10 October – 17 October:

Research/Planning

I reviewed my background reading done over the summer and planned the initial report document. I also gathered my list of references and thought of a time-wise breakdown of the project, taking into consideration the major tasks.

During this week I decided upon a number of changes in the project, such as using a library in order to make the graphics programming easier. Also I decided to use the headset Brain Computer Interface because it would be much easier to demonstrate during the open day. Also, since it is easier to program as there are SDK’s for it, it allows more focus time on the complex operations my game should perform (such as emotion detection and adaptation).

On the 16th of October I decided upon the SDL library for graphics, sounds and some user input, as it also allows OpenGL programming (thus giving me the chance to learn it) and works natively with the C++ programming language.

17 October – 18 October:

Deliverable:

I wrote my initial report and submitted it, based on the plan previously made.

19 – 25 October:

Research:

I used this week to get familiar with SDL, do some tutorials and analysed a game written using SDL. Also installed and set up my working environment, libraries, links project etc.

27-28 October:

Planning:

Downloaded and set up the SDK for the BCI headset.

31 October:

Development:

Set up the git repository for the project. The project will use git as a subversion tool because of the amazing features it provides for managing updates to the project, working in parallel in different features and integrating them into the main branch, and also the possibility of revising any change ever made and re-applying changes after changing it. Basically it allows re-writing the history of the project which is an amazing feature for debugging / changes of heart.

1 November:

Set-up:

Today I am installing Linux on my new computer as well. I already have it on my laptop.

7th of November:

Set-up:

Today I found and downloaded the newest SDK's for the Emotiv EPOC BCI. I found versions for both Windows and Linux OS, which should prove very useful for my intentions of developing under Linux.

12th of Novermber:

Today I decided to start the implementation of some OpenGL trials. Found and introduced in project the sample codes from one of the books. I am finding issues with configuring NetBeans to cope with the external libraries for glut and OpenGL.

I also decided to learn more about the actual graphics programming in OpenGL and I used my books to read and understand the sample code for the first chapter block model.

14th of November:

Today I implemented a library and created a class for 3D vectors. This will help me with determining the positions of the game objects, in the game model and updates. A conversion will be provided for the graphics rendering part later on.

I learnt about 3D vectors from the following link:

http://vvvv.org/documentation/3d-vector-mathematics#representation