**Adopted Development Methodology**

For our Project, we have chosen to adopt the Agile method of development. This is a form of modern iterative or agile prototyping. This method begins with the project identification/selection phase, then the initiation and planning phase. The next phase consists of the analysis, design and implementation phases, which are all developed almost simultaneously, with little or no clear distinction between the phases. The operation and support phase follows.

There are multiple reasons why we have chosen to adopt this method of development. We decided that a development method following the modern iterative or agile approach to programming would be best, as it would allow us to rapidly create a working product in a shorter timeframe than traditional approaches may allow. Secondly, as our user requirements were listed on paper and handed to us, any additional requirement gathering would be difficult. This is less of a problem in agile development methodologies, as the design and implementation phases are more fluid, allowing quick revisions to be made to both simultaneously as new requirements appear.

The modern agile development methodologies also come with a number of downsides. Firstly, it requires that group members and leaders must possess significant levels of discipline, as the format can allow uncompleted work to remain undetected for a longer amount of time, and this can cause problems later down the line for the group. This may prove to be a problem as our group has chosen to work closely without a leader, which allows more specialised allocation of tasks to those with the appropriate skill set, but also means that for this development methodology to succeed, all members must maintain that high level of integrity and discipline. Modern agile approaches are also more suited for small projects with a small number of developers. As this meets both of those criteria, having only three group members, this should not cause any problems.

The Agile method we chose allows us to create a full working project even though the user requirements may not be clear at all stages. It also allows us to complete the project within a shorter timeframe, as with all modern development methodologies. However, it does not cope as well when unfamiliar technology or languages are used, or when the project is more complex. Luckily, as we are designing a relatively simple product on familiar hardware and software, in languages we have used before, this should prove to be a very suitable development methodology.