**Sprint-wise Documentation**

# **Sprint - 1**

### **FrmLevel Gameplay Implementation (Pratik Ghimire 30/10/2023)**

* Added function so that enemies will disappear from the map when their health is zero.
* Added functionality so that: Player can’t fight with the boss enemy until all other enemies are dead. To ensure this following things are implemented:
  + Added gate in the FrmLevel and that will prevent player to reach boss enemy
  + Implemented method to generate key in the FrmLevel and users can interact with that key.
  + Implemented the action: removing the gate, once the player interacts with the key.
  + Implemented the method of displaying text when the player interacts with the gate without killing all the side-enemies and collecting the key.

### **FrmHome Creation (Niskarsha Acharya 30/10/2023)**

* Created a home page form ‘FrmHome’ that has the menu with the following buttons and key presses:
  + New Game button: Allows us to play the game. It calls the FrmLevel form.
  + Exit button: Exits the application.
  + Esc key press: Exits the application.

### **FrmLevel Modification (Niskarsha Acharya 30/10/2023)**

* Created a button ‘Go To Home’ that allows us to go to the home page while playing the game. It calls the FrmHome form.
* Added some key presses:
  + Esc key press: Exits the application.
  + Q key press: Allows us to go to the home page. It calls the FrmHome form.

### **FrmBatle Modification (Niskarsha Acharya 30/10/2023)**

* Modified the conditional check on player and enemy healths when they become less or equal to 0.
  + When player health becomes 0, a message box is displayed showing that the player has lost the game and if he/she wants to play the game again. If the player selects ‘Yes’, then the home page is loaded and if ‘No’, the application is closed.
  + When enemy health becomes 0, a message box is displayed showing that the player has won the game and if he/she wants to play the game again. If the player selects ‘Yes’, then the home page is loaded and if ‘No’, the application is closed.

**FrmHome and frmHelp Creation (Mufutau Ramon 30/10/2023)**

* Added an home page to house the storyline and the animation
  + Add a timer to the pictureBox to change the images at specific time
  + Add a timer to the label to change the story at the same time with the image.
  + Add a timer to the label to change the name of each character at the same time with the image.

* Added an instruction page (New Form) that a user can click from the home page to get instructions about the game.
  + Add a button button to home page to click and access instruction
  + Add label to place the instructions
  + Added a button to go back to the home page from the instruction page

**Installation / Setup Procedures for OpenAI API Functionality (Cary Randazzo 31/10/2023)**

1. In Visual Studio, navigate to Tools
2. Navigate to the Nuget Package Manager side menu
3. Click on Nuget Package Console
4. In the console that opens below, execute the following command “Install-Package OpenAI” which will install the necessary package
5. Back in the Nuget Package Manager side menu, click on the package manager button in the middle
6. In the search bar in the new window that opens, search for “openai”
7. When OpenAI comes up, click on it, and click on the two relevant project folders so as to check mark each. If there is an install button, click install
8. Next, go to OpenAI and sign up for and fund an OpenAI apikey
9. Copy the key that you generate for the upcoming command
10. Next, open a command prompt and type the following command to set a new environment variable: ‘setx OPENAI\_API\_KEY “<yourapikey>”’ - without the single quotes or </> symbols and it will generate a “SUCCESS” response
11. This concludes the requirements for installation of this feature

\*\*\* IMPORTANT NOTE: This feature branch has been disabled due to financial requirements of OpenAI ApiKey and issues implementation the Api key to other users’ devices (discovered one day before deadline; and the possibility of extending said deadline is not possible without a Project Manager)

**Chatgpt ReturnResponse (Cary Randazzo 31/10/2023)**

* Use thread handling and OpenAI API to request a response from chatgpt with some given inputPrompt

**Chatgpt IntroBossStatement (Cary Randazzo 31/10/2023)**

* Use ReturnResponse with a specifically structured inputPrompt to generate a relevant intro statement by the boss.

**Chatgpt MidFightBossStatement (Cary Randazzo 31/10/2023)**

* Use ReturnResponse with a specifically structured inputPrompt to generate a relevant mid battle response based on if the player or the boss’s health has dropped below half of its maximum.

**Chatgpt GetBossDecision (Cary Randazzo 31/10/2023)**

* Use ReturnResponse with a specifically structured inputPrompt, based on current game/fight states such as player and boss health as well as player and boss damage (and also healing amount) to generate a choice between “Attack” or “Heal” choices for the boss during each phase of the fight.

**Non Boss Background Changes (Cary Randazzo 31/10/2023)**

* Altered the non boss background images to fit the graphics of the level

**Boss Fight Background Changes (Cary Randazzo 31/10/2023)**

* Altered the Boss Fight background to give the player a more immersive serious boss battle experience

**Label3 Added to handle Fight Calculations Log and Boss Statements (Cary Randazzo 31/10/2023)**

* As described in title

**Player Graphic Changes (Cary Randazzo 31/10/2023)**

* Some minor changes to the player graphic

**Boss Graphic Changes (Cary Randazzo 31/10/2023)**

* Some minor changes to the boss graphic

**Attack Sound Effects (Cary Randazzo 31/10/2023)**

* Added battle sound effects for a more immersive experience

**Level Music (Cary Randazzo 31/10/2023)**

* Added background music that is played during the level movement and interaction phase of gameplay

**Boss Fight Music (Cary Randazzo 31/10/2023)**

* Added an exciting background song for the final fight. The song itself highlights the supremacy of the AI boss that the player fights (Fun Fact: The song itself was generated by Chatgpt!, although a musician on youtube collected it to music. Fair Use Claim for educational purposes and being a shortened/clipped version of the song)

**Updated Instance Handling when FrmBattle Closed (Cary Randazzo 31/10/2023)**

* There were issues where the player could close the FrmBattle Form directly by the window “X” button and it would causes errors and crashes in the game – fixed
* There were also issues in when the player would win or lose a fight during the FrmBattle Form’s normal processes and errors and/or crashes would follow when FrmBattle was called again later from the FrmLevel – fixed

**Updated Enemy Class to Simplify Identification (Cary Randazzo 31/10/2023)**

* Updated the Enemy Class to include “Name” for simple identification of which enemy was to be handled during conditional situations

**Item Feature Architecture Added (Cary Randazzo 31/10/2023)**

* Added a Factory Design pattern system to handle the intended item system
* Added interfaces based to begin handling the items added to the system
* (not enough time to deadline - feature set aside due to time restrictions)