PYDC Game Development Competition

Game Documentation

Version 1.0

Game Name : Neraka

Team Name : Drunk Kitchen

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1.0 Introduction

Neraka is a fictional game developed by Drunk Kitchen Studio. The background of the game story is set to World War 0. The protagonist, Muhammad Imran, who is a Malaysian soldier, is escaping from warfare areas to safe areas. It is because the warfare areas are contaminated by massive bioweapons. During the journey, he encountered lots of mutated beings. Therefore, the game is about the protagonist traveling to the safe areas, by escaping from the mutated beings. The game is designed in the pixel art theme.


Figure 1.1 is the game logo. The logo is the picture of the Wahmen monster in the game.

2.0 Game Flow

When the game is launched, the main menu is displayed. It displays a play icon to start the game. Besides, it has buttons to navigate to the tutorial page and credit page.

When the play icon button is pressed, the gameplay is started. The user will control the player in the game to escape from the monster attacks. The gameplay continues until the player runs out of health.

When the user loses the game, a game over page is displayed. It shows the time survived and distance traveled, for both the current game and the best record. The user can choose to navigate to the homepage, or restart the gameplay again.
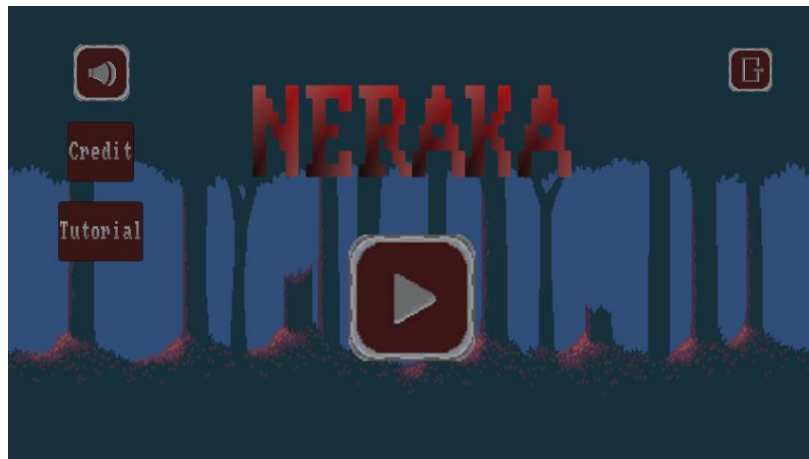
Figure 2.1 shows the Main Menu of the game.
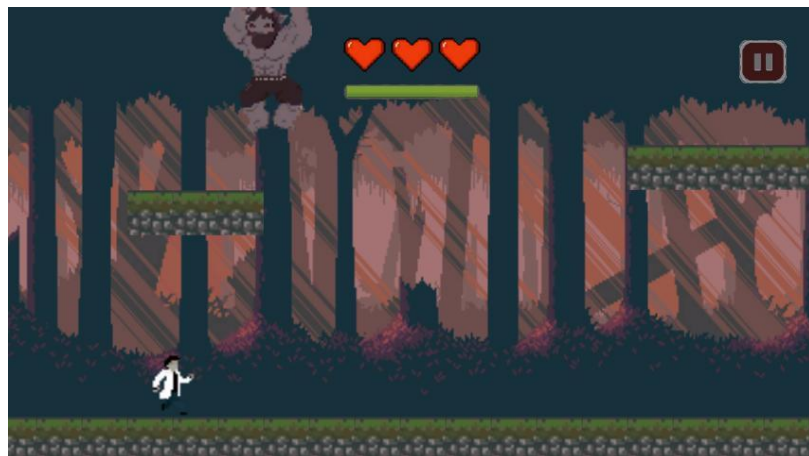
Figure 2.2 shows the Game Play Scene of the game.

Figure 2.3 shows the game over scene.

Figure 2.4 shows the credit page of the game.

Figure 2.5 shows one of the tutorial slides of the game.

3.0 Game Rules

The game is similar to an endless runner game. The player in the game will always be running throughout the gameplay, whereas the monsters will be spawned continuously on the path that the player is running. The player has to escape from the monster by jumping, sliding and dashing. Colliding with the monster will reduce the player's health.

In the game, it has a base ground for the player to run, and some platforms for the player to jump onto. There are power ups for the player to gain, which will provide different effects for the player. When the player loses all of his health, the game is over.

4.0 Player Movement

There are four movements for the player:

Run Movement

The player will be running most of the time in the gameplay. The running movement is automated by the system. The user cannot stop the run movement, unless it is from the monsters' attacks.

