PNNSD

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Bibbin's Adventures (CSCI 205 Edition)

User Manual

I. Introduction

The objective of this RPG, Bibbin's Adventures (CSCI 205 Edition) is to entertain users by throwing them into the class of Computer Science 205, Software Engineering and Design, as a student at Bucknell University. As a player, the user will interact with professors, teaching assistants, and other students of the class along the way to achieve the goal of understanding neural nets and passing CSCI 205. Some NPCs give the user hints or tasks which, if taken, will help the user achieve success; others will hinder the ability to learn and proceed in the game unless the user defeats them in a duel. Listening and aiding allies while defeating enemies will allow the user to win the game.

To begin the game, the user will select their player by clicking on name of the character they wish to be. A pop-up window will appear instructing the user on what their first task is. After this, the user will be placed in the first room where they now have the freedom to navigate the map by clicking on the door/arrow buttons which correspond to the rooms on the map surrounding the one the user is currently in. In each room, the user will be able to talk with an NPC, fight an NPC, and/or gather items and weapons that will help the user complete their quests by clicking on the corresponding NPC or item in the room. After defeating an NPC in battle, the user will be able to click on the NPC's body to loot any equipment the NPC had. Throughout the game, the user will be able to view their inventory by clicking on the backpack button. This will display the user's available weapons, as well as consumable items. If the user follows the instructions carefully while navigating the game, the final scene will require the user to fight the most difficult NPC to defeat.

II. Background and Motivation

The motivation for the game is wanting to entertain players by allowing them to become students of CSCI 205 by completing tasks and interacting with characters inspired by real-life elements of our class at Bucknell University. In addition, all of the characters featured in the game are inspired by real-life students and professors at Bucknell, most of which are in our class along with one geology major who adds to the storyline. Our program uses many different software design elements from the Java programming language, as well as Scrum and Agile frameworks for managing software development.

(Sidenote: An important aspect of creating an RPG game like this one is that, even though we created a storyline inspired by CSCI 205, the game can be refactored to include any type of storyline a developer could want!)

To allow the user to fully become this Bucknell computer science student, we decided to make a role-playing game (inspired by games like Dragon Quest and Freddi Fish) that allows the user to actually choose a player (one of us four developers) to play as throughout the game. To accomplish this task, we input four buttons into our initial program screen so that the user can choose which character to play as. After the user chooses, we assign that character as their player in the game that they are able to see on screen and manipulate. We want the player to be able to move between rooms to complete different tasks, so we allowed for buttons to appear for the user to click which room they want their player to move to on the map.

The point of our RPG is for the user to complete tasks inspired by people and elements of our class, so we included non-playable characters that the player can interact with by talking to them, as well as fighting them in certain situations. To move the story along, the NPCs are the main source of instruction for the user as to what they should do next so we allowed for the user to click on an NPC to see its dialogue. In addition, we programmed an “Attack” button to allow the user to attack an NPC if the NPC was not friendly or helpful to them. In addition, the player or NPC will have statistics associated with such as health, attack, and defense. These statistics will help determine who wins the battle. In addition to interacting with characters the player is also able to attain items that will serve as weapons and consumables to help them throughout the game by boosting their health, assisting them in battle, etc.

Included on the next page is our UML Use Case Diagram displaying the relationship between the user and the specific actions they may take in the game.


RPG
Player
Choose Character
<<include>>
Assign Character to Player in Model
Talk to NPCs
<<include>>
Iterate Through NPC Dialogue
Move Between Rooms
<<include>>
Adjust Map
<<include>>
Verify Room is There
Move Room Left
Move Room Right
Move Room Up
Move Room Down
Gather Items
<<include>>
Adjust Inventory
<<extend>>
Use Items
<<extend>>
Adjust Player Stats
<<extend>>
Fight NPCs
<<extend>>
Adjust NPC Stats
<<include>>
Display Battle Scene

III. Instructions

The user will begin by selecting a character to play as using the buttons that are prompted after the initial game description. Once selected, the player will then appear on the first room of the game. The text on the top of the screen tells the name of the room the user is in. To move between rooms, hover the mouse cursor over or around the doors until arrows appear. Click on the arrow to move to the next room. There will be a picture of an NPC inside each room. To talk to the NPC (which allows the users to get hints on the next task to complete), simply click on their picture, and their dialogue will appear on the bottom right. If the NPC is dead, clicking on them will instead loot their body for items.

There are four buttons on the bottom right of the screen. The backpack represents the user's inventory. Clicking on the backpack opens the inventory so the user can see, use, or equip items in the inventory. A user can equip armor, weapons, and shields to increase their strength, defense, maximum health, and the inventory size.To add items in the room to the inventory, click and drag items to the backpack image.

The magnifying glass searches NPC bodies for items, which will work when the user clicks on the magnifying glass image AND the NPC is currently dead. Clicking the orange and blue arrows allow the user to trade items with the NPC in the room. The NPC will only trade if they need an item and the user has the item they want.

The action bubble with a fist is the attack button. Clicking this button will attack the NPC in the room, only if the NPC is not friendly and not already dead. Battles work by lowering the health of the NPC based on the user's strength and their defense, and vice versa. After the user attacks the NPC, they will automatically retaliate. After the NPC retaliates, then the user can attack again. If the NPC's health reaches zero before the user's, the NPC dies and the battle is over (REMINDER: clicking on their dead body or the magnifying glass will loot their body). If the NPC the user is fighting is the final boss and they die (health reaches zero), the game is over and the user has won. If the user's health reaches zero first, then the user dies and the game is over.

Once the game is over, the user will see a final message describing their faith. After closing this message box, the game shuts down, and the user is free to reopen the game and try again.