

Telehealth

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2 Change Log

Revision	Description of changes
A	Initial version

3 Purpose & Scope (of this document)

The purpose of this document is to outline the detailed specifications and functionality of Telehealth. Here , users from urban and rural areas are able to book online consultation with doctors and get their lab tests and self-help kits delivered to them. Following a consultation, doctors can electronically prescribe medications. Telehealth is also integrated with clinics and pharmacies to ensure coordination of lab tests and prescription management respectively.

The scope can be further expanded or customized based on specific project requirements and considerations. The mentioned features provide a general overview of the Telehealth app's functionality, focusing on enabling online consultations, facilitating lab tests and self-help kits, prescription management, and integration with healthcare providers to ensure a smooth user experience and quality healthcare services.

4 Market Assessment

4.1 Market size and growth

Telehealth has experienced significant growth, accelerated by the COVID-19 pandemic, and is expected to continue expanding in the coming years.

4.2 Target regions and countries

- India
- Germany

4.3 Customer segment

- Easily accessible to people living in rural or remote areas.
- Caters to individuals who have limited options for healthcare services in their local area. They may have to travel long distances to access specialized care or wait for extended periods to see a healthcare professional.

5 Competition

Competition includes established Telehealth Platforms such as Mfine , Amwell which offer similar services and have a wide user base along with strong brand recognition.

6 Users / actors

6.1 Registered user



Registered User

Description

The registered user is registered in the system and can book consultations

Available services:

- can book consultations with doctors
- can order lab tests / self help kits
- browse their appointments and doctors letters along with medicines
- Pay by credit/ debit card . Vouchers and discount coupons are also available
- Additional payment methods such as Apple Pay & Paypal

NOT available:

- Chat with doctor will disappear after 3 weeks after consultation

6.2 Doctor



Doctor

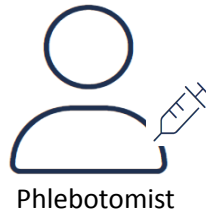
Description

Doctors are responsible for offering online consultation to the users.

Available services:

- offers online consultations to users
- provides patients with prescription and doctors letter

6.3 Phlebotomist



Description

Draws blood from user and transports it back to the clinic along with the delivery of medicines

Available services:

- Acts as delivery agents
- Draws blood from users and transports it to clinic
- Delivers medicines and self-help kits from pharmacy

6.4 Lab Technician



Description

Lab Technicians are responsible for performing various laboratory tests and procedures on patient samples such as blood, urine, tissue, or other body fluids. They are integrated with Telehealth and conduct tests, analyze results and document findings.

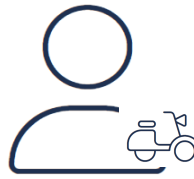
6.5 Pharmacist



Description

Pharmacists are healthcare professionals that dispense required medications to the users. In addition to this , they also provide self - help kits to users and are integrated with Telehealth

6.6 Delivery Agent



Delivery Agent

Description

Delivery agents are responsible for delivering medicines and self-test kits to users timely and securely.

