



E-Trike

Progress Presentation 2

Kassandra Price, Adaugo Anyamele, Felicia Long, Breyonna Pinkney,
TiAuna Dodd, Mercy Daniel-Aguebor

Technical Advisor: Timothy Brown



TIMELINE & MILESTONE

Feb	2	Designing the PCB Board - having a draft prototype	Breyonna	having drafts of the whole system	
	3	Coding the App - Building the draft interface	Tiauna		DONE
	4	Hardware Peripheral- verifying each part works	Kasandra		ONGOING
Mar	1	Putting together the parts	Kasandra	Having a moving bike and	ONGOING
	2	Putting together the part	Breyonna		ONGOING

Progress

Highlights

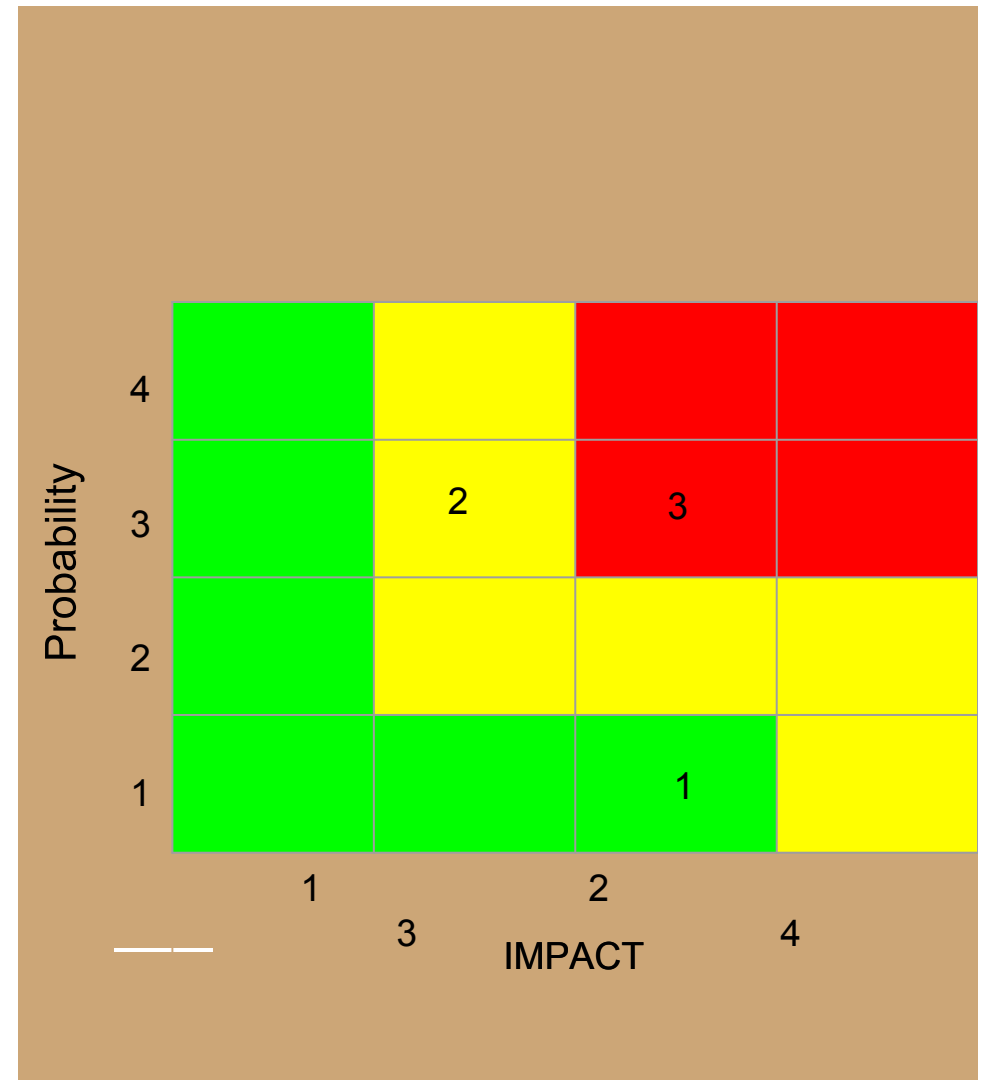
- Local Bike Shop agreed to give free parts
- Department started processing purchase order for parts to be bought
- Scope of the project changed to be more flexible
- Three peripheral modules working - GPS Bluetooth, and Light Sensor
- Evolving pace of assignments

