Viollier AG

Viollier Mobile – Pocket-sized Medical Labs

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Company description

Viollier AG owns and operates medical service laboratories in Switzerland. Its laboratories offer assisted reproductive technologies, cardiology and pathology services, clinical laboratory diagnostics, and medical products.

It serves physicians, physician assistants, patients, nurses, hospitals, laboratories, pharmaceutical, and insurance companies. The company was founded in 1953 and is based in Allschwil, Switzerland.

Project description

The Viollier mobile app is a Xamarin native iOS and Android application used by doctors and it keeps track of patients' health screening results, generating reports, sending messages in critical situations and post-prescribing further analysis.

Our team developed, tested and deployed the application for iOS and Android mobile devices.

Challenges

— **Assure data security:** The mobile app contains mainly sensitive data (healthcare information), and data security is of utter importance
— **Adaptable app:** A reliable mobile application, that allows physicians to go along the many unexpected turns any diagnosis takes.
— **Developing the app's chart section:** Creating a unified design while maintaining the Android and iOS platforms' specific features.
— **Device compatibility** for existing and next generation smartphones: Adaptability to iPhone X.
— **Mobile platform fragmentation:** Maintaining a unified and enhanced user experience on a large variety of mobile devices.
— Notifying doctors in real time in case of emergencies.
— Developing a scalable mobile application that easily complies to users' additional requests.

Solutions

— **Cross platform development:** Developing a Xamarine native app implies lower costs than developing a native Android app (the code re-usability going up to 75%). Moreover, finding a suitable library to multiple challenges had a great impact in the optimization of the costs.
— **Data protection through highest security standards:** Login is easy, fast and secure with Touch ID or Face ID though **Oauth2** for providing a specific authorization flow and **Keychain** for local data storage.
— **Push notifications:** In critical situations or in case of emergencies where immediate notification of the laboratory results is essential, the doctors' receive immediately push notifications so they can act in a timely manner for the patients' benefit.
— **UI automated testing:** A solution for mobile platform fragmentation that maintains a unified and enhanced user experience on a large variety of mobile devices.
— **User friendly:** UI/UX focused, the app layout is optimized for smartphone and tablet and was designed to meet the users' expectations.
— **Intuitive interface and accelerated learning:** The interface enables users to get comfortable quickly with the platform.

Results

— **A high quality mobile application:** Developing a complex mobile application that works for the benefit of doctors and patients.
— **Data accessibility optimization:** No matter where and when, the users always have access to their patients' reports and can post-prescribe further analyses.
— **Enhanced end-users experience:** Easy and fast access to analyses' results.
— **Increased brand visibility:** Mobile brand engagement through developing an app that works as a constant business reminder.

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Team setup

Cegeka embraces Agile methodologies in most of their projects and the Viollier project was no exception.

The team works closely with the Client Service and Infrastructure teams, including project managers, sales, marketing and design specialists.

Types of activities

Software development, R&D

Architecture and technology

Used methodology

Agile – SCRUM

Main technologies

Xamarin native for Android and iOS, Syncfusion and Telerik library, MVVM Cross