6.7 User

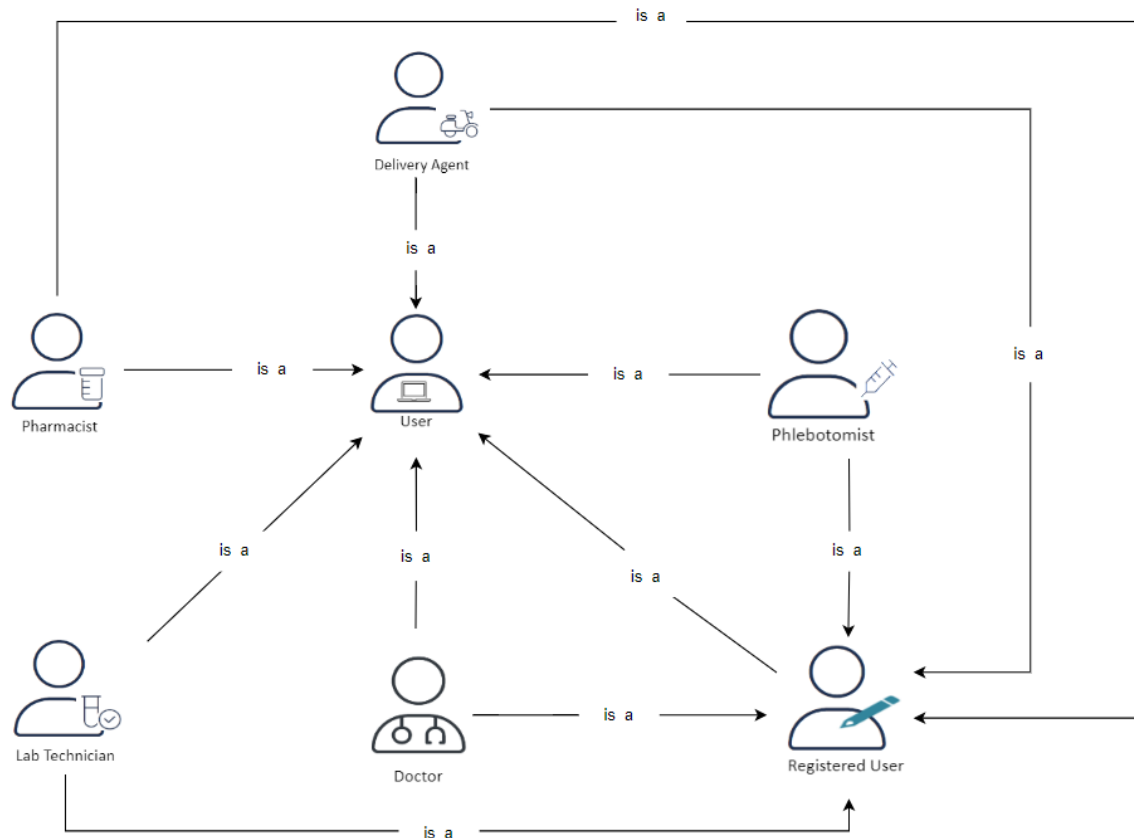


User

Description

A user has access to the website. Registered users, doctors, and phlebotomists, lab technicians, delivery agents are all users. In this document the term “user” is embracing all three aforementioned actors. Thus if “user” is mentioned in a requirement, the requirement holds for doctor, phlebotomist, lab technicians, delivery agents and for registered users.

6.6 Actors model

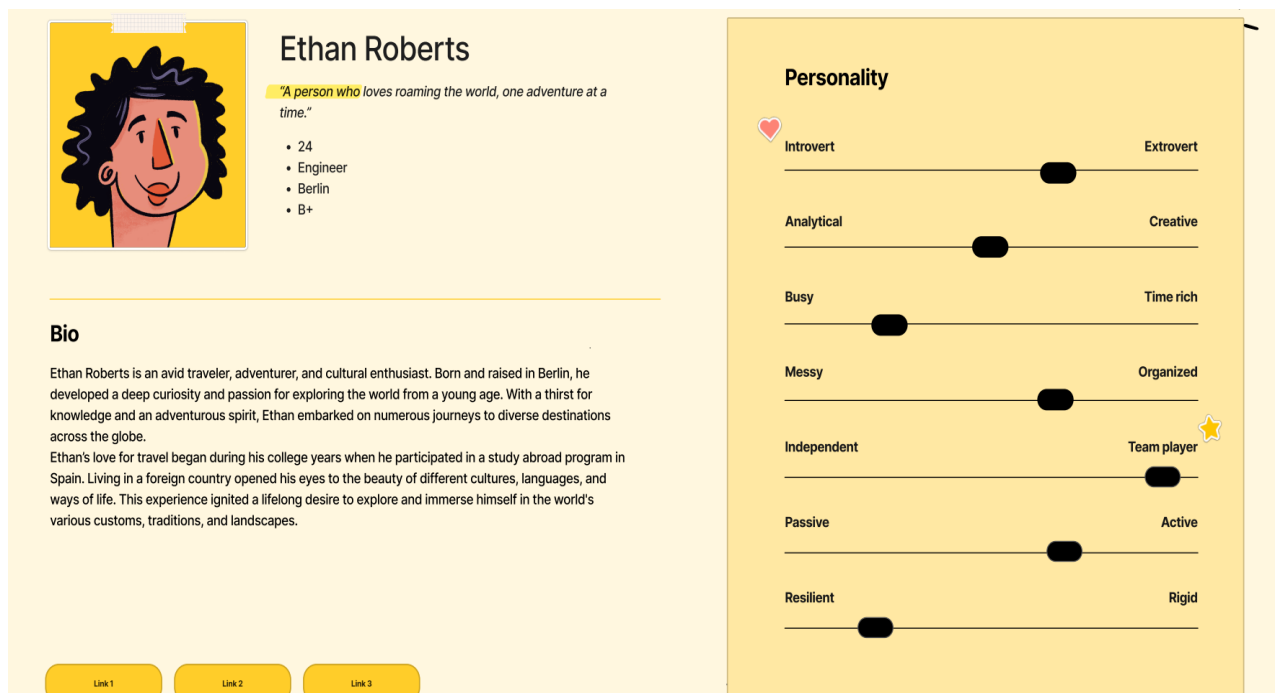


7 Product Overview

7.1 Application environment



User Journey



Persona

7.2 Use scenarios

7.2.1 USE-SC-001 Booking a consultation

Title	Doctor Consultation
ID	USE-SC-001
Primary Actor	Doctor, Patient
Further Actors	Lab technicians, Pharmacists, Phlebotomists
Preconditions	Internet access is required and device to access the internet (cell phone or Desktop, tablet)
Success scenario	<ol style="list-style-type: none">1. Login to the application2. Research and identify the doctor with respect to the need.3. Schedule an appointment.4. Confirm necessary technology requirements.5. Testing Equipment and connectivity.6. At the appointed time join the consultation.7. Establishing Communication and discussing medical concerns.8. Visual Examination, Diagnosis and treatment plan.9. Documentation and prescription.10. Follow-up, next steps and closing the consultation.
Alternative Success scenario for step 3	Due to technical glitches Consultation might get canceled or rescheduled.
Success Guarantees	The patient will be alerted with the required message.

