

#9 ✓
2/4/19

Meeting Notes 2/4/2020

- Contact Zach to retrofit GPS system
- Haptic Feedback should be focus regardless
 - Evaluate at a later date to broaden or specify the project
- Light weight case hardware is ~~important~~ key
- Power management w/ Pi's are an issue
- Quick power on/off may be an issue
- ML component to identify Entrances & Elevators in Building as well as popular locations such as Starbucks in Zachry.
- Allow user to drop their own anchor points
- Guides user through their anchor points
- Utilize Apple maps to get to certain locations such as 911 - Silver Towers, bathrooms, etc

Meeting Notes - Software Design 2127120

- Needs for iOS/Android? two devices -
- Controller in phone for all settings
 - Set navigation instructions
 - Guide User

- Main Features

- Data Source (Send Info to pi)
 - Accelerometer
 - Gyroscope
 - GPS

- Controller

- Feedback type

- Proximity Detection Thresholds (Variable)

- Destination point

- Navigation, Top half
Settings, bottom half

- Navigation

- Tinder Style Selection
- Swipe left to pass
- Swipe right to select
- Swipe up to input new location

- Consider using Accel. data
to track user + provide
guidance

0515513 repeated, modified - still present

- Read out remaining distance
- Read out 'closest building'
- Navigation to 'closest building'
- Haptic feedback

- Navigation

- Haptic Feedback

- Left, Right

(in a more direct way) -

- Obstacle

- Haptic Feedback

- More aggressive vibrations

- Goals for next two weeks

(already) - looking at software - on code

- Start implementing features

that part - connect w/ pi + send info between
that method, phone + pi

method -

method -

method -

method -

method -

method -

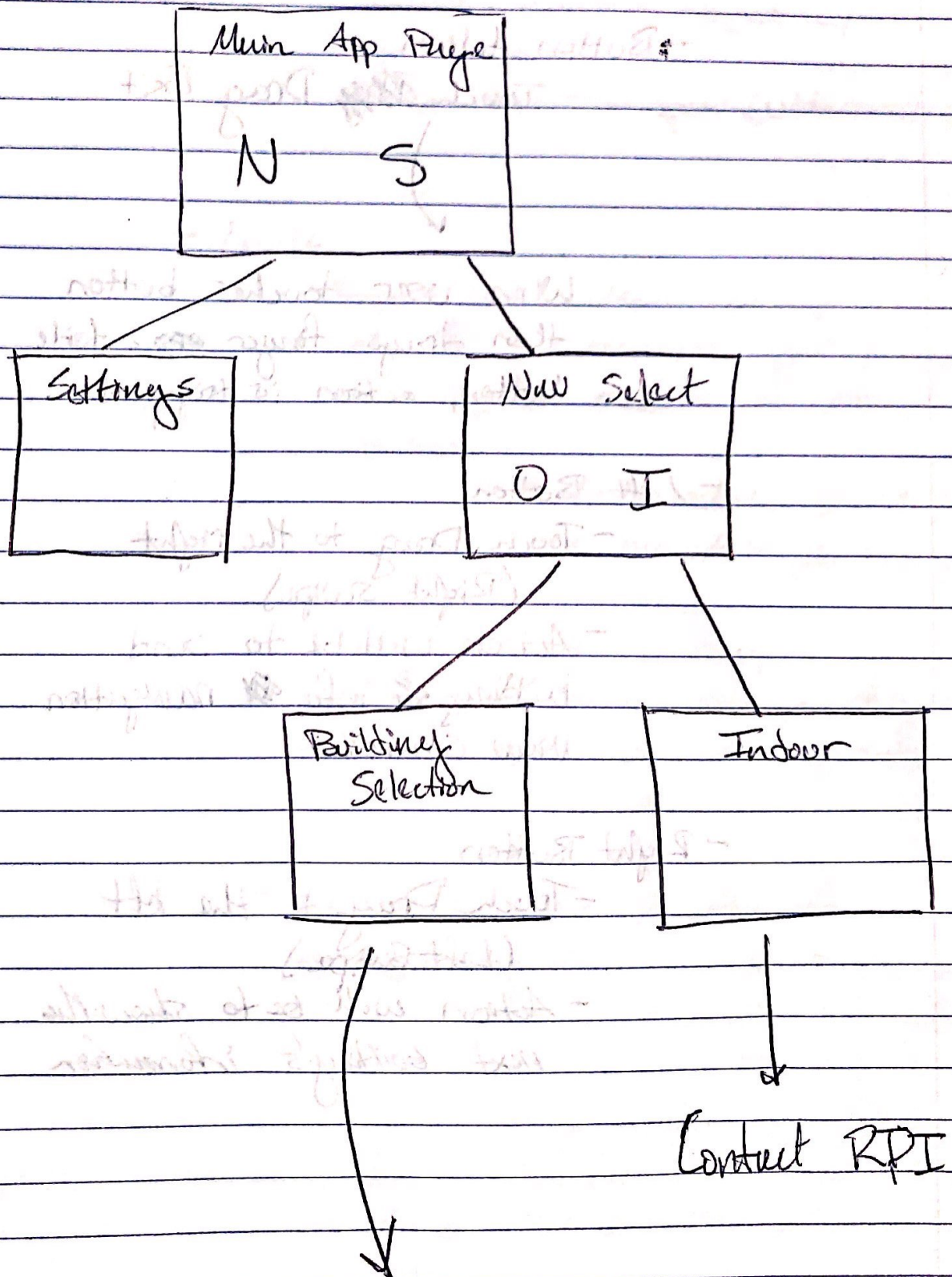
Weekly Meeting - 3/3/20

- Add physical toggle button to adjust settings on the cane

- Physical button triggers emergency services

Xcode Software Design

- View Controller Design



- Building Selection controlled by two special buttons

- Button Action

- Touch ~~Drag~~ Drag Exit



When user touches button then drags finger ~~out~~ outside button, action is triggered

- Left Button

- Touch Drag to the right (Right Swipe)

- Action will be to send building ~~to~~ info ~~to~~ navigation view controller

- Right Button

- Touch Drag to the left (Left Swipe)

- Action will be to show the next building's information

- Vocalization

- Import Synthesizer
- Create utterance object w/
some string
- Run synthesizer.speak(utterance)

- Location

- Import CoreLocation library
- Set ~~for~~ location manager delegate
and request access for location
services
 - Must include special keys
to maintain permissions
- Request highest accuracy
- Create location manager delegate
function that constantly updates
the user location
- Remove the user location from
manager object