Sudden Darkness

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Introduction

Sudden Darkness was inspired by a lot of modern horror games from these days. Basically, the player suddenly wakes up inside the house. Player will need to find their way to escape the house. Finding the key is crucial for the player to escape the haunted and creepy house. To make it more challenging the player will only be having one life.

The purpose of this program is to improve our skills in developing program and implementing the concept of physics in our program. Thus, widen our knowledge in using Unreal Engine 4 as platform to create our own game interfaces.

Basically, our program allows the player to play as a boy who suddenly wakes up inside an old house. Player can use directional keyboard keys and mouse to move around the map looking for the item required. Player can move around the house looking for the key and quickly get out of the house. The challenge of this game basically the player is required to roam around the house in darkness with the help from the torchlight beam.

Documentations

Our program will start with a main menu that give the player two choices which are to play the game or to quit the game. Player can navigate through the main menu by using the mouse.

When player choose Play Game, player will be moved into a first-person viewer. The player will be inside the living room which has been designed using the unreal engine 4. For this scene, the house will be in total darkness leaving the player to fully depends on the torchlight. For picking up the torchlights, the player will need to press 'q' key to pick it up while 'e' key to switch it on or off. For the interaction with door, user will need to press the 'f' key to open and close the door. For the key, user will only need to run over the key to pick it up and clicking sound will be activated.

For the movements of the player, the acceleration of the character was set to 200 and the max walking speed of the character was 300. For the walking animation, we have used blendspace to make sure the transitions from idling to walking and to crouch walking were smooth. Then, these animations were taken into the character animation blueprint for the flow of the animation and logic calculation for the animations. This was to make sure that the player will move from slow to fast in stages. Other than that, there will be collision effects if the player hits the box or bottle inside the house. Other than that, the player can jump around the house. The jumping velocity was set to 400 to make sure that the jumping animation finished before reaching the ground again.

In this game, there were three NPCs (Non-player characters) which were put thoroughly inside the house. Each of these NPCs have their own animations playing all over the time. For a situation where the player hits the NPCs, the NPCs will be triggered and the player will lose one life. In this whole game, the player only gets 1 chance to survive. For each of the NPCs, they will produce sound all of the time to make the horror effect livelier.

During the gameplay, player can pause the game whenever they want by simply press the 'P' or ESC key. Then, the pause menu will pop out with two choices which are to resume or to quit the game completely. The winning condition for our game is to get out of the house safely. There is no time limit so the player can take their time to search for the key somewhere inside the house. Not only that, the player will also need to get out from the exact door to win. If the player is trying to get out while not having the key, there will be message printed saying that the player still does not have the key.

User Manual/Instructions/Screenshots

How to Install

1. Unzip the SuddenDarkness.zip to the desired location.

2. Launch the game by clicking the SuddenDarkness.exe executable.

How to Play

The key bindings that are available in this game are keyboard key W, A, S and D for the movement of the player's character. Other than that, player can jump by pressing keyboard key spacebar. Player can collect the flashlight to keep it in the inventory by pressing keyboard key Q. Player can toggle on or off for the flashlight lighting. Player can open or close doors in the game by pressing keyboard key F. Player can pause the game by pressing either keyboard key ESC or P.

If there is any button displayed in the game, player can make a choice by clicking left mouse button. The main menu, the pause menu and the end menu can be controlled by clicking left mouse button. The camera of the game can be controlled by moving the mouse.

Figure 1 – Main Menu of the Sudden Darkness game

Player can launch the game by clicking the Sudden Darkness executable. A window will be launched and will display the main menu of the game. The player can either choose to play the game or quit the game. If player choose to quit game, the window will be closed right away. If player choose to play the game, the game will start in darkness with a little glowing light on the flashlight that can be equipped by the player. The flashlight can help player to navigate the player's character to fulfil the objective given.

Figure 2 – Play Game mode of the Sudden Darkness game

As in *figure 2*, the only light that the player can see is the glowing light of the flashlight. The player does not to make any movement in order to equip the flashlight. The player can simply press keyboard key Q to equip the flashlight. The flashlight can be toggled on or off. As in the *figure 2*, there will be two initial objectives that would need to be fulfilled.

Figure 3 – Play Game mode of the Sudden Darkness game in flashlight view

Figure 3 shows that the player had equipped the flashlight. Player can move the flashlight by moving the mouse. The objective that have been completed will disappear from the screen. After the player have obtained the flashlight they will need to find the way out of the dark house. Player can move all around the house to the escape door.