7.3 Description of product

Telehealth is a digital platform designed to provide convenient and accessible healthcare services remotely. It allows patients to connect with doctors through secure video conferencing or messaging.

Users can schedule and conduct video consultations with doctors from the comfort of their own homes by scheduling appointments. This feature eliminates the need for in-person visits, saving time and travel expenses. It ensures secure and private communication between patients and doctors and users can receive reminders and notifications about upcoming appointments, ensuring they don't miss any important consultations.

In addition to this, patients can maintain their medical history, including diagnoses, medications, and test results, within the application. This allows healthcare professionals to access the information

during consultations, leading to more accurate diagnoses and personalized treatment plans. A chatbot is also available which focuses on the preliminary diagnosis of the patient.

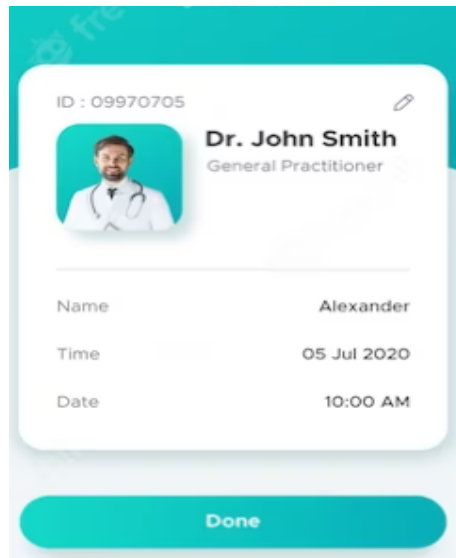
Telehealth allows healthcare professionals to electronically send prescriptions to pharmacies on behalf of the patients. This streamlines the prescription process, eliminating the need for physical prescriptions and reducing the risk of errors.

Finally it also offers self help kits for users who wish to avail them . Telehealth also provides access to a wealth of health-related information, including articles, videos, and educational resources. Users can stay informed about various health topics and make informed decisions regarding their well-being.

7.3.1 Must-have: What the user expects in any case

The users expects the following as must-haves:

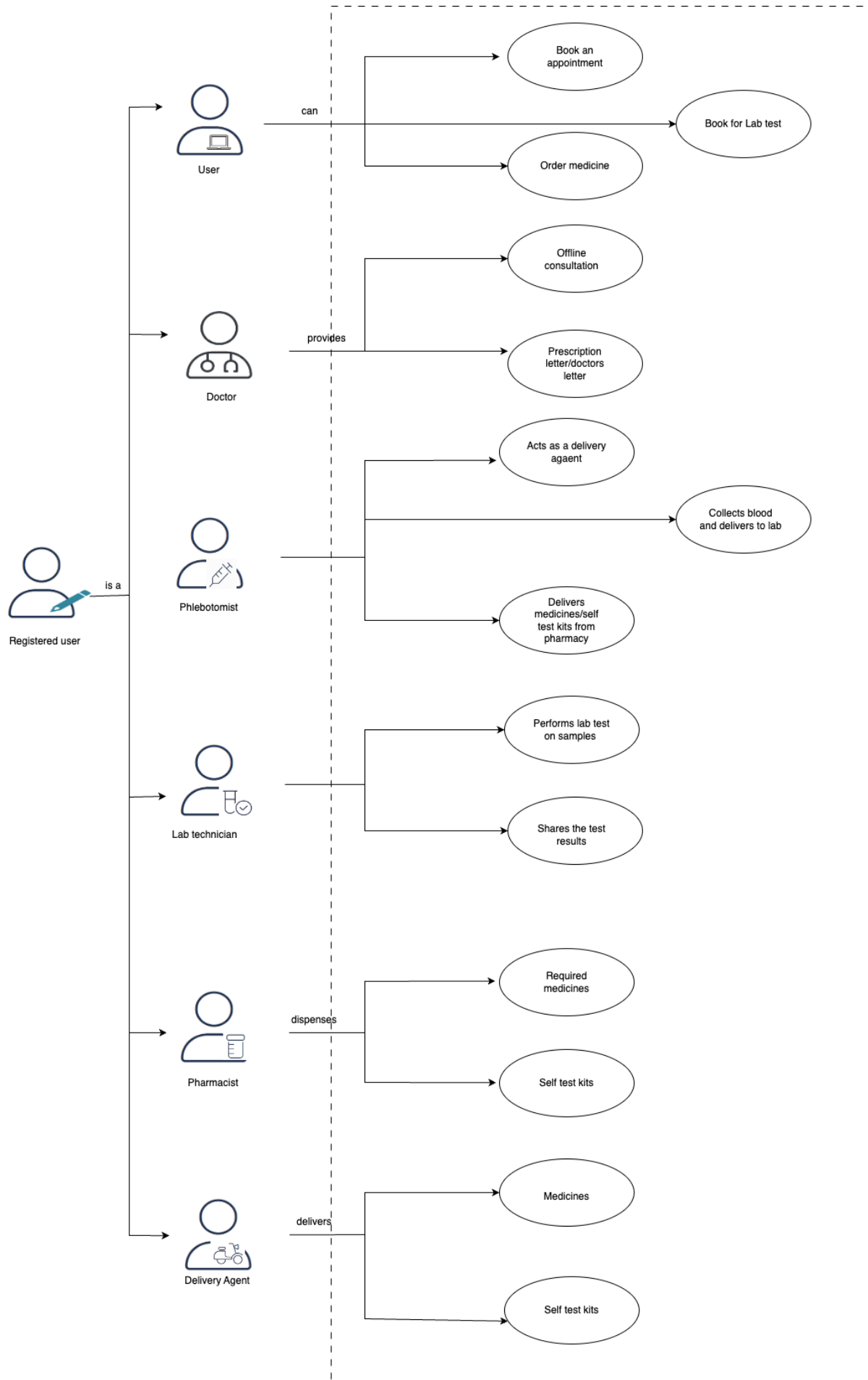
1. **Registration and Profile Management:** Users can create an account, complete their profile, and manage their personal information, including updating contact details and medical history.
2. **Appointment Booking:** Users can easily schedule appointments with doctors. The app should provide options for selecting preferred date and time for the appointment.
3. **Virtual Consultations:** Telehealth supports virtual consultations through secure audio or video calls, enabling users to connect with doctors remotely and discuss their health concerns or receive medical advice.
4. **Payment and Billing:** Popular payment gateways , Apple Pay and PayPal are used as a secure and convenient payment system to pay for consultations, services, or medications.
5. **Notifications and Reminders:** Telehealth sends timely notifications and reminders to users for upcoming appointments, medication schedules, and important health-related information.
6. **Prescription Management:** Users can view current medications and order and get their prescriptions delivered.