Jump Movement

The user can tap to jump, and double tap to double jump, at the left side of the screen. The jump movement will allow the player to jump onto the platform, or jump between two platforms. Besides, the jump movement allows the player to jump over the monsters, in order to prevent the monsters' attacks.
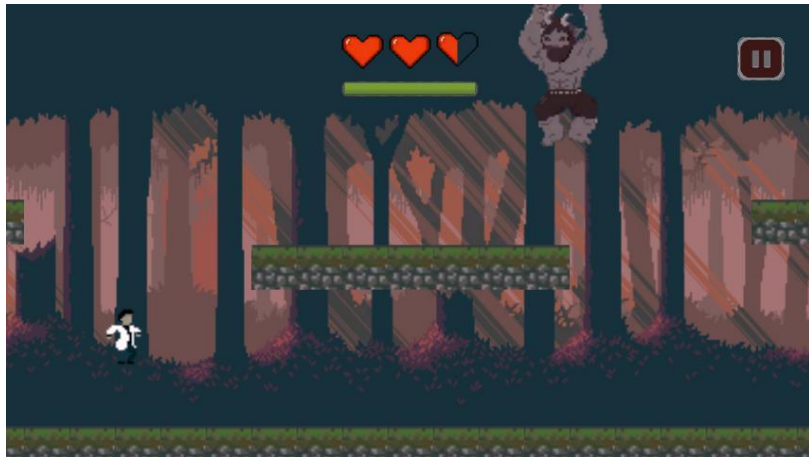
Figure 4.1 shows the player's jump movement.

Dash Movement

The user can tap to dash, which is to move faster in the game, at the right side of the screen. This movement allows the player to pass through the bottom of the monsters quickly, when they are jumping. Besides, the dash movement will allow the users to escape from the tangling attack of the monster.

Slide Movement

The user can swipe down to slide. When a monster is jumping and falling back to the ground, it has a small gap under it. The player can slide to pass through the bottom of the monster, to prevent himself from getting damage from the monster.

*Figure 4.2 shows the player's slide movement.*

5.0 Monster

There are two monsters in the games:

Giant

The giant is a big size monster in the game. He causes damage to the player when the player collides with him, by deducting half heart from the player's health. The monster will jump in the game, and break the platforms that are located on top of them. The player needs to jump, slide or dash in order to prevent colliding with him.
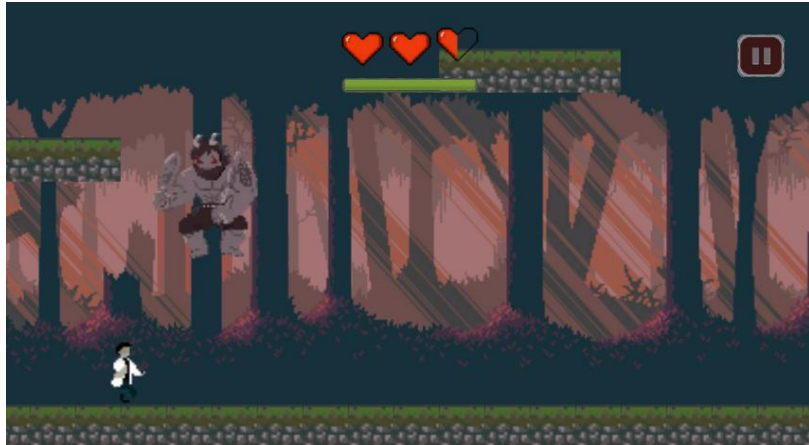
Figure 5.1 shows the Giant monster in the game.

Wahmen

The Wahmen is a female monster in the game. She will shoot out a tangling bullet in the direction of the player. The player can jump to avoid colliding with it. If the bullet hits the player, she will stop and tangle the player, and drag him to collide with her. She will deduct half heart from his health when a collision occurs. If the Wahmen tangles the player for the first time successfully, she will tangle and drag him to her again, after he has passed through her. When the tangling situation occurs, the player needs to keep dashing in order to resist the tangling process.
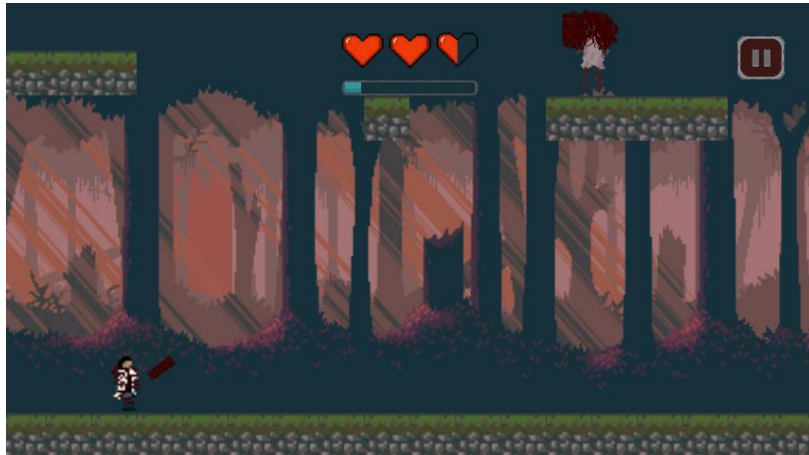
*Figure 5.2 shows the Wahmen monster in the game.*

