

# **MADD Dungeon Game Project**

Mike Steel, Andy Poll, Dan Woodcock, Dan Thwaites

Version 1.1.0: Version Saved at 16:29 25/01/13 and henceforth distributed &c.

## **Project Analysis**

### **1 Project Outline**

#### **1.1 Program Overview**

This program is to be implemented in the form of a recursive dungeon environment with a potentially infinite length that is procedurally generated level by level for the player(s) to explore. It shall contain a number of different dungeon environments, with increasing difficulty and improved loot at each level advanced into.

A player will enter a dungeon at level one and upon completing that will be able to enter into the next level, this will continue and every fifth level will end in a teleport to a safe area. If a player dies they will 'respawn' in the last entered safe area and have to re-conquer any previously completed levels after that safe area. When a level is completed a new level will be generated over the previous level, so there can be no going back to previous levels. This generation will be procedural and based on a general map generating algorithm plus a randomly picked environment style for that particular level.

#### **1.2 Project Rolls**

##### **Team 'DoubleDan' – Dan Thwaites, Dan Woodcock**

This is the programming team and its members will mainly look at the programming side of the project, as well as researching into new ideas surrounding that programming.

##### **Dan Thwaites – Group Communist**

Dan will look at general gameplay related coding, including shaders and rendering within the project to create a realistic feel.

##### **Dan Woodcock – Map Coding**

Dan will look at coding the maps for the level, including the procedural generation of dungeons and the implementation of entities within maps. He will also look at the integration of animation of the player and other entities, and will take part in the finalization of modeling with animation.

##### **Team 'Michaelandrew' – Andy Poll, Mike Steel**

This is the design side of the project and its members will focus on modeling and texturing for the program, they will also look at the integration of these models with

MADD Entertainment © 2012-2013

Produced by M. Steel, A. Poll, D. Woodcock, & D. Thwaites

the code as well as tying the project together by working on menus, cursers, and other key parts that program users will experience.

**Andy Poll – Design Legend jr.**

Andy will take part in designing models and texturizing them, as well as taking part in any integration coding required for the implementation of such models. He will also look at any scripts that may be needed for animation and the use of objects within the game environment.

**Mike Steel – Design Legend**

Mike will work on menu and model design, and will look at texturizing such objects along with Andy, he will also look at the possibilities for AI and work on understanding AI coding and creation of such entities within the program.

### **1.3 Programming and Design Environments**

The program will be coded in C# and will be built in Unity 3D, since the Unity engine supports a number of features such as collision detection, texturization of models, camera control, and the like, which would have to be coded from scratch in any other situation. By using Unity it will save time that would otherwise be spent completing tasks others have already written to the highest degree of efficiency before us.

Models will be created using the Blender design suite, the textures are recommended to be created using either GIMP or Photoshop, but any environment that designers are comfortable with is appropriate as long final textures are in PNG or JPG format. JPG should be generally used unless transparency is required, in which case PNG is the appropriate file type.

## **2 File Storage and Version Control**

### **2.1 GitHub File Store**

Dan Thwaites will set up and manage a GitHub repository to be added to by project group members as and when amendments or changes are made to any project-related files. All group members are to have an active GitHub account and are to maintain familiarity with files that are on GitHub as well as understand any changes that take place therein.

### **2.2 Backup Policy**

All project members will keep up to date backups and back up files regularly to separate devices and/or webspaces. These backups, as with all files related to the project, shall be kept secure.

### **3      Webspaces and Web Presence**

#### **3.1    Website Management and Content Control**

The website is to be hosted at <http://madd.atwebpages.com>, and is to be updated and corrected by Mike; all group members shall have accounts on that website and it shall be used to keep interested parties updated on the progress of the project.

#### **3.2    Social Networking Pages**

The group's Facebook page shall be kept up to date with the current state of the project; all group members shall have administration abilities on this page and should make sure that all information on that page is correct. All status changes should be relevant to the project and be in no way harmful, derogatory, or discriminatory to any person, party, group, or organization of people.

### **4      Document Changes**

<b>Document Version</b>	<b>Date</b>	<b>Reason for Change</b>
Version 1.1.0	25/01/2013	Grammatical Corrections