

## **Sprint 1 Scenario:**

User stories

A)As a developer I need a communication interface between arduino and android

B)As a developer I need a hardware schematic for arduino

C)As a user/tester I need a user interface on android

Testing

Click 'app' icon in smart phone environment

-home screen should appear with buttons

Click 'settings gear'

Turn on Debug Mode

Click back

Click TalkDebug button

-device detect button activates communication between devices

-arduino captures sensor data, android receives hex encoding of signals

Click 'back' on smart phone

-communication is ended between devices

-arduino stops capturing sensor data

## **Sprint 2 Scenario:**

User Stories:

A)As tester I need organized data of position from the arduino

B)As user I need a graphical representation from position data

Testing

Click 'device detect' button in home screen

-graphics activity will start

-displays background "arc"

Place object in front of sensor

-interactive graphics starts

-wedges corresponding to correct data are displayed

Click 'back'

-graphics activity is stopped

-home screen is displayed

### **Sprint 3**

A)As a user I need a settings page to set proximity parameters

B)As a user I need response inputs to warn cars around me.

#### Testing

- Click 'settings' icon in home screen

  - settings page will load

- Set proximity setting with slide bar

  - should set global proximity setting

- Click back key

  - bring user back to home page

- Tap screen

  - graphics module should load

- Move hand towards sensors

  - Alert flash should display on graphics module

  - Alert corresponds to nearness of object

  - Sensitivity depends on set proximity sensitivity

C) As a tester I need a module to log data from app

#### Testing

- Click settings icon turn on Debug Mode

- Click back key

  - Function errors will be logged to file

- Click TalkDebug

- Check the checkbox logsession

  - Hex data will be logged to file