# Dungeon of the Mighty Titan - Vanquish

**User Manual** 

## **David Bond:**

- Implementing multiplayer functionalities, which span several components.
- Programming of the following game menus: Main menu, Lobby menu, and character selection menu.
- Research into the networking aspect of the Unreal Engine.
- Coding of the Save and Load systems.

# **Matthew Yengle:**

- Coding of the in-game GUIs, as well as additions to the Player Character and Game
  Mode classes for support.
- Creating a database to hold information for the game's items.
- Research into open-source weapon and armor models.

# **Timothy Canipe:**

- Coding of the Character, Player Character, and Non-Player Character subsystems.
- Coding of the Skills and Attributes minor subsystems.
- Coding and implementing the Damage calculations.
- Research into open-source character models, animations, and assets.

### **Vishal Bhatt:**

- Coding of the Game World and Game Level major subsystems.
- Research into open-source world meshes, level designs, and audio assets.

### Main Gameplay

To move the camera around, use the keys **A,W,S,D** to go left, up, down, or right, respectively.

To pan the camera 90 degrees, use the keys **Q** or **E**.

Players are only allowed to move when it is their turn. This is indicated in the upper left hand corner of the screen. Once it is the player's turn, they can move by clicking with the **Left Mouse Button** on a tile within their allowed movement spaces, which is indicated by blue squares.



The player can simply click on a blue tile, and their pawn will move to that tile. If the player does not want to move at all, they can click on the tile that the pawn is current on. The player can perform their movement process over multiple operations.

The static information shown on the screen at all times is called the Heads-Up Display (HUD). The bottom left shows the player's current HP out of their maximum HP, their current mana out of their maximum Mana, and their current experience out of the

required experience to level up. A player level's up by defeating monsters and gaining experience. When they level up, they earn Attribute Points that can be used to raise their pawn's attributes, which is discussed later on.

On the right side of the screen, the player can see information about each of their party members. It is in the same order as their own information, with health on top, then mana, and finally experience. Hovering over these graphics with the mouse will show the exact numbers.

The player is allowed one attack per turn, unless otherwise specified by a skill. To attack an enemy pawn, the enemy must be in range of the player's pawn. A pawn's range is determined by the type of weapon they are using. Melee weapons generally have a range of 1, where the enemy must be on an adjacent tile to hit. Ranged weapons have a range greater than 1. If the enemy is within range, the tile that the enemy is on be red. The player can then click on that tile using the **Left Mouse Button** to attack that enemy. If the enemy is out of range, but the tile is red, then that means the pawn will be close enough to be able to attack that enemy. An example of this is shown below.



The player's turn ends when they have exhausted their options.

Items are stored in the player's inventory, which can be opened with the key I. Nearly all items in the game can be interacted with using **drag and drop** operations. The exception to this are potions, which are consumed by **double clicking** the potion in the inventory. An image of the inventory is shown below, with a few items.



The player can open the Character menu with the key **C**. The Character menu has two pages of information: the Equipment page and the Attributes page. The Equipment page is shown by default, and is pictured below.



All players will begin a new adventurer with at least one piece of armor and a low-tier weapon. Items can be added or removed to the proper slots by a **drag and drop** operation. On the right, the slots are for: head armor, chest armor, pants armor, and feet armor. On the left are two weapon slots, for such things as daggers, swords, bows, and even shields. Two handed weapons such as bows, staves, and great swords must be equipped in the top left weapon slot. Items can only be equipped from the inventory item.

On the right side of the Character menu, there are two pages that switch between the Equipment page and the Attribute page, the latter is pictured below.



There are 7 attributes in total, which the player can allocate Attribute Points to upgrade. The player earns Attribute Points by leveling up.

- Strength will increase physical, melee damage dealing weapons, such as swords.
- Vitality will increase protection to physical attacks.
- Intelligence will increase magic damage dealing weapons and magic dealing skills.
- Wisdom will increase protection to magical attacks.

- Dexterity will increase the physical, ranged damage dealing weapons.
- Speed will increase the player's Hit Rate (their chance to hit a target) as well as their Maximum Movement spaces per turn.
- Luck will increase the player's chance to land a critical hit, which always doubles the amount of damage the player will deal.

Increasing one of these attributes using the + button or decreasing one of these attributes using the - button is temporary. The player cancel the changes using the **Reset** button. To finalize the changes, the player must use the **Accept** button. Exiting out of the menu will cancel the temporary changes. The values shown below the attributes are reflected by any temporary changes.

There are three ways that a player can get items in the game: finding chests in the dungeon, looting defeated enemies, or bought from NPC vendors.

To open a chest, the player must be on an adjacent tile, and it must be their turn. Meeting these conditions, a player can open a chest using the **Right Mouse Button**. A player or enemy cannot walk on a tile that has a chest on it. An image of loot found in a chest is shown below.



The player can drag and drop these items to their inventory; however, they cannot add items to the chest from their inventory.

The second way to get items is by defeating a monster and claiming their loot. A defeating enemy will be replaced by a gravestone upon their death. The same rules that apply to chest concerning how to access it applies to gravestones. However, there are some differences. A player or enemy can walk on a tile with a gravestone on it. If another player or enemy dies on such a tile, their loot will be added to the existing gravestone. Once the contents of the gravestone are empty, the gravestone will disappear. The items spawned by the death of a low level enemy will be a lower tier than those spawned by the death of a mini-boss or a level-boss. Furthermore, gravestones and chests are the only way to find Gold, which is used as a currency in the game. An image of a chest and a gravestone are shown side by side in the image below. Note that the tile of the chest is not blue, while the tile of the gravestone is blue.



The final way to obtain items is through vendors, which are found throughout the dungeons. Vendors are the only non-enemy NPC in the game, and can be identified by

not having a health bar above their head. Player's can access the vendor's merchandise by right clicking on them while it is their turn and their pawn is within two squares of the vendor. Like with chest, neither a player or enemy can walk on a tile with a vendor on it. The player can buy items that the vendor has in their shop by dragging and dropping the item to their inventory. If the player does not have enough gold, they cannot buy the item. The value of the item is shown in its description. The player can also sell items to the vendor. The item must be in the player's inventory, and when dragged and dropped in the vendor's inventory, the player will automatically receive two-thirds of the item's worth in Gold.



The player can open the Skill menu with the key **P**. The Skill menu displays the skills for the current unit as in the image below.



The skills can be purchased using skill points which are acquired from leveling up. Each class has it's own skills, which can be purchased and placed in the skill bar, by clicking on the skill and then dragging it to the desired slot on the skill bar. Once on the skill bar these skills can be used by clicking on the skill in the bar or by pressing the correlated button on the keyboard, which is displayed above the skill slot.