7.3.2 Unique Features

- Ease of use
- 24/7 Availability.
- HealthGPT
- Multilingual support
- Appointment scheduling and reminders.
- Secured messaging and file sharing.
- Integrate with wearable devices such as smart watches, fitness trackers.

7.3.3 Use case model



8 Compatibilities to other products

Booking platform is used on mobile phones, tablets and desktop computers. In order to have strong customer relations it is available both as an application and a website.

9 Requirements

R-DB-1001

A telehealth database shall act as a structured collection of digital information that stores and organizes data related to telehealth services, including patient records, medical history, appointment details, treatment plans, prescriptions, and other relevant information. It serves as a centralized repository for securely managing and accessing patient data in a telehealth context.

9.1 Platform features

R-PF-1002

The product shall be available to the customer as an application. Its OS compatibility, utilizes biometric authentication making it possible for FaceID/TouchID on iOS and leverages the fingerprint sensor on android for easy user authentication.

Note: Please see section 8 Compatibilities to other products.

R-PF-1003

The product shall be available to the customer as a website. It's a browser compatibility, real time notifications using web push notifications to provide updates and reminders. Using local storage capabilities certain features can be accessed when the users are offline.

Note: Please see section 8 Compatibilities to other products.

R-PF-1004

The app (as specified in R-PLATFORM-201) shall be available for the following operating systems:

- iOS
- Android.

Siri and Google fit integration - enables voice commands and interactions with the app.

Note: This enables usage on iPhone and Google phones as well as tables and covers 99 % of the mobile users.

R-PF-1005

The website (as specified in R-PLATFORM-202) shall support the following web browsers:

- Chrome
- Internet Explorer
- Edge
- Safari
- Mozilla Firefox.

Note: This enables usage on iMacs, tablets and Windows PCs and covers 99% of the website users.

R-PF-1006

The platform shall support payments which refers to the financial transactions and processes involved in billing and receiving payment for telehealth services.

R-PF-1007

The platform shall support for reimbursement and coverage of telehealth services through insurance providers are subject to specific regulations and guidelines. Insurance may be public ,private or some third party insurances.

