



Specifications

| **v1**: finally available

Context and problem definition

What is causing this in our country? And how to solve this problem?

In a country where access to quality and timely care is obstructed by endless queues, the real problem is no longer identifying illnesses, but rather succeeding in having a consultation without sacrificing an entire day. The main issues to address are access to quality healthcare, long waiting times, and the unavailability of doctors.

Project goals

Alice offers an unified interface to interact with various doctors, enabling users to easily proceed to an online consultation. The goal is to provide users with prompt medical assistance while enabling high-skilled doctors to grow their community and easily connect with users in need.

Target audience

1. **Doctors Corps:**

- Primarily targets junior or senior doctors without hospital options, providing them a legal platform to exercise their skills, earn money, and help those in need.

2. General Users:

- Targets individuals who cannot afford to sacrifice a whole day for a traditional consultation. Alice aims to alleviate this issue by offering a common platform where users can schedule meetings with available doctors at any time.

Actors

Any system needs people to work on, to interact with it and make it live.

This platform will be reached mainly by two types of actors:

1. Doctors

- Doctors can register and, upon validation, conduct consultations through the application.
- They can set consultation prices, link a Mobile Money account for transactions, and earn money for each consultation.

2. Every people with a disease or a need to meet a doctor

- Any individual can join the platform, purchase consultations, and connect with available doctors.
- Users can buy consultations, request specific doctors, and engage in consultations through the application.

Functional Specifications

The platform/application must implement the following features:

Invoicing of the Consultation

- Users can purchase consultations by selecting available doctors and making requests.

- Prices are set by each doctor, and payments are processed through the application.

Treatment Follow-up

- Once a consultation is purchased, it begins at the time scheduled.
- The consultation can be paused and resumed at any time.
- Doctors guide users to necessary tests, and upon completion, users share results through the application.
- Users can then send their tests results through the platform in order for the doctor to use them properly.
- The doctor issues the prescription based on the test results.

Engaging High-Skilled Doctors

- The platform serves as a showcase for doctors' skills and experience.
- Doctors, especially those not working in hospitals, can build their professional reputation.
- A ranking system based on user reviews helps users make informed decisions.

Hiring System for Junior Doctors

- Requirements for platform entry include a medical degree from a reputable school.
- Consideration for additional assessments or a probationary period for junior doctors.

Security and Privacy

To ensure the privacy, security, and controlled user experience within the Alice platform, the sharing of personal contact information, including email addresses and phone numbers, is strictly prohibited between doctors and patients. All communication must take place within the secure confines of the platform.

- Implement robust security measures for user data protection and secure transactions. (Including end-to-end encryption mechanism)

- Ensure compliance with healthcare data protection regulations.
- Prohibiting direct contact information sharing enhances the privacy and security of both doctors and patients, safeguarding sensitive information from unauthorized access or potential breaches.

By enforcing this policy, Alice aims to provide a secure and trustworthy environment for both doctors and patients while facilitating meaningful and professional interactions exclusively within the platform.

Integration with Diagnostic Centers

- Explore potential partnerships with diagnostic centers for seamless test result integration.
- Enhance efficiency in the treatment follow-up process by linking test results to the platform.

Technical Specifications

Technologies

The Alice platform will be built using modern and scalable technologies to ensure a robust and user-friendly experience. The chosen technologies include:

- **Backend:**
 - **.NET 8:** the server-side logic will be served as an API
 - **SqlServer:** relational database utilized for efficient data storage.
 - **Azure Blob Storage:** to store users' files in a secured way

- **Frontend:**

The frontend will be two applications both developed using **Blazor SSR:**

- The vitrine website showcasing Alice platform and its benefits
- The doctor's dashboard, where they take consultations and make orders.

- **Mobile Application:**

The mobile application will mainly serve users

- **.NET MAUI:** for mobile accessibility, we will develop native applications for both iOS and Android platforms
- **Communication:**
 - **SignalR:** real-time communication between users and doctors.

Infrastructure Model

The platform's infrastructure will be designed to handle scalability, reliability, and security. The infrastructure model will include:

- **Azure:** Cloud Hosting
- **YARP:** Load Balancing and Revers-Proxy
Implementing load balancing to distribute incoming traffic across multiple servers, ensuring optimal performance and reliability.
- **Data Security:**
 - Utilizing encryption protocols (SSL/TLS) to secure data transmission between users and the platform.
 - Regular security audits and compliance with industry standards to protect sensitive user information. (See a security expert like Dr. MAKKA for deep explanations and guidelines).

Development Methodology

We will use Agile and DevOps methodology with the Scrum framework. To do so, we will use tools like:

- **Notion:** for taking notes and reporting meetings.
- **Jira:** for task scheduling and management.
- **Git:** for version control.
- **Github, Github Actions:** for central code hosting, and CI/CD.

The following documents are written by ChatGPT and reviewed by me (Djounson)

[Terms and Conditions \(T&C\) for Users](#)

Terms and Conditions (T&C) for Doctors

Privacy Policy

Alice (c) 2024: Unless otherwise stated, all content and materials within the Alice platform, including but not limited to text, graphics, logos, images, and software, are the property of Alice and are protected by copyright laws. Unauthorized reproduction, distribution, or use of any content without explicit permission from Alice may violate copyright, trademark, and other applicable laws.