

# Release Plan, Bike Remote Sensing, BRS , Origin 3/19/14, 1.0

## High Level Goals

- Android user interface which displays position and velocity data in a graphical display. These packets of data should be accurate and transparent to the user.
- Automated alert system which effectively warns user of potentially 'dangerous' incoming objects. This should be automated by arduino to detect whether an object is approaching too fast towards bicycle. This alert will be displayed graphically to the user
- User feedback will allow user to set 'safety parameters'. Which can allow the user to set the default closest response between user and incoming object. For example if object would collide within 15secs to 5 seconds.
- Automated feedback will allow arduino to control lighting to warn cars if they are to close.

## Sprint 1

- 1) (Pts: 5/5/5/5/#)As a developer I want the arduino to interface with android device.
- 2) (Pts: 3/2/2/3/#)As a user I want a user interface for the android to navigate between settings and display system.
- 3) (Pts: 2/5/2/5/#) As a developer I need a hardware schematic for the arduino and the sensors so I can build software to compute sensor data.

## Sprint 2

- 1) (Pts: 8/2/5/##)As a user I want a settings page to determine necessary parameters
- 2) (Pts: 20/20/20/20/#)As a developer need precise position data to send to android device.
- 3) (Pts: 20/20/20/##)As a user I want a graphical display of object positions relative to me

## Sprint 3

- 1) (Pts: 13/20/13/20/#)As a user I need an automated alert system (feedback bike\android to arduino, braking, turning)
- 2) (Pts: 8/5/8/8/#)As tester I want the android device to log received data.
- 3) (Pts: 8/8/13/20/#)As a product owner I want accuracy of graphical display and real position

## Product Backlog

IOS development which is concurrent with android application.  
Bluetooth connection to replace serial connection.