|  |  |
| --- | --- |
| Team Meeting | 2/5/201811:00EE Cafe |

|  |  |  |  |
| --- | --- | --- | --- |
| Meeting called by: | Patrick | Type of meeting: | Introductory |
| Facilitator: | Shreyus | Note taker: | Pu |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | The Team |

#### Discussion:

* Each team member introduces themselves and discusses their relevant strengths and weaknesses
* Shreyus and Pu are EIE students with strong coding skills
* Yaolei and Eliot are EEE students who are experienced with programming hardware from their experience with embedded systems
* Patrick and Abdullahi are EEE students who have good experience with hardware electronics
* The team then proceeds to discuss whether to break into separate sub-groups or work as one team; decides on the latter as it was observed that the nature of the project meant that continuous consultation with other team members were required

#### Conclusions:

* Yaolei and Eliot are versatile and as such will work on both the software and hardware sides
* The team will work together as a one big group as opposed to independent sub-groups

| Action items | Person responsible | Deadline |
| --- | --- | --- |
| * Review product specification | Everybody | 4/5/2018 |
| * Background research on potential sensors | Everybody | 4/5/2018 |

|  |  |
| --- | --- |
| Team Meeting | 4/5/201814:00Central Library |

|  |  |  |  |
| --- | --- | --- | --- |
| Meeting called by: | Mutual | Type of meeting: | Client Meeting |
| Facilitator: | Shreyus | Note taker: | Pu |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | Review of Product specification |

#### Discussion:

* The device must be able to detect heart rate, temperature, blood pressure and skin resistance
* It must have a GPS
* The device should keep a log that can then be used to detect patterns and the data can useful for GPs and other carers
* The device should also be voice activated; it should respond to the user calling out “Help”
* The AI should have a personality and be able to converse to put the user at ease; asking things like “What’s your plan for today?” and regularly inquiring about the user well being
* Mr. McNamara (the client) added an optional requirement; he wanted the team to film promotional material for the IBM industrial group project (simple videos of team working on the project). The team agreed to meet this requirement.
* The client also informed the team that components distributer Arrow Electronics has agreed to supply components free of charge.

#### Conclusions:

* The team will begin selecting and ordering sensors next week

| Action items | Person responsible | Deadline |
| --- | --- | --- |
| * Research and select sensors | Patrick, Abdullahi and Yaolei | 11/5/2018 |
| * Find a way to add a GPS to the product | Eliot | 11/5/2018 |

|  |  |
| --- | --- |
| Team Meeting | 7/5/201811:00EE Level 5 Lab |

|  |  |
| --- | --- |
| Type of meeting: | General Team Meeting |
| Note taker: | Abdullahi |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | Distribution of work |

#### Discussion:

* For the next few weeks the project would be separated into different parts
* It’s agreed that one area will be hardware (just researching and ordering components for now). Patrick volunteers to head this part.
* The project brief indicated that Node-Red would be useful and as such someone should look into how to use it and its possible applications. Same goes for IBM Watson
* Shreyus suggested making a supporting app as it would make the SMS alert simpler and also already have a GPS in built.

#### Conclusions:

* The work is to be split into three initial parts; the app development, hardware research and flow construction with Node-Red
* There will be a supporting app

| Action items | Person responsible | Deadline |
| --- | --- | --- |
| * Hardware Research and Selection | Patrick, Yaolei and Abdullahi | 14/5/2018 |
| * Familiarise themselves with Node-Red and Watson | Eliot | 14/5/2018 |
| * Develop an App | Shreyus and Pu | 8/6/2018 |

|  |  |
| --- | --- |
| Team Meeting | 11/5/201814:00EE Level 6 Conference Room |

|  |  |
| --- | --- |
| Type of meeting: | Client Meeting |
| Note taker: | Abdullahi |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | Progress review |

