Abstract

First responders from the Little Wabash Fire Protection District, IL, often cannot effectively coordinate their actions and maintain accountability as first responders when mitigating emergencies. It is possible to decrease the extent and frequency of this problem by using a mobile application that improves interdepartmental upward communication, reducing loss of life and property.

Background

• First responders are volunteers who are probably among the first people to arrive at the scene of an emergency. They are trained to deal with a wide variety of medical and fire emergencies.
• The Little Wabash Protection District does not have a professional fire department due to its size, instead it relies on first responders to handle local emergencies.
• The department focuses only on transmitting information downwards, from the dispatcher/chief to the first responders.

Results

• Backend: Ruby on Rails and SQLite
• Frontend: Swift using Xcode
• Separate user interfaces for administrators and users
• Real-time emergencies feed
• User-friendly interface that allows users to respond to emergencies rapidly and with little effort
• Token-based user authentication

Conclusion

The iOS application will allow first responders from the Little Wabash Protection District to coordinate their actions and keep track of which users are responding to emergencies, thus eliminating upward communication problems that the department currently faces. Future work includes support for Android and a web application.