**Design Approach**

Our design approach for this project will be agile development. Agile is a lightweight development method for software and game development which values:

Individuals and interactions: in agile development, self-organization and motivation are important, as are interactions like co-location and pair programming.

Working software: working software is more useful and welcome than just presenting documents to clients in meetings.

Customer collaboration: requirements cannot be fully collected at the beginning of the software development cycle, therefore continuous customer or stakeholder involvement is very important.

Responding to change: agile development is focused on quick responses to change and continuous development

***“manifesto of agile development from http://en.wikipedia.org/wiki/Agile\_software\_development#Predecessors”***

Agile development is based on 12 key principles

1. Customer satisfaction by rapid delivery of useful software

2. Welcome changing requirements, even late in development

3. Working software is delivered frequently (weeks rather than months)

4. Close, daily cooperation between business people and developers

5. Projects are built around motivated individuals, who should be trusted

6. Face-to-face conversation is the best form of communication (co-location)

7. Working software is the principal measure of progress

8. Sustainable development, able to maintain a constant pace

9. Continuous attention to technical excellence and good design

10. Simplicity—the art of maximizing the amount of work not done—is essential

11. Self-organizing teams

12. Regular adaptation to changing circumstance

“Principles of agile development from <http://en.wikipedia.org/wiki/Agile_software_development#Predecessors>”

In comparison to other design approaches such as Rapid Application development, agile is much more versatile and does not require specialist software to use and unlike with Rapid application development it is very simple and quick to change certain aspects of your game at the drop of a hat.

The main reasons we have chosen to use Agile development for my approach is because with agile development there is a higher emphasis on working software over high amounts of paperwork which suits us perfectly due to a desire for focusing more time in more important areas.

Another advantage / reason for choosing agile development is that you can very easily make changes to your project regardless of how far into development you are allowing us to easily make changes to aspects of my game or add new features in such as new enemy types or unique level feature.

A big advantage to agile development for us is that due to agile planning not being so strict we can within reason pick and choose which aspect of development to focus on in a day to day basis meaning that if we are having a problem with a particular piece of implementation that we just can’t figure out then with agile development we can easily shift to do something else until a solution to the initial problem arises.