#### Discussion:

* The team informed the client that they had decided to create a supporting app for the device.
* Regarding the app display:
  + The top section will have three emergency contacts; the user presses on one and the phone places a call
  + In the middle there will a large red button with “Help” on it; pressing this will send an SMS with the user’s location to their carer
  + At the bottom there will be map which can be used to direct the user to a safe location (e.g. coffee shop)
* The client supported the idea of an app but emphasised that the device should perform most of the functions (i.e. the app should not form an integral part of the final product)

#### Conclusions:

* The team will continue with the app development

|  |  |
| --- | --- |
| Team Meeting | 14/5/201811:00EE Level 5 Lab |

|  |  |
| --- | --- |
| Type of meeting: | General Team Meeting |
| Note taker: | Abdullahi |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi and Yucheng |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | Plan the for week |

#### Discussion:

* Shreyus and Pu have finished the App design and they have started work on functionality
* Yucheng volunteered to help out with the App development
* Most of the required components have been ordered
* They include a heartbeat sensor and raspberry pi from Arrow, and a speaker and temperature from ….
* The possibility that the product will not have the added capability of detecting the galvanic skin response of the user is raised, with health and safety concern
* Given the budget available, the GSR detector would have to be constructed in rather crude fashion and as such there would be a risk of electrocution
* As there is not much left for the hardware group to work they should be assigned new tasks until the components arrive
* Patrick volunteered to start work on the leaflet and Abdullahi is tasked to help Eliot and Yaolei with Node-Red
* For Node-Red, the flow construction has been finished and it meets specification in regards to speech recognition
* Only remaining part on that front was the connectivity of the Node-Red flow to external device

#### Conclusions:

* Components have been ordered
* No GSR detector will be added to the final product

| Action items | Person responsible | Deadline |
| --- | --- | --- |
| * Find a way to connect Node-Red flow to a device (potentially via bluetooth) | Eliot, Yaolei and Abdullahi | 18/5/2018 |
| * Begin Work on the leaflet | Patrick | 15/8/2018 |
| * Work on the App’s functionality | Shreyus, Pu and Yucheng | 8/8/2018 |

|  |  |
| --- | --- |
| Team Meeting | 18/5/201811:00EE Level 5 Lab |

|  |  |
| --- | --- |
| Type of meeting: | General Team Meeting |
| Note taker: | Abdullahi |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi and Yucheng |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | Progress Review |

#### Discussion:

* The raspberry pi has arrived and Shreyus has installed the relevant software (NOOBS and Raspbian)
* Work on the raspberry has begun as the
* For Node-Red, it has been decided that connection to the external device will be established via (MQTT?) due to………….
* Concerns have been raised over the delay as no other component had arrived yet
* This has left the hardware team with little to do and has led to an increasing gap between the hardware portion of the project and the other sides (Node-Red and the App) in terms of progress
* It’s suggested that the team contacts Arrow or the client and ask for an estimated arrival date
* The App development group (Shreyus and Pu) informed the rest of the team that the App was nearing completion as most of the functional requirements had been implemented
* The “Help” button and the navigation feature of App was complete and only the contact list remained incomplete

#### Conclusions:

* Work on raspberry pi has begun
* App nearly complete
* Sensor have not arrived yet

| Action items | Person responsible | Deadline |
| --- | --- | --- |
| * Contact Arrow/Client | Patrick | 21/5/2018 |
| * Begin flow construction in Node-Red on the raspberry pi | Eliot and Yaolei | 25/5/2018 |

|  |  |
| --- | --- |
| Team Meeting | 21/5/201811:00EE Level 5 Lab |

|  |  |
| --- | --- |
| Type of meeting: | General Team Meeting |
| Note taker: | Abdullahi |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi and Yucheng |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | Plan the work for this week |