Lowlights

- Long process still ahead for ordering parts
- Bike Shop Hours
- App Scope increased

RISK MANAGEMENT

Rank	Risk	Approach
1	Each module working (Gps, Lights)	W
2	Bluetooth connection to App	R
3	Bike Hardware (Battery, BMS, Motor, Motor controller, chains)	A



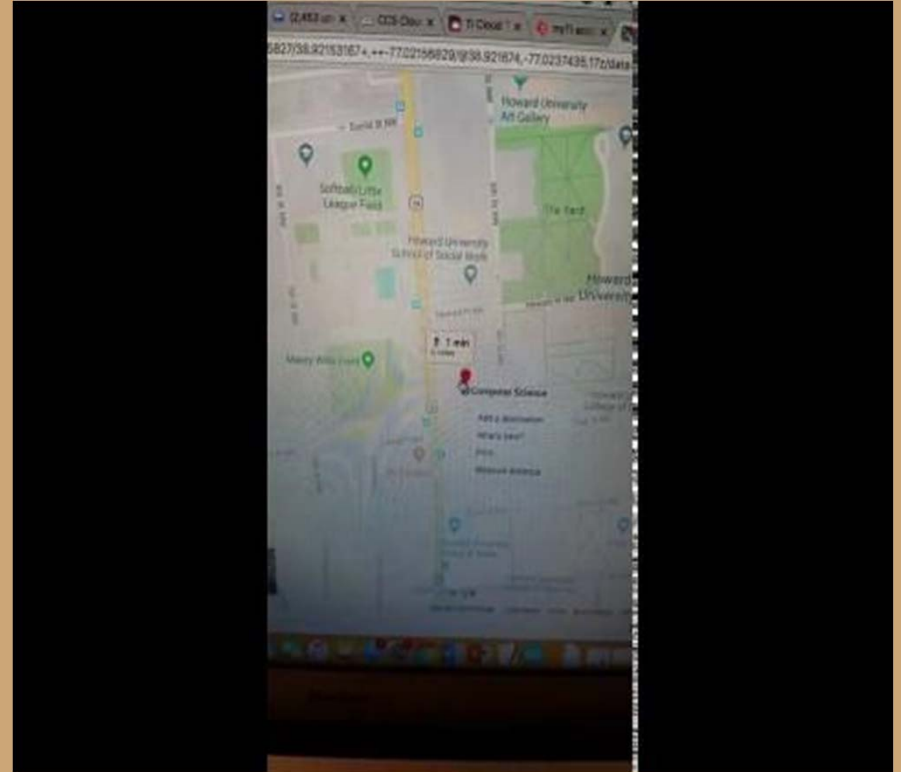


GPS Module

MakerFocus GPS Module 51
Microcontroller Ublox GPS

- Works!!!
 - Connected to the Arduino
 - Pin Points Longitude and Latitude
 - Assess Speed in mph
-

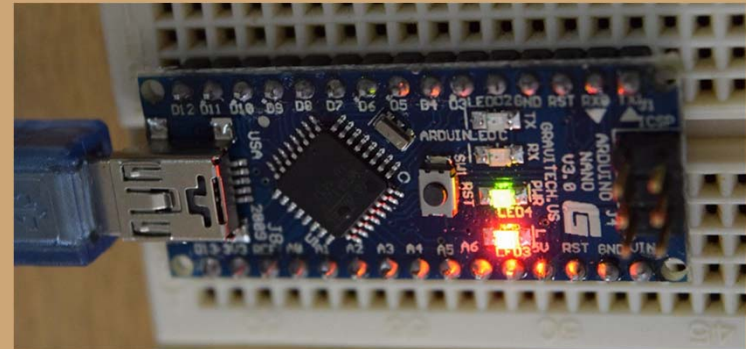
GPS Vid Demo



Light Sensor

TEMT6000 Ambient Light Sensor

- Works!!
- LED responds to the relative brightness exposed to the light sensor
- Used to ensure bike safety and can be controlled via app