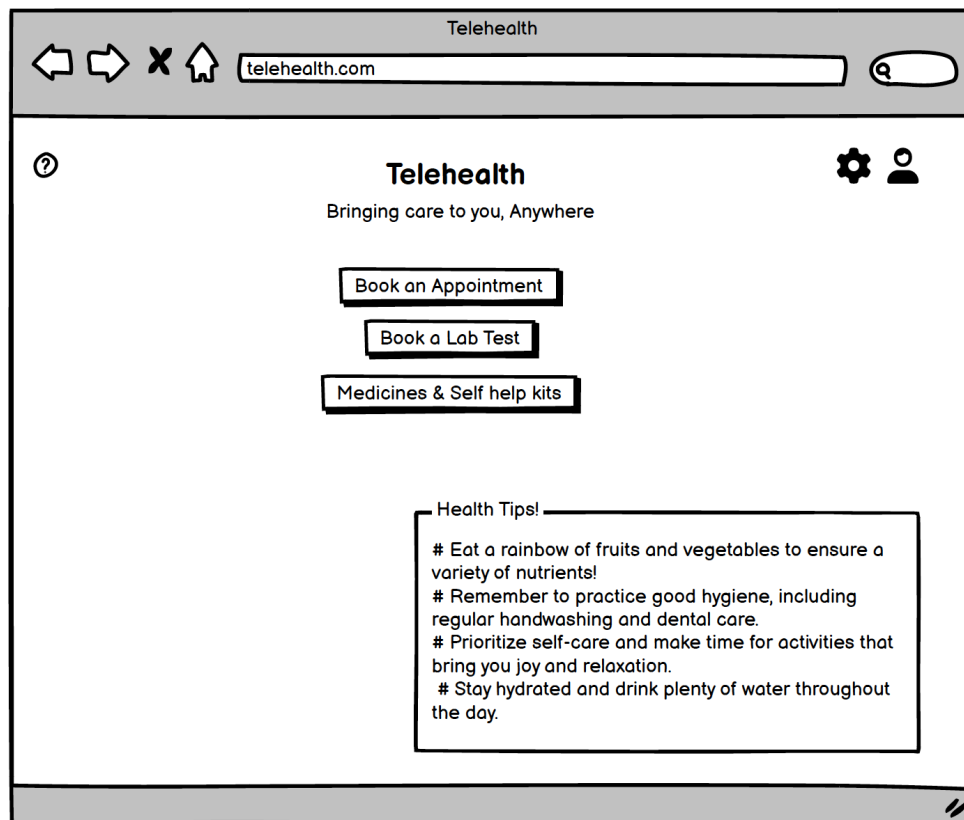
9.2 User interface

9.2.1 UI – Basic features

R-UI-1008

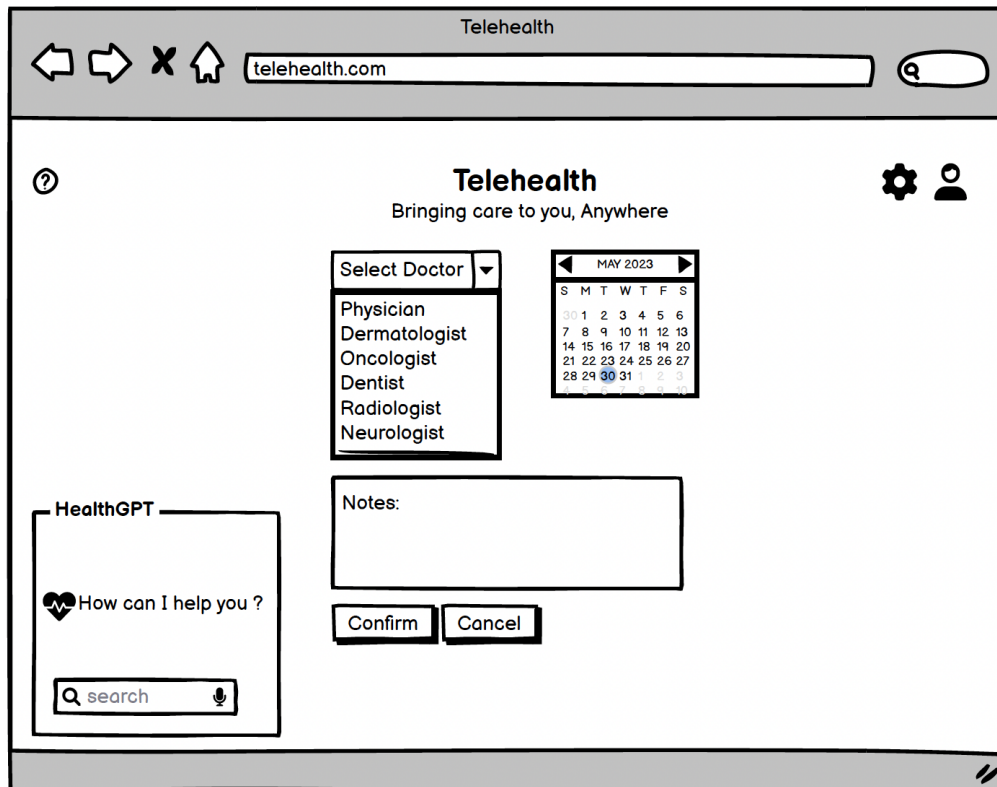
The platform shall provide the registered user(patient) to book an appointment, lab test and medicines.