Figure 4 – The escape door of the Sudden Darkness game

Referring to the figure 3, there was only one objective left that needed to be fulfilled. As shown in figure 4, another crucial objective is shown once the player found the escape door. Unfortunately, the escape door is locked. However, the player can search inside the rooms to find the key. There are some doors that are not locked and can opened by pressing the keyboard key F.
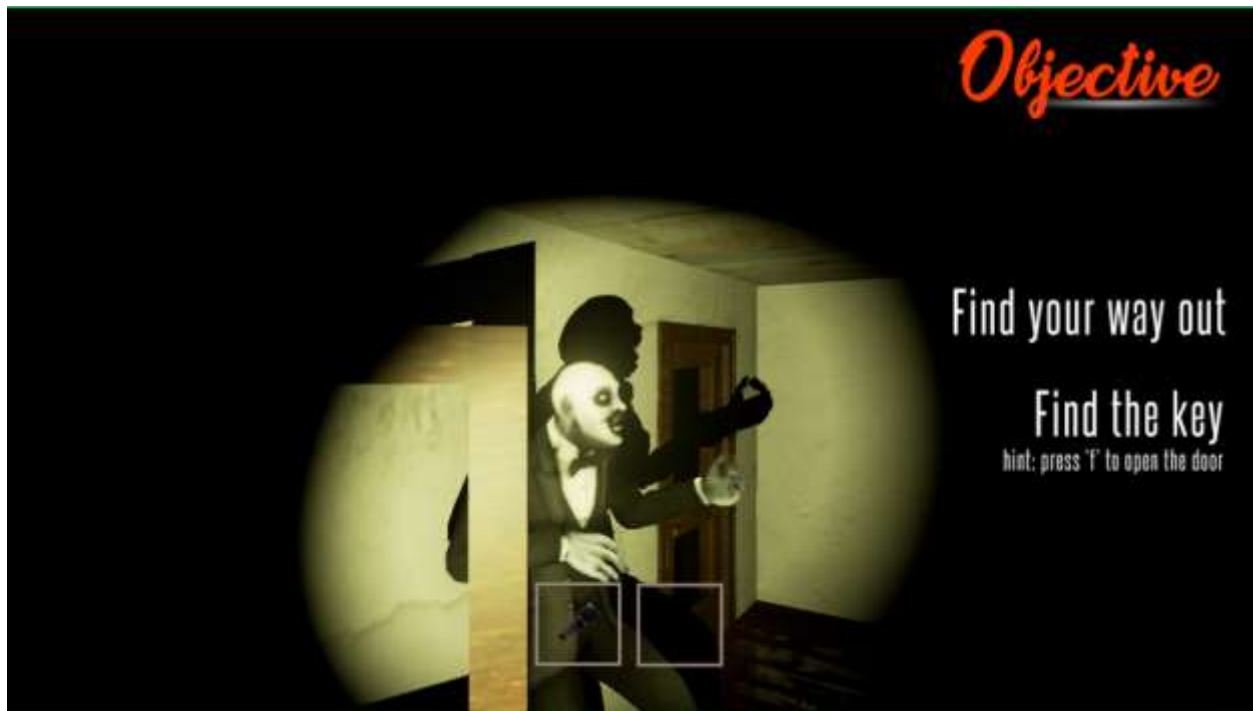
Figure 5 – Example of the non-player character of the Sudden Darkness game

As the player moves from a room to other rooms, they might meet with non-player characters which can be a bit frightening. As in the figure 5, the NPC is an example of the NPCs that the player will find. The NPC will not be following the player. However, if the player collided with the NPC, the player will die and lose the game.

Figure 6 – Key item

Figure 6 shows the key item that will be needed to unlock the escape door so that the player can escape from the darkness. Player can pick the key by moving near to it. Once the player picked it up, the key will appear in the player's inventory.

Figure 7 – Key item is inside the inventory of the player

As in *figure 7,* they key is inside the player's inventory. The only objective left to be fulfilled is find the way out. To complete this objective is easy because the player already found the escape door before they are searching for the missing key item.

Figure 8 – Winning screen of the Sudden Darkness game

Figure 8 shows the winning screen for the Sudden Darkness game once all of the objectives have been completed.

Figure 9 – Losing screen of the Sudden Darkness game

Figure 9 shows the losing screen if the player dies while trying to search for the missing key item.

Figure 10 – Pause mode of the Sudden Darkness game

Figure 10 shows the pause menu of the Sudden Darkness game. Player can pause the game if they want to. Player can press either keyboard key P or keyboard key ESC. To resume the game, player can press again the pause key or left-click the RESUME button. Other than that, player can choose to quit the game while in the pause mode.

Link to Demo

- Creating A Main Menu - #51 Unreal Engine 4 Beginner Tutorial Series
  https://www.youtube.com/watch?v=U_DY1lmHbLc

- Creating A Pause Menu - #57 Unreal Engine 4 Beginner Tutorial Series
  https://www.youtube.com/watch?v=dOCNKMTBL-A

- [TUTORIAL] UE4 Night Scene - Includes MOON
  https://www.youtube.com/watch?v=0YpZlUzkQVk

- Creating An Inventory System-#13 Creating A Survival Horror (Unreal Engine 4)
  https://www.youtube.com/watch?v=BEEfv9Ed6F8&index=13

- UE4 Tutorial - Open a Door with the E Key (Matinee Sequence & Blueprints)
  https://www.youtube.com/watch?v=tm5QZiqVdwI

References

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