**Bi-Weekly Report #4 - The Mind Set**

**Overview:**

This week saw a significant improvement in how the app works internally. We implemented another design pattern, the Singleton, which allowed us to ensure that only one instance of the *MediaPlayer* object exists at any given time; this makes sure the state is saved and that no unnecessary resources are held up. Use logging, error handling and multiple media file functionality are also things we worked on this week.

**Meetings conducted:**

**14th March – Meeting with team Topic: Progress**

Continued to work on making different parts of the code more independent from each other. Extracted some functions and removed constant from code and into a constants class to better keep track of them.

**17th March – Meeting with team Topic: Progress/Bug fixes**

Worked on removing some bugs that had come up by testing on physical devices. These included things like the media player becoming disconnected form the media file it was handling.

**18th March – Meeting with team Topic: Progress with menu**

We managed to make the menu a little bit smarter, by making it check whether the menu option selected was actually the activity currently on display, and if it is, to just close the menu rather than reloading the activity needlessly. This immediately made the app run smoother.

**21st March – Meeting with team Topic: Logging/Persistent data**

Today we looked into different options for saving persistent data on Android. This will be relevant for us, not only for keeping the logs of the usage of the app, but also for saving settings, the state of the media player etc.

**22th March - Meeting with team Topic: Singleton Pattern/Logging**

Today we finalised the way the media player runs in the app. By using the singleton pattern the media player object is now instantiated only once and used across the lifespan of the app. This way it never loses its state. We also started working on logging functionality to provide stats for the client.

**24th March – Meeting with team Topic: Logging/Settings**

In today’s meeting, we continued work on action logging and started working on a mechanism to handle multiple media files. As media files will potentially be streamed from a server in the future, we need to make this feature easy to plug in to for future developers.

**Tasks completed**

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| **Number** | **Task** | **Owner** |
| 1. | Implemented the Singleton pattern for the media player | Lambros |
| 2. | Started working on multiple intervention functionality | Lambros |
| 3. | Further improved robustness of error handling | Jaro |
| 4. | Started working on usage logging for client to analyse | Jaro |
| 5. | Tested – removed bugs – tested – removed bugs… | Both |

**Jaromir Latal**

**Lambros Zannettos**

After reading up on the Singleton design pattern, I managed to implement it for the media player functionality of the app. I also started experimenting with different ways of handling multiple files.

**Plan for the next 2 weeks**

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| **Number** | **Task** | **Owner** |
| 1. | Continue working on logging | Jaro |
| 2. | Make preferences persistent/add settings screen | Lambros |
| 3. | Work on final report | Jaro |
| 4. | Implement ID3 reading capabilities (optional) | Lambros |
| 5. | Further encapsulate code | Both |