Note: These languages shall be supported since these are the languages of the target markets and countries (please see section 5.2 "Target regions and countries").

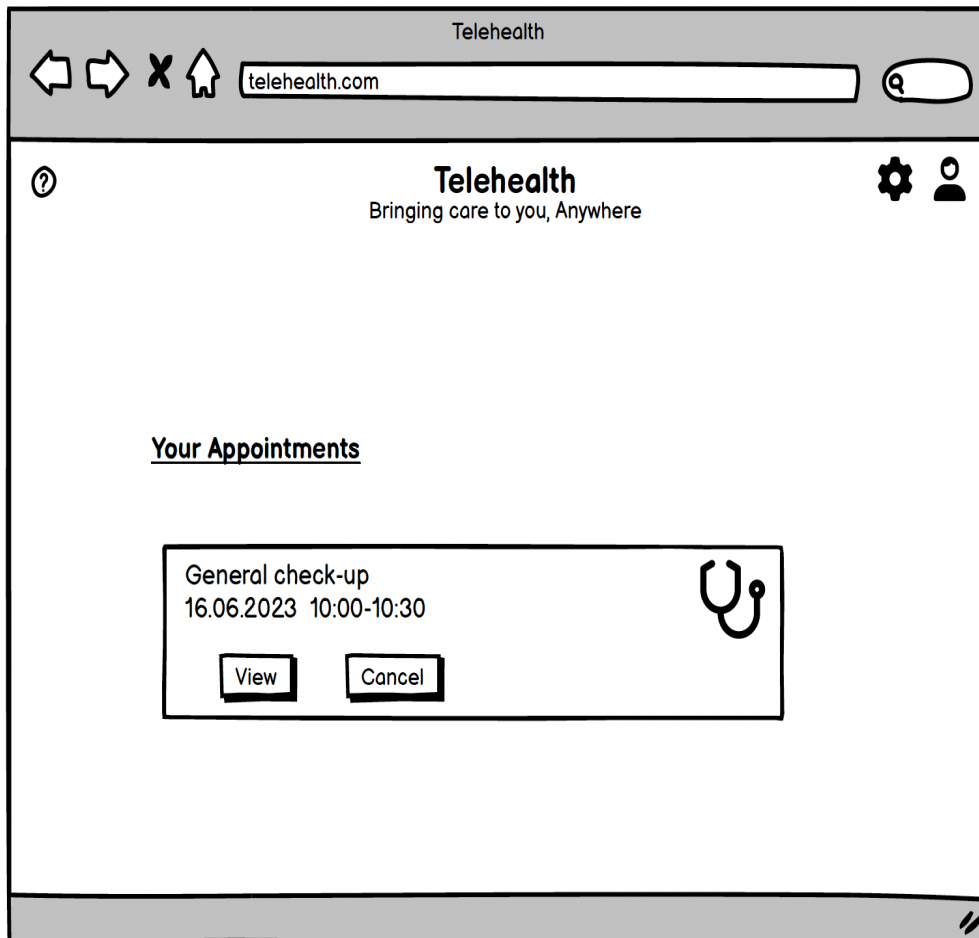


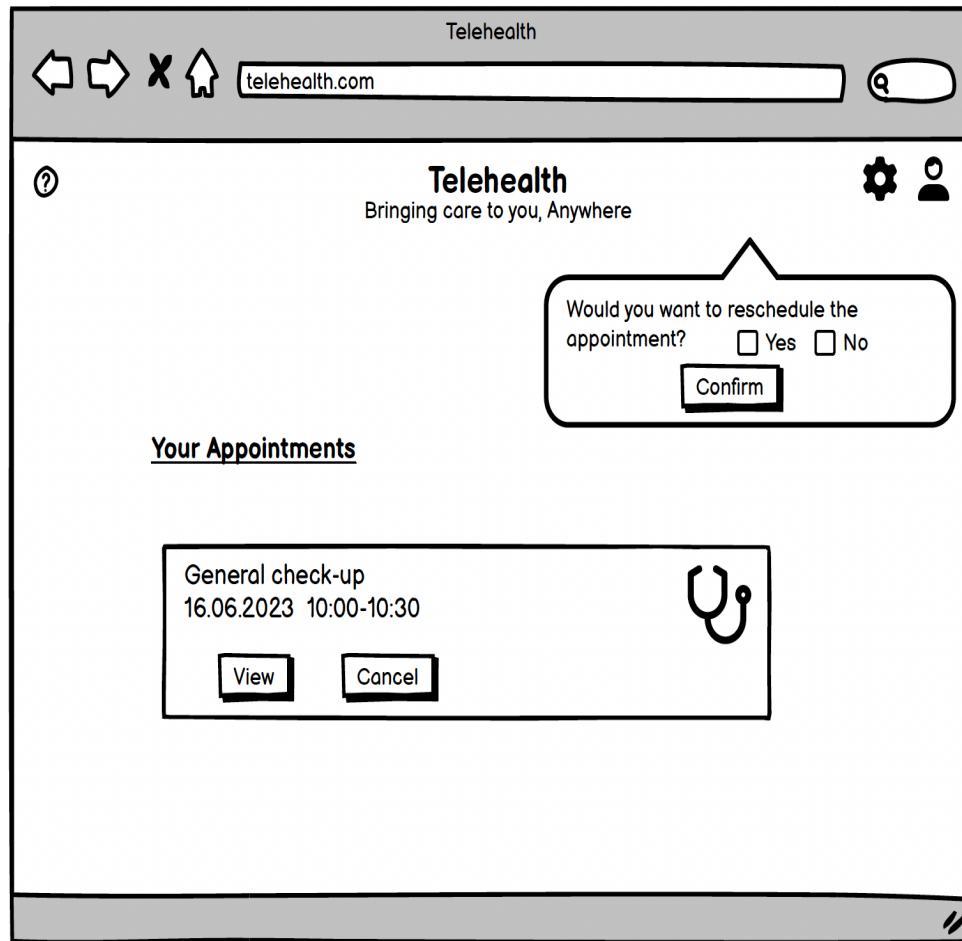
