



InSight : In Your Eyes

Mobile GIS and LBS Project



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Introduction

Background:

- Vulnerable group, like elderly and visually impaired people are not easy to use navigation apps and stay safe.
- Increasing demands for an app to provide reminders and guides for navigation and safeguards.

Topic:

Develop a mobile app to help vulnerable people find ways.



Generics

Name	InSight
Slogan	In Your Eyes
Target audience	Elderly or visually impaired people
Objectives	<ul style="list-style-type: none">• Help target people to locate themselves• Help target people to find their way easily (Audio Guide)• Provide emergency services



Methodology

Functions	
GIS	Locate yourself
	Search location
	Add location marker (home, places often visited)
	Navigation
LBS	Reminder (time, task, location)
Others	Output in sound
	Emergency Contact
	Call hospital and navigation
	Personal information (Personal health info, contacting info)



Technology Domain

Tools & APIs	
Google API	Provide base map, last location, geocoding / decoding, navigation, add self-defined mark...
Local file	Provide the reminder table
Android SDK	UI, AVD to test
TextToSpeech	Voice output



Methodology - Special Consideration

Special consideration on the audience	
Elderly-friendly UI	Help page, bold and larger front of text, larger size button
Voice as part of output	Aim at people with poor eyesight
Simple operations	User friendly for elderly people



Drafted Workflow

Requirement Specification

Ensure our requirement and functions
Make initial plan

●

1

2

Implementation Stage 1

Create database

Embed base map and search
address function

●

Implementation Stage 2

Integrate database and map
search function

Implement navigation function

●

3

4

Implementation Stage 3

Implement other functions like
emergency call and complete
user interface

●



Drafted Workflow

Integration and Testing

Debug the whole system

5

6

Check with initial plan

Compare final app with initial plan to make possible adjustments

Documentation

Write report and user guides for our app

Finish





Preliminary Result

Requirement specification

Related APIs and packages

Find references, Github codes

aar	processing detached head
app	update Gradle version
gradle/wrapper	update Gradle version
svgpathview	update Gradle version
.gitignore	Initial commit
README.md	Update README.md
_config.yml	Set theme jekyll-theme-architect
build.gradle	update Gradle version
gradle.properties	Initial commit
gradlew	update Gradle version
gradlew.bat	Initial commit
settings.gradle	refactor package structure



Thanks !