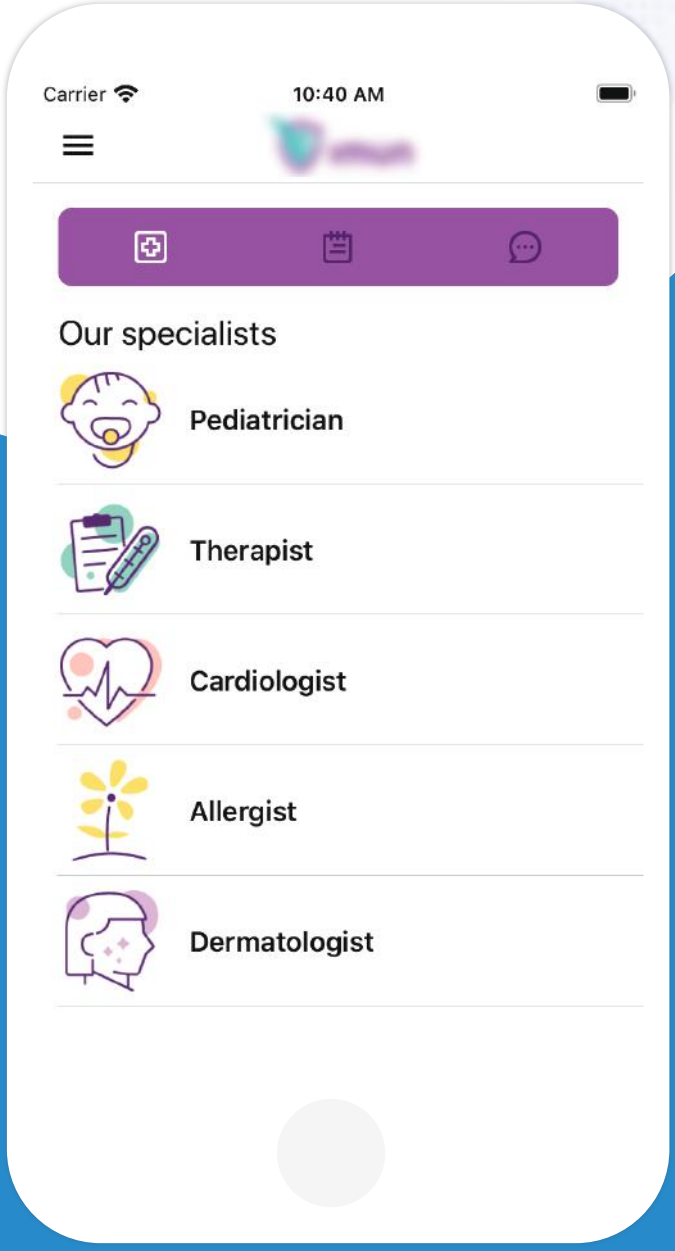
Mobile app for online consultations with doctors

Client
Under NDA

Industry
Healthcare

Location
Ukraine



GOAL OF THE PROJECT

Our client wanted to develop an IT solution for performing consultations with certified doctors from every part of the country or world. Previously, patients would go to the hospital and then spend much time waiting in a queue.

Because of our solution, they are now able to register for a consultation in just a few minutes and are able to talk with the doctor at their convenience. Also, there is a possibility for doctors to consult with other doctors, which makes diagnosis even faster.

CORE TECHNOLOGIES

Xamarin.iOS, Xamarin.Android, MVVMCross, AppCenter, Akavache, Refit, Agora, SignalR, Firebase

SOLUTION & RESULTS

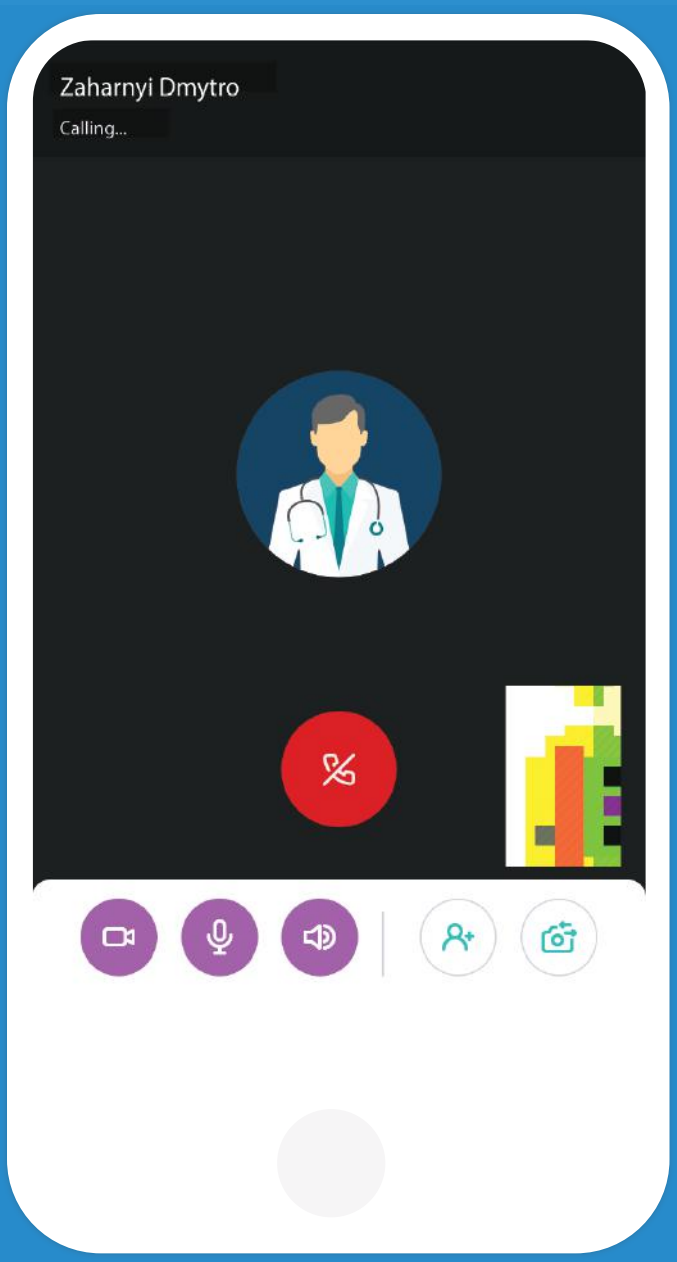
As a solution, we developed an intuitive and user-friendly iOS and Android application which aims to become an easier and less time-consuming way to have a conversation with a doctor.