R-UI-1009

The platform shall provide the patient with the ability to book an appointment.

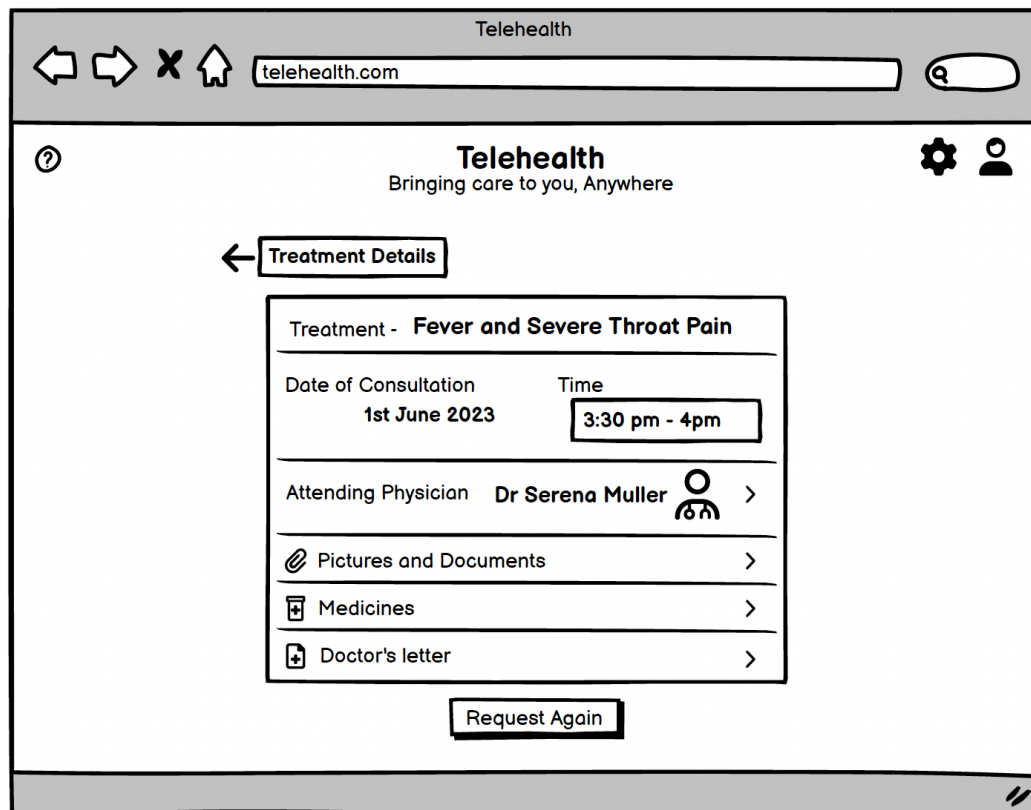
**R-UI-1010**

The platform shall provide the patient with the ability to cancel/reschedule an appointment..



