

Technical Details

Choice of Technology

Front-End

Back-End

Database

Version Control

Deployment Infrastructure

Choice of Technology

For this project, here are the technologies we are exploring:

Front-End

There are two we are considering, for the Mobile and Web apps respectively:

1. React Native: a framework for building native mobile applications using JavaScript and React. Mainly use due to its flexibility to make both iOS and Android apps, and has been used by previous team.
2. React.js or React: a JavaScript library optimized for web development and provides a rich ecosystem of resources and tools for building user interfaces.

Back-End

Kotlin Spring Boot: a Java-based framework for building web applications and RESTful APIs. It provides a robust and scalable backend infrastructure for handling business logic, data storage, and communication with clients.

Database

PostgreSQL: an object-relational database management system with advanced features, reliability, and scalability.

Version Control

GitHub: a web-base platform that enables version control and collaboration in software project. It allows users to host and manage repositories, track changes to code, collaborate with others through pull requests and code reviews, and automate workflows using integrations and tools.

Deployment Infrastructure

The deployment will be collaborating with the clinic's own IT infrastructure, at least in the short-term. As far as the team is aware, the clinic has an EC2 instance (AWS), which can host the backend, as well as both frontend applications (Mobile app and web app). Given the robust nature of Springboot, little server management will be required for the IT team to manage the application.