Light Sensor Demo



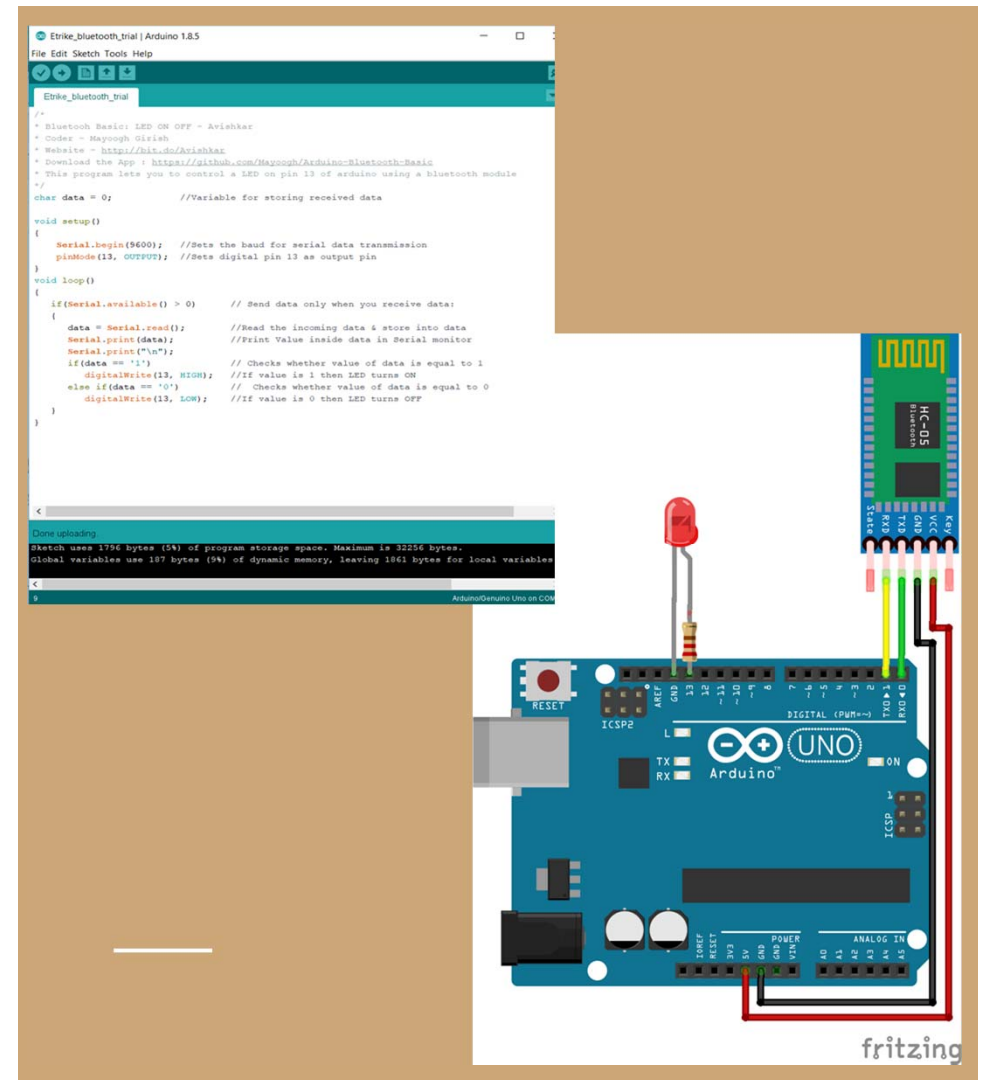
Bluetooth Hardware

Expectations

- To have full bluetooth communication between the Arduino and the phone application by April

Purpose

- To connect the gps module for locational services such as
 - Navigation
 - Speed
 - Tracking
- Battery monitoring



WHAT'S NEXT



- Continue coding for App
 - Sourcing and attaching the bike parts
 - Follow-Up ordering the parts
 - Create a working internet of things
 - Transmitting specific data via bluetooth to the phone
-

QUESTIONS

*Thank
you*

