REPORT OF MEETING FROM 27th FEB 2020

Purpose of the meeting was to get everybody on the same page as to how the 'Guardian Cycle' project was split over the devices, what needed doing etc. This was a change from suggested agenda.

A general consensus developed over the hour, enough to cover work going on over the Reading Week, however some things still need to be arranged.

Proposed that we have weekly meetings on Monday 11/11.30 – possibly in the Bio Sciences cafe, starting March 16th.

What follows is a brief breakdown of how the devices will work. Some elements are being-designed for (PO)Presentation Only (ie a final device would work slightly differently) and some elements could involve a (MB) Magic Box (eg fake JSON data as we can't replicate a GPS module in a presentation)

M5 STACK

PO – buttons will trigger an Arduino to make a RGB Matrix to indicate Left/Right/Break and Emergency Flashing Light
Suggestion that M5 Stack can be programed so that being placed on its side generates the emergency light/signal. However, it will be hardwired to a button on the Arduino as a back up for the presentation.

Actual Device:
Would send Journey data by sim card or upload after journey
At the End Of Journey it would display:
- distance
- elapsed time
- calories burnt
- best time
- top speed?

**suggested that this data is calculated insitu rather than being returned from Web Service

It would also monitor forces upon it and generate a call to emergency services in event of a fall

Buttons also need to start/pause/stop journey – so after start, they may function as indicators – with maybe both buttons activating break lights in demo.

M5 STICK

is pressed to cancel a fall alert within 30 seconds of a fall

WEB

Because of nature of the device, a lot of this needs to be Magic Box for Presentation.

PO – User sign up. This would go to a MB fake filled in page for Presentation, saving us having to build a database.

MB - Will display map of route (along with the same data displayed on M5 Stack – distance, time etc).

Input of emergency contact in event of fall – MB fake SMS sent to contact and emergency services
Emergency contact can log in to web to live view/track.

Social Media – ability for friends to see data, challenge friends to beat time/go further distance etc

Actual Web:

Note: Sign Up must include a privacy sign up – only indicators/etc will work plus call to emergency services ie things that Chris brought up in paper test must be incorporated.

Would receive data from M5 Stack (GPS and disance, time, calories etc)

Would be used in initial set up of device – Device would be connected to laptop and would create user log in etc with device attached...
Needs to have a fitness height/weight entry to enable rough calorie calc to work

Current expressions of interest:

Alex – Map/JSON
Andy – Javascript Calories etc
Gene – SMS
Nathan – Arduino hardware and coding
Humphrey – M5 Stack display/Arduino hook up
Evy – Web design