6.0 Collectables

The current collectable object in the game is the power ups. The power ups are collected and used instantly in the game. There are two power ups available:

Health Regen

The Health Regen is the power up that restores all of the player's health for over 15 seconds. The player's health will be restored at the rate of half heart per 4 seconds. It is useful when the player has low health.

Jump Boost

The Jump Boost is the power up that allows the player to jump higher in the game. The effect will last for 15 seconds, and allow the player to jump 1.5 times higher. This allows the player to jump to the platforms that are highly located from the ground. Besides, it can be used to escape from the monsters as well.
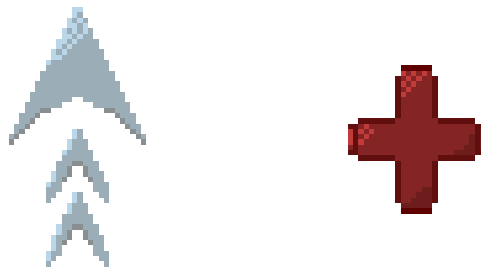
Figure 6.1 shows the power ups in the game.
*The left sprite is Jump Boost.*
The right sprite is Health Regen.

7.0 Music

Background music and sound effects are added to the game. When the game is launched, the background music will be played automatically and repeatedly. Besides, sound effects are also added to the UI elements of the game. The buttons of the game will produce a clicking sound when it is clicked, so as to let users feel more immersed into the game, and increase the game experience.

For the characters in the game, each character has their own sound effects for each different movement and action. For the player, it has respective sound effects for his jump, slide, dash movements. Moreover, the player has sound effects when he gets damaged and dies. The sound effects are also provided for the monsters in the game.

To mute all the sounds in the game, the user can press the mute button of the game.
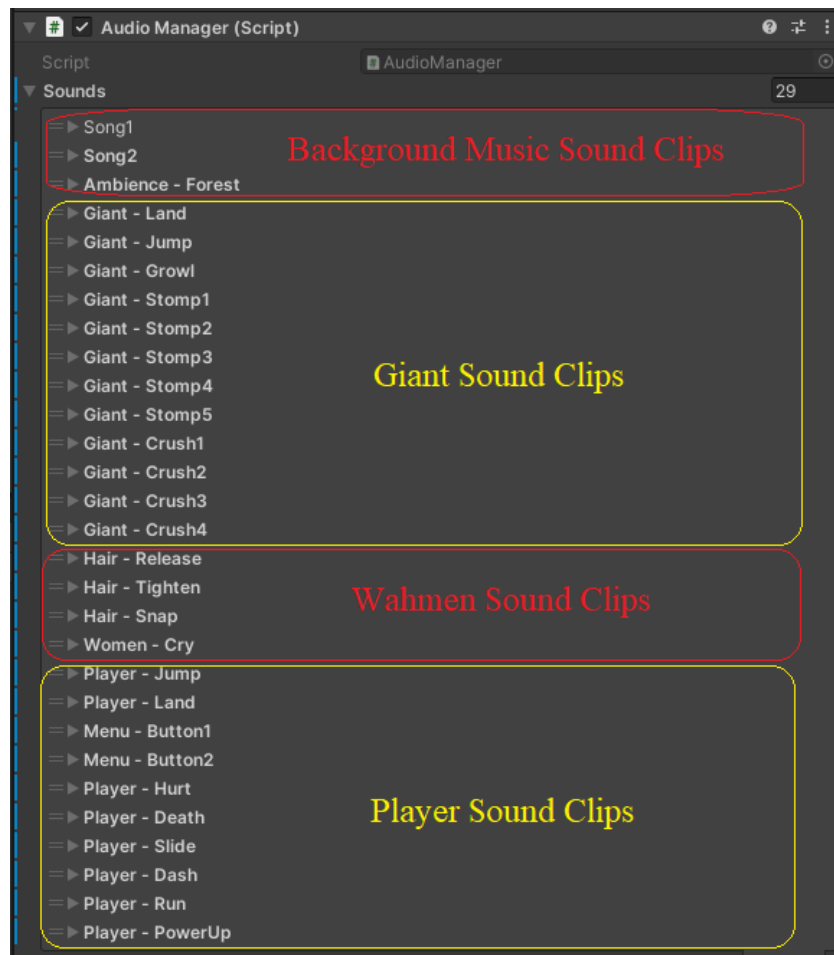
*Figure 7.1 shows the list of the sound clips in the game.*

8.0 Sprites

There are many sprites in the game, the sprites are categorized into Game Part and UI Part, so that it is easy to understand.