#### Discussion:

* Microphone and speaker have arrived but the other sensors still haven’t arrived. Nonetheless, the team could begin to making progress with the hardware side of the project
* It’s decided that Yaolei will take charge of building the necessary circuit for the speaker with Eliot helping incorporate Node-Red and Watson into it
* As for the rest of the sensors, Patrick was able to contact Arrow Electronics but was told the heart beat sensors would arrive on the 18th June, 4 days after the deadline for the product.
* As such, the team decided to instead order from another source, Amazon
* With little to be done on the hardware side (the tasking of setting up the speaker required only one person with the occasional consultation with other team members), Abdullahi was assigned to find a way to connect a button to the raspberry pi such a push would run a certain piece of code
* Patrick was assigned to help Eliot finish his work with Node-Red
* The App was essentially finished and only required a few modifications and a clean-up making it on track to be completed ahead of the deadline
* Work on Node-red connectivity will continue, not much progress have been made yet

#### Conclusions:

* Sensors will be delayed further
* Circuit construction will begin with raspberry pi and speaker

| Action items | Person responsible | Deadline |
| --- | --- | --- |
| * Set up and connect speaker and microphone to raspberry pi | Yaolei | 25/5/2018 |
| * Connect a button to raspberry pi | Abdullahi | 25/5/2018 |
| * Clean up and Finish the App | Shreyus and Pu | 1/6/2018 |

|  |  |
| --- | --- |
| Team Meeting | 25/5/201811:00EE Level 5 Lab |

|  |  |
| --- | --- |
| Type of meeting: | General Team Meeting |
| Note taker: | Abdullahi |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi and Yucheng |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | Progress Review |

#### Discussion:

* Heart beat sensor has arrived and the Node-Red group along with the hardware group are working to construct the circuit and connect it to Node-Red
* After initial testing it was clear that the sensor required calibrating and as such the team will continue working on it
* The speaker and microphone has been successfully built, with positive testing results
* However, due to the tight budget, an operational amplifier was used to boost the speaker’s volume
* The App was still not polished yet but progress remained on track
* It’s discussed that it is time to consider aesthetics of the final product
* What was firstly needed was a case to store all the electronic component in
* Given the time frame and budget, 3-D printing appeared to be most viable route for the team
* Yucheng volunteered to complete the 3-D printing given he a previous experience with it

#### Conclusions:

* App development on track
* Hardware group is making progress

| Action items | Person responsible | Deadline |
| --- | --- | --- |
| * Create a 3-D printed case for the final product | Yucheng | 8/6/2018 |

|  |  |
| --- | --- |
| Team Meeting | 4/6/201811:00EE Level 5 Lab |

|  |  |
| --- | --- |
| Type of meeting: | General Team Meeting |
| Note taker: | Abdullahi |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi and Yucheng |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | Progress review |

#### Discussion:

* The App is completed and performs all the essential functions.
* It has successfully been connected to the raspberry pi
* With some time left till the deadline it’s decided that additional feature will be added to App; this will begin with App processing the data it receives from the raspberry pi
* The screen has successfully been added to the raspberry pi along with the heart beat sensor and temperature sensor
* Concerns were raised regarding the 3-D printing of the case as no progress has been shown. Yucheng assured the team that it would be done by the end of the week.
* Leaflet is nearing completion

#### Conclusions:

Enter conclusions here.

| Action items | Person responsible | Deadline |
| --- | --- | --- |
| * Add additional features to the App | Shreyus and Pu | 11/6/2018 |
| * Complete 3-D case for final product | Yucheng | 8/6/2018 |
| * Finish Leaflet | Eliot and Patrcik | 8/6/2018 |

|  |  |
| --- | --- |
| Team Meeting | 13/6/201812:00EE Level 5 Lab |

|  |  |
| --- | --- |
| Type of meeting: | Supervisor/General Team Meeting |
| Note taker: | Abdullahi |

|  |  |
| --- | --- |
| Attendees: | Patrick, Shreyus, Yaolei, Pu, Eliot, Abdullahi and Yucheng |

# Minutes

|  |  |
| --- | --- |
| Agenda item: | Progress review |

#### Discussion:

* The team met the supervisor to present the finished final product
* Yucheng has completed the 3-D case
* Poster has been completed

#### Conclusions:

Final Product is complete

| Action items | Person responsible | Deadline |
| --- | --- | --- |
| * Present Final Product | Everybody | 14/6/2018 |