**R-UI-1011**

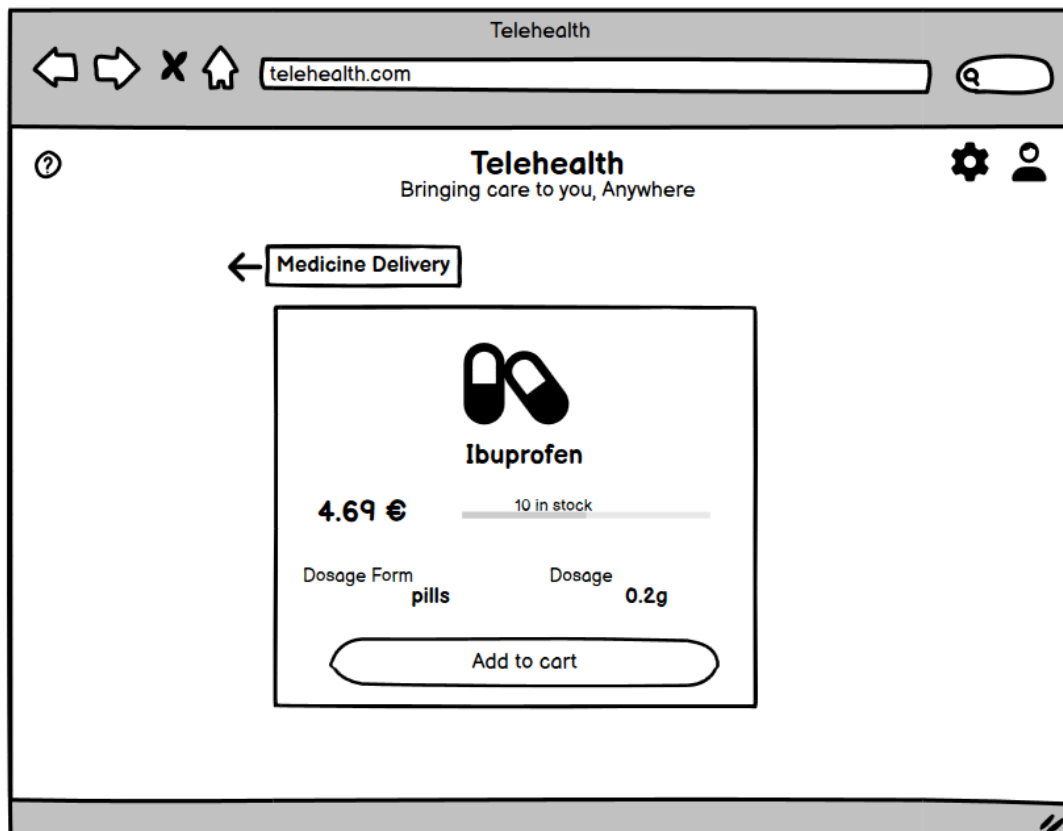
The platform shall provide the patient with the ability to view the treatment details .

**R-UI-1012**

UI for Lab check up

R-UI-1013

The platform shall provide the patient with the ability to book required medications.



9.2.2 HealthGPT

R-UI-1014

The platform shall provide the patients with the ability to check for daily health tips. This creates awareness, motivation, inspiration and also offers wellness strategies. Along with these it focuses on preventive measures and risk reductions.

R-UI-1015

The platform shall provide the guest user and the registered user with the ability to subscribe for HealthGPT service. This helps as a research assistance, triage and symptoms checker.

9.3 Marketing & Sales

R-MR-1016

The platform shall provide the customer with the ability to select the following languages:

- Hindi
- English
- German.

The platform shall select default language corresponding to the language preference of the device the customer is using to access the website.

Note: These languages shall be supported since these are the languages of the target markets and countries (please see section 5.2 “Target regions and countries”).

R-MR-1017

The platform shall clearly communicate the pricing structure of telehealth services, ensuring that patients understand the costs involved upfront. Highlighting the cost savings and value for money that telehealth services offer compared to traditional in-person healthcare.

R-MR-1018

The platform shall implement patient surveys and feedback forms to gather insights and understand patient satisfaction levels. Promote these surveys, ads on social media channels, offering incentives for completion to encourage participation. Using social media platforms to educate patients about telehealth services, address frequently asked questions (FAQs), and provide step-by-step guides on how to use the telehealth platform.

R-MR-1019

The platform shall collaborate between the telehealth service and the local pharmacy. Co-brand marketing materials and communications to establish a sense of trust and familiarity for patients who are already familiar with the pharmacy brand.

R-NF-1020

The platform shall emphasize the security measures in place to protect patient information and ensure privacy during telehealth consultations. Highlight compliance with relevant data protection regulations (such as HIPAA in the United States) and encryption methods used to safeguard sensitive data.

R-NF-1021

The platform shall allow Users to access healthcare services from the comfort of their own homes, eliminating the need for travel and wait times. Telehealth also enables personalized care by facilitating one-on-one interactions, tailored treatment plans, and remote monitoring, enhancing the overall user experience and satisfaction.

R-MR-1022

The platform shall adhere to compliance standards to protect patient privacy and ensure secure data transmission. It aligns with regulatory frameworks such as the Health Insurance Portability which mandates the security and confidentiality of patient information. Telehealth platforms incorporate encryption and secure communication protocols to safeguard sensitive data during telehealth sessions.

R-MR-1023

The platform shall be compatible with various devices and technologies, making it highly accessible to users. It can be accessed through smartphones, tablets, computers, and other internet-connected devices. Telehealth platforms are designed to be compatible with different operating systems and browsers, ensuring compatibility across multiple platforms. Additionally, telehealth services can integrate with existing healthcare systems and electronic health records (EHRs) to enable seamless sharing of patient information and maintain continuity of care.