8.1 Game Part

The sprites are designed and created for many aspects of the game. The sprites include the player, monsters, power ups, background pictures and the ground & platform. As the sprite such as monsters and players are displayed in animations form, their actions are drawn one by one, so that the pictures can be looped as animations in the game.

Whereas for the sprites like the power ups, as they are displayed in static form, hence they usually have one picture only. The background picture in the game play is created by using many layers of the picture, and each arrangement of the layer is controlled by using code, so that it looks dynamic during the gameplay.
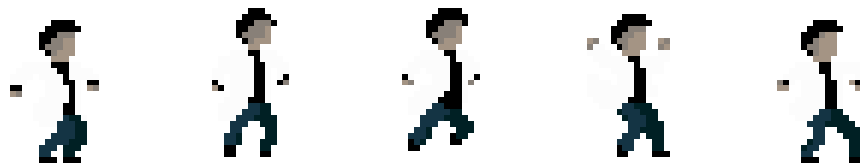
Figure 8.1.1 shows the jump animation sprite sheet of the player.

Figure 8.1.2 shows the smash animation sprite sheet of the Giant.

Figure 8.1.3 shows the attack animation sprite sheet of the Wahmen

Figure 8.1.4 shows the tilesets used to generate the ground and platform sprite.

Figure 8.1.5 shows one of the background images of the game.

8.2 UI Part

For the UI of the game, it is mainly found in the menu of the game. The UI consists of buttons, texts, images and videos. For the buttons, they are created by using legacy buttons and Text Mesh Pro (TMP) buttons. Some of the buttons will also display an icon rather than text.

For the text, the font style is set to an external word design, so that it suits the design of the theme of the game. Some of the color of the texts is set by using color gradients, so that it looks more attractive and beautiful.

For the image in the UI, they are mainly icons for the buttons. For example, the images are play icon, mute button and restart game button. The images help to make the button in the UI to be more user-friendly.

For the videos, they are used in the credit page and tutorial page. A background video is used in the credit page, whereas player movement tutorial videos are used in the tutorial page. The videos are used to attract the users' attention in the game, as they will be more attracted to videos rather than images, which are not static.

Figure 8.2.1 shows some of the UI icons of the game.

Figure 8.2.2 shows the text font style design used in the tutorial page.

9.0 Achievements

There are two types of achievements for the user to achieve in the game. The achievements are the time survived and distance traveled.

For the time survived, it records the time that the player survived in a game match. The user should try to survive as long as they can. The longer the time that the player survives in the gameplay, the better the user is.

For the distance traveled, it records the distance that the player travels in a game match. The user should try to travel as far as they can. The longer the distance that the player travels, the better the user is.

In the game, it will record the user's best time survived and distance traveled. The game will always update both of the records, when the user breaks the previous records. It is to encourage the user to break his record again and again.

Figure 9.1 shows the current and best record of time survived and distance traveled in the game.

10.0 Future Planning

More collectables in the game

The game will provide tokens for the user to collect during the gameplay. The tokens are coins and diamonds. The tokens will be generated randomly for the user to collect. The tokens will be used as part of the coin system in the game, to purchase items in the shop of the game.

Multiple biomes and characters

The game will provide more biomes design for the game map, so as to keep the user interested in playing the game continuously. The game will change the biomes based on the distance traveled in the game.

Apart from that, the game will provide more monsters. Although the game has only two monsters at the present, more monsters will be designed and added into the game. It will make the game more challenging and interesting to play. This will keep the user curious about the types of monsters that they will meet.

Furthermore, the game will provide more player characters for users to choose to play. The user can select the character that he likes to play in the game. Each character will have different abilities. The user is able to get the characters by coins or achievements.

Shop

The game will have a shop for the user to spend his tokens to purchase items that he wants. The shop of the game is also part of the coin system of the game. The shop will provide more enhanced power ups for the user to purchase, such as second life revival, restore all health and stamina, and invincibility. The user has to purchase the power ups first in the shop before he can use them.

More achievements

More achievements will be provided for the user to achieve. The game will list out all the achievements, and the awards will be given to the user once he achieves them. For example, achievements like escaping from 10 consecutive monsters without getting damage. Rewards will also be given when the user gets the achievements. The achievement feature aims to retain the user's enthusiasm to play the game, even if he has played the game for a long time. It is to make the game interesting and challenging as well.