

## 31<sup>st</sup> January Minutes – meeting 3

### Arrivals

Tom Methven: –10:00  
Andrew McBain: - 10:00  
Scott Valentine: -10:05  
Alexander Wickham: - 10:00  
Jake Paterson: – 10:00  
Cale Clark: - 10:00  
Kyle Dick: -10:00

### Apologies:

N/A

**Previous meeting minutes agreed as accurate with team.**

### Actions from last meeting:

Completed

In Progress

Not Started

- Finish Consent form – Lead by Jake Peterson
- Meeting with Theo lead by Scott Valentine
- Script for tomorrow – Andrew McBain
- Email Ian McCrone about the restrictions are in place and what is available – Alexander Wickham
- Survey Charger-points: Kyle Dick
- Interview Alistair – Cale Clark - Ongoing
- Investigate hosting options – Cale Clark - Ongoing
- Set-Up Admin for git-hub –Alexander Wickham
- Introduce Ian McCrone to Team - Tom Methven

### Key-Points of the Meeting:

- New chargers api discussion; chargers too be updated across campus, manual implementation may become obsolete (Tom does not expect these to be updated anytime soon so parallel development of both methods area priority); design so that system can be switched over in future, ocpp is more of a protocol than api, protocol requires many features to be implemented that is out of our scope,

*As a result of the meeting with the client, the team discovered that all the older chargers across campus will be updated to the new generation that can be found outside the Grid. This would potentially mean a manual system may eventually be unnecessary as they would all have access to the ocpp protocol. After discussion, the team came to the opinion that these changes would likely be far enough down the line to justify parallel focus on the development of both implementations.*

- Car api is a no go; too much personal data

*After discussion with client, the idea of using car API access has been ruled out of scope for the project due to the sheer amount of personal data the system would have to store as a result of its use*

- Ian says MySQL on uni is possible (port is available), we can host on server on ww2 but not a lot of space available, client was only happy for personal data to be stored if on uni server, need to record our decision making on uni hosting vs cloud hosting (uni exclusive or transparency of usage), would make most sense to be open for everyone, less sign in would help user uptake, passwordless sign in system looks like a positive option,
- Cloud hosting (outside uni), azure free tier system, need to clarify with Ian about the VM situation,

*Following a discussion with Ian McCrone, it was identified that hosting on the university server was a viable option. Additional follow up meeting will take place to get further detail on this however a MySQL port is for now looking likely for data storage/management. This discussion sparked some debate over the use of uni hosting services vs an external source. In the meeting with the client, it was identified that they would feel more comfortable giving over personal details (if we need them) should it be hosted on a uni server. Further discussion within the team will be needed to make a decision following the next meeting with Ian. A password-less sign in system is looking a favourable design choice from information collected in the client meeting therefore this will factor into the team's decision process*

- Risk register is vital, testing server ports and assessing validity of ocpp for suitability is vital for us,

*The team discussed the importance of testing some of our more vital technical challenges early. This included insuring that we can get all the functionality from the uni server as we can and also assessing the suitability of the ocpp protocol.*

- Interview form to be sent to be whatsapp group

*It was decided that the team would put together an interview questionnaire to send to members of the current WhatsApp group to garner more information for the development of our solution.*

- **Deadline moved for D1 for week 5 to allow for further interviewing, agreed by the whole group and Tom**
- Inquire about centralised account for project contact point, ask Ian about this

- Charger survey; some charge spaces double as disabled parking should this be factored into system, Robotarium and Oriam (1) are the most up to date, 9 total chargers across campus (maybe one more but map makes it difficult to find), marked charging points on map is quite confusing and inaccurate, park and ride chargers are outside scope for us,

*The team discussed the current set up of chargers on campus following a survey. It confirmed that most up to date chargers were found at the Robotarium and Oriam car parks. It was discovered that for many charging points their location on the map vs their actual location could differ quite a bit which is something the team will take into account when creating the system. Additionally it was discovered that many of these charging spaces double as disabled parking bays which is another factor we will have to consider in our system particularly in the queuing function.*

*The team was also in agreement that the charging points within the nearby park and ride would be out of scope for the system as these are pay to use and there is uncertainty in our access to these points.*

#### **Actions for the Future:**

- **Interview Alistair – Cale**
- **Wireframe and design prototyping – Jake**
- **Second interview with Theo – Scott**
- **Second meeting with Ian to clarify hosting – Xander**
- **Initial Testing in backend – Xander**
- **Document Write-up – Kyle**
- **Create updated interview and consent forms for WhatsApp group– Andrew**

#### **Date/Time/Location of next meeting:**

Wednesday 7<sup>th</sup> Feb EM G.44

Kyle will do minutes next week