queries with minimal interaction cost.

Style Guide

According to color theory, blue symbolizes calm, security, and order. Furthermore, research shows that blue and white is the most popular color scheme in healthcare design, aligning with my goal for a familiar look.

I selected the Roboto typeface for its screen readability and balance between content density and reading comfort.

Color Scheme and Fonts

Primary	#005DB6	Secondary	#00658F	Tertiary	#983F6C
On Primary	#FFFFFF	On Secondary	#FFFFFF	On Tertiary	#FFFFFF
Primary Container	#D6E3FF	Secondary Container	#C7E7FF	Tertiary Container	#FFD8E6
On Primary Container	#001B3D	On Secondary Containe	r #001E2E	On Tertiary Container	#3D0025

Title Large - Roboto Regular 22/28.0

Title Medium - Roboto Medium 16/24 . +0.15

Title Small - Roboto Medium 14/20 . +0.1

Label Large - Roboto Medium 14/20 . +0.1

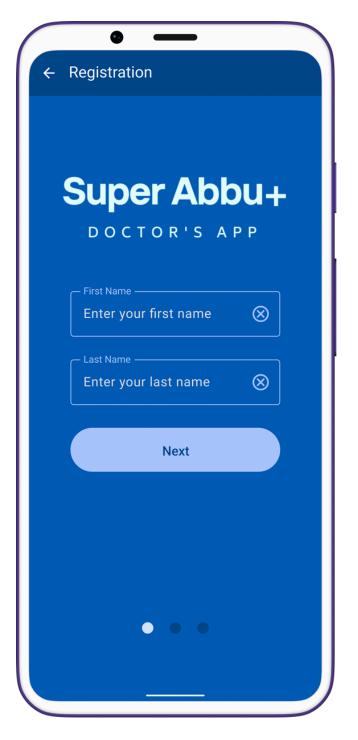
Label Medium - Roboto Medium 12/16 . +0.5

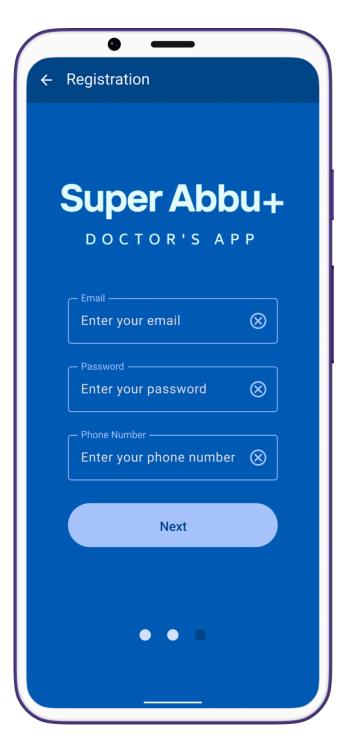
Label Small - Roboto Medium 11/16 . +0.5

Hi-fi Prototype

We implemented a security code requirement in the application's registration flow to protect sensitive patient data, providing an added defense against data theft. This would ensure that only doctors from our team could register for the application.



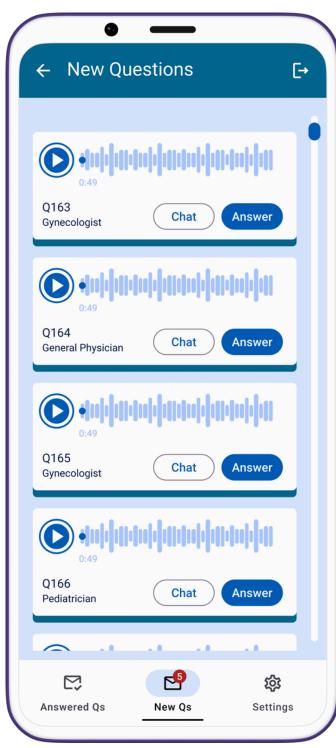






Due to the doctor's familiarity with the messaging application, we implemented a WhatsApp-like interface for the collaboration and answer mechanisms. Doctors can listen to the patient's query, collaborate with others, and record their answers from the same interface. The complete prototype can be found on this <u>link</u>.









Outcome

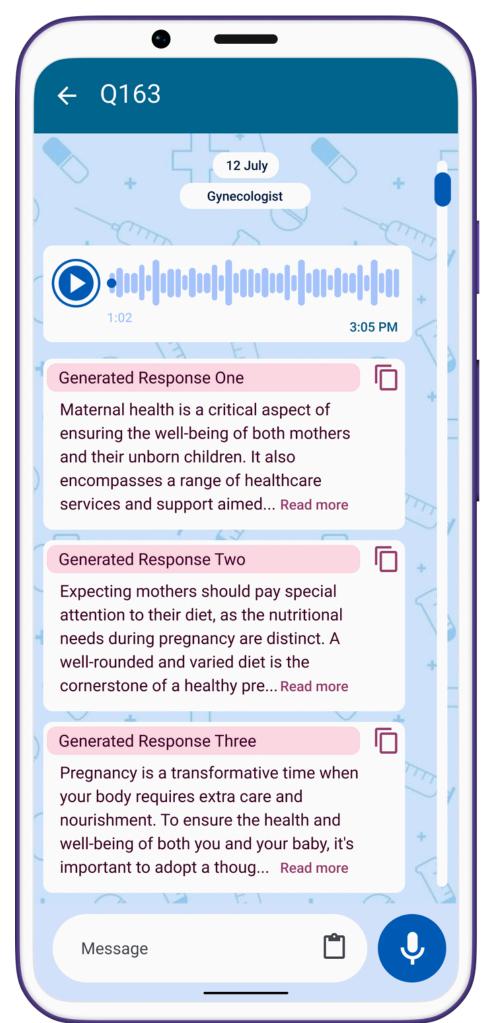
We developed an Android version of this application (with a PHP backend), which was launched on March 6, 2023. To date, the doctors have answered 100% of valid questions on the platform. I have included a number of relevant statistics below:

Stats as of October 26th 2023	Number of	By Number of Users
Total Successful Calls	12919	2458
Total Valid Questions Posted	849	512
Times Answers Were Played	10649	815 miro

For future developments of the Super Abbu doctors app, we're exploring integrating large language models within the interface. This enhancement aims to elevate the quality of doctor responses and expedite their response times. Pertinent research directions for this update would relate to how we can evaluate and negate automation biases that may arise in the doctor's responses.







Reflections

This project was an amazing experience for me 🐎

As someone who worked on the design, development, and deployment of this application, I am immensely proud of the impact that it has created. The UX research for this project taught me how to design for populations with limited tech literacy. I am eager to dive deeper into this domain and harness these insights in future endeavors.

My heartfelt appreciation goes out to Professor Mustafa Naseem and the entire team. Their guidance was indispensable, and their expertise significantly enriched the trajectory of our project.