Cognisent

A Personal Safety Mobile Application

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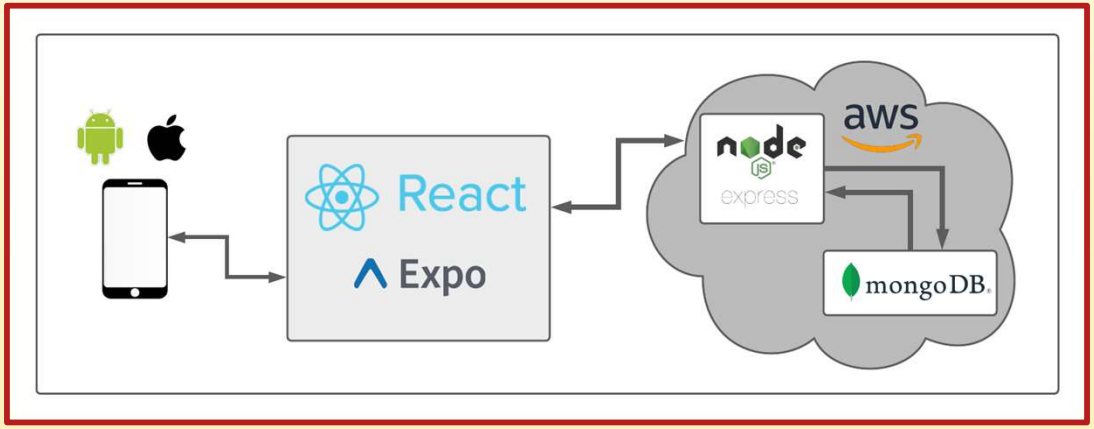
What is Cognisent?

Cognisent is a personal safety mobile application that helps users, along with their friends and families, stay safe and secure. It is a cross-platform application for use with both iOS and Android devices.

Cognisent provides features such as real-time location tracking, creation of user-configured safe areas, video and audio recording, and emergency location-based notifications. This project idea was chosen to learn more in the area of mobile/full stack development, and produce an app with a positive, real-world use.

Architecture Diagram



Technologies

- Expo
- React Native
- React Navigation

- Node.js
- Express
- Mongoose
- BCrypt
- MongoDB

- Amazon Web Services
- Amazon Elastic Compute Cloud

- JSX
- JavaScript

GitHub

Approach

To provide cross-platform compatibility, React Native was chosen as the front-end framework for developing the mobile app UI. The Expo SDK provided several useful APIs to access mobile sensors and hardware, and the Expo Go app was used throughout development for testing and demonstration.

Node.js and Express as well as libraries such as Mongoose and BCrypt are used in the back-end to handle authentication and passing of user information. MongoDB is used for storage of user information and the back-end is hosted on an Amazon EC2 t2.micro instance.

Goals

- Build an application using the popular MERN stack.
- Gain full stack development experience.
- Develop a project that provides a positive, real-world use.

Conclusion

- Gained a much better understanding of mobile development.
- Got extensive experience with project management.
- Completed a large project with further scope for development.

Results