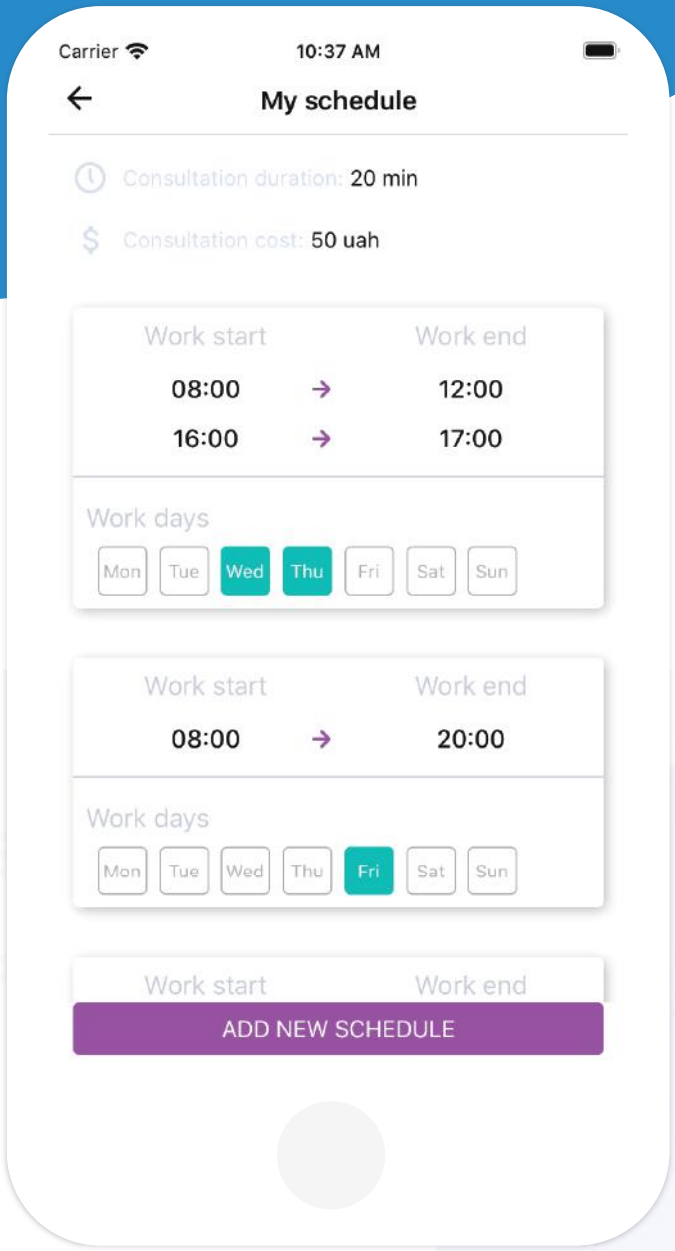
The user creates a profile as follows: Doctors have their credentials checked and approved as part of the registration process. The user selects the doctor he/she wants to have a consultation with. Choosing a doctor becomes easier when previous patients leave feedback and rate the doctor.

After selecting an available time slot, the user pays using LiqPay. The funds for the payment are put on a hold, and the process awaits approval that the consultation will be held.

With the help of SignalR and Firebase, it is possible for the user to chat with the doctor. During the consultation, a video call is made using the Agora library. In addition, there is an opportunity for the doctor to add another doctor, up to five doctors, if the problem is serious enough to require additional opinions concerning the diagnosis.

After the consultation, a pop-up prompts the user to leave feedback and prompts the doctor to fill out a medical card for the patient and add an electronic signature.





CHALLENGES

The most important and difficult part of the development was to make stable video calls on different devices, not just with the latest version of the operating system. This means that it should also work well with older and less powerful devices, which have Android 5.1, iOS 9 and higher.

To achieve this result, we took great care of app performance, not overloading the page with redundant and heavy layouts where the video is displayed.

We were very thorough while implementing interaction between SignalR and Agora, following all the best practices while working with video streaming. And finally, we achieved outstanding results, whereby our app is able to make video calls with up to five doctors.