**Embedded Systems Development Group Meeting 3**

**Meeting Details:**

* Time: 1:00pm – 2:00pm
* Date: 14/11/13
* Location: Library

**Minute’s taker:** Thomas West

**Meeting Agenda:**

* A discussion of the previous meeting minutes
* Assign weekly research between group members
* Audio streaming including multicasting and the tools to use
* Web hosting
* REST

**In Attendance:**

**Members not present:** None (All present)

**Weekly Research/work delegation:**

The team has agreed to each be assigned a piece of work to do over the week and discuss what they have discovered to the group in this weekly meeting. The idea behind the weekly distribution of work this week was to ensure that we get a good start on the project. This included both design and implementation.

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| --- | --- |
| Name | Research area |
| Thomas West | Draw up a Finite State Diagram and start to look at the server work |
| Greg Masters | Start coding the client to a basic level |
| Alex Hobbs | Continual work on the keypad |
| Hevlain Nana | Start writing the functional specification |
| James Dibble | Continue on the service infrastructure, set up an e2c (amazon) web server |
| Richard Clark | Start looking at the streaming of audio with QT |
| Tim Norris | Do some work on MVC and start thinking about the kiosk |

**Audio Streaming:**

After the research done by Richard Clark, the group was able to see the good and bad points around each of the main, discussed, audio streaming tools; QT, GStreamer and FFMPEG. After some debate, we decided that the ease-of-use provided by QT was the choice to be made. It seemed well supported and the documentation was easier to follow with many people having used it before. FFMPEG appeared that it would be the best for multi-casting but the advantages of QT out-weighed this.

**Security:**

The group discussed the possibilities of securing the user information and/or the stream data. Some considerations here was the possibility of using an SSL certificate, data encryption on the database information and streaming encrypted data. Whereas this will be considered in the development of the project it isn’t going to be definitely implemented.

**Hosting:**

After discovering that we’re allowed to host our web services externally, we had to find a suitable web hosting provider that was preferably free. From past experiences of several group members, we decided that Amazon had a good, free cloud hosting service called e2c. We decided to use this as our server.

**iGEP to Web service communication:**

The group discussed how we were intending on communicating between the device and the web services that we were going to create. Using previous experiences we come to an agreement to keep everything within the bounds of HTTP using REST. Some of the group didn’t know what this was so had to add this to their research over the next week.

**Follow up meeting:**

* Time: 1:00pm
* Date: 21/11/13
* Location: Project room