An android mobile application to assist people with various disabilities and to connect them to an online buddy system

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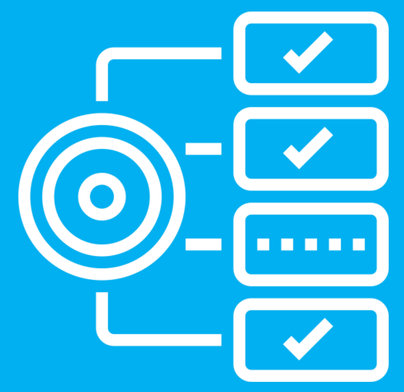
1 Introduction

- The author has looked at the problem of social isolation and loneliness with people with intellectual and physical disabilities and decided to create a mobile application to have a buddy system wherein two parties (Buddies and people with disabilities) could interact and socialize with one another
- The reason for this Project's development was to assist people with various disabilities (physical and mental) and help them socially interact with people without any disabilities using a real time buddy mobile application

special buddy

2 Aim

The aim is to create an android mobile based application that would help people with disabilities to overcome their solitude and to interact with peers or buddies without much difficulty using a social online platform.



3 Objectives

- Use Google Maps (Geo-Location), Accessibility and Chat Services to use coherently with the application
- Find more background and information about social; loneliness among people with disabilities
- Make Application as User Friendly as possible for user's using the application
- Cater Application for people using application with and without disabilities

4 Methodology

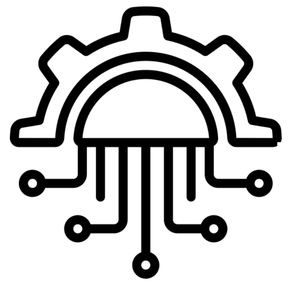
- Used Android Studio as the IDE
- Used the Agile Methodology to develop this application
- Use Java & XML to code and design the application
- Used technologies like google cloud platform, firebase, geo-location and chat services to incorporate into the application
- Used Multiple Documentations on the Internet to research about the tools and technologies
- Used Library Resources for technology and literature review research
- Conducted Interviews to gain further insight and taught into the subject of study
- Used Group of 5 people to test the final product and give feedbacks and improvements on it

5 Findings

- Found that the accessibility service is usually linked via a button on the mobile application to the device settings on a phone device
- Found that Geo Location Map is the best way for people with disability to view their buddies closest to them
- Found that there are no specific apps that cater for people with disability to interact with people without any disabilities

6 Technologies Used

- Android Studio for the IDE (Integrated Development Environment) to prototype and code my application
- Google Firebase Console to support the database, authentication, chat, and storage of files
- Google Maps API to support the Google Maps implementation of the application



7 Conclusion

- The outcome of this project has successfully met the objectives. It offers good quality and performance with a straightforward mobile application and offers different functions for the user. However, it can be still improved and worked on for a better quality
- Understood how an android based mobile applications can help people with disabilities to recover from solitude and loneliness
- Understood the full process on how to build a software application from scratch from the planning stage all the way to the testing and roll-out phase

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