





Florida International University

Summer 2024 Senior Design Project Poster

Neighborhood Watch

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Introduction

Securing the neighborhood is an important factor to every neighborhood of the society. Our Senior Design Project addresses this challenge by creating a mobile application called Neighborhood Watch built with Swift. This app aims at improving residents' interaction and cooperation with each other to report and address the suspicious activities in the area immediately. Based on the present-day mobile technology, the proposed solution would seek to foster a safer society that is well connected.

Research

When designing this project, my main work was to work on the home page that contains the tab bar to enable navigation in the app. I also created a page that allows users to create group chats by filling the form by entering details like the zip code, age, user identification number, and group chat identification name. Also, as demanded, I added the possibility for users to find existing group chats and join them by entering zip code and age. Lastly, I designed the chat view page where users can view and operate all the groups they have created as well as all the groups they have joined this has features on text messaging as well as image messaging. To facilitate these functionalities, I created a real-time database, Firebase that holds the data regarding group chats, user involvement in group chats, and user accounts.

Conclusion

When it comes to community security, our Neighborhood Watch application is a clear advancement. With the emphasis on intuitive interface of the system, ease of creating and joining a group chat, and integration with the database, we have created a tool that will enhance the residents' engagement and communication within their neighborhood.