

Building An Android App For Communication And Collaboration In The Healthcare Industry

The US-based client belongs to the healthcare industry. The client wanted to develop a mobile application which would help healthcare professionals to communicate and collaborate with each other.

The Vision

A survey done in the US revealed that the healthcare industry faces losses worth \$8.3 billion per year due to the time wasted using outdated technology. The client felt that this wasted time could be drastically reduced by using better communication and collaboration tools. One part of the problem was that while people wanted the service and information in real-time, the healthcare professionals themselves were using age-old communication tools. A change was needed at the level of these professionals who could make use of new technology to revolutionize their industry.

Application Overview

A mobile app was thought of as the best solution to these problems. With a unique platform for healthcare professionals, this app would solve the significant problems faced by the client.

e-Zest became the natural partner for the client because of its vast experience of delivering award-winning apps on the Android platform. The rich experience of the e-Zest team ensured the client that the mobile apps can be developed quickly from ideation, implementation and solution validation. The right tools and technologies were picked to meet the requirements with the optimum price and timelines.

Technologies and Tools

Technology

- Java (Android)

Development tools

- Android SDK
- Eclipse Juno

Web services

- REST web services

Web services Response

- JSON Format

Local Storage

- SQLite database
- File system

Encryption library

- SQLite cipher

Secure messaging real-time notifications

- Cometd library
- Jetty server
- GCM

VOIP / Voice mails

- Twilio library

PDF viewer library

Challenges and Solutions

The client had an existing iOS application and a replicated user experience with enhancements for the myriad Android devices in the market was desired. The multitude of sizes and specs served as an exciting challenge for the design team at e-Zest that made subtle changes to the user experience keeping in mind the responsiveness and the overall usability.

The project team at e-Zest also optimized the web service hit. Initially, the data was synced up using the main thread on which the UI was running. That resulted in the UI staying frozen till the message was retrieved from the server.

However, with innovation deep rooted in the DNA of e-Zest, quick solutions were found to each of these problems.

Business Benefits

The app, with its powerful network and data, allows healthcare professionals to readily navigate the care continuum as key events are instantly available. Users can also use the app in the offline medium. The application enabled the hospital staff to communicate efficiently in real-time. The app directly resulted in staff nurses getting more time at the bedside. Meanwhile, operational errors also came down by as much as 28% due to such access. Patients were also treated more effectively. This boosted the efficiency of the hospital and ultimately the revenues.

Bottom Line

The project team at e-Zest was able to successfully deliver an app which was intuitive and user-friendly. More importantly, the features developed by e-Zest in the application save valuable time for these caregivers. The saved time can be better utilized for giving improved care and access to more patients.

