

Group 24: XNA 2D Game

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Project Abstract

The purpose of this project is to develop a 2D role-playing game using the Microsoft XNA framework in C#. The game will be created with an object-oriented design style, and attempt to follow best practices of code and documentation creation. Additionally, the project will use an agile development process to provide a flexible development schedule, as well as some aspects of TDD (test-driven-development) to allow for a faster start to the coding process, as well as proper testing down the line. Moreover, the game will use semantic versioning and GIT for version control. The game is going to follow the Massive Multiplayer Online Role Playing Game stereotype (MMORPG), pulling inspiration from games like World of Warcraft, Maplestory and similar 2D games like Terraria. Following the MMORPG stereotype, the game is expected to have a large world where individuals can interact, team up and battle monsters together. The game will be flushed out with non-player-characters (NPC's) that will provide storyline through the form of quest chains. These quests will ask the players to collect items, kill monsters, or clear areas in return for rewards in the form of currency, equipment and story development. The game will also contain some platforming aspects to add further challenge and depth to the game. Individual entities, like characters, NPC's and monsters, as well as all items will have sprites either manually created or outsourced with a cartoony feel. Each individual section of the map will have backgrounds and music associated with them to provide an immersive experience. The main objective of the game is to develop your character's attributes and skills through leveling up. To make this objective clear and solid, the main quest line will follow through the character's entire leveling process. The character will start as a classless vagrant.

Upon reaching level 15 they will be given the choice to become either a Mercenary, Ranger, or Mage. These classes further split the skills and attributes they will use. Each class will bring different mechanics to the game but share common functions of their base class. Mercenaries will be sword wielders, choosing either to be a sneaky rogue-like, reckless barbarian type, or armored knight. The Rangers will be bow or gun wielders, either a short-bow with rapid fire, a long bow with slower but more powerful attacks, or a pirate gunslinger. The Mages will be the spell wielding class, choosing between fire and earth based attacks, water and air based attacks, or choosing to be a light and darkness mage providing healing as well as minimal damage to a party. As software engineering students, the members of the group will be able to apply the knowledge of OOD, TDD, and agile development schemes learned in their program to bring to life a massive multiplayer online role playing adventure.