Survival VR(Virtual Reality game)

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1 Motivation

After a false-start in the 1980s, it's finally time for VR to shine. Facebook famously bought Oculus for 2 billion dollars in 2014, and now several major headsets are on the market (Oculus Rift, Sony's PlayStation VR, HTC Vive and more). Our motivation is the boom of this VR technology in the current era and how its storming the market leading us to a whole new world. Major game engines such as Unity and Unreal are now supporting VR, and the computer power required to drive VR is finally affordable. Today we have some great platforms to work with including Oculus Rift, Google Project Cardboard, and Samsung Gear VR.

2 Overview

The idea behind to build this game is to learn new technology that is escalating quickly into the world and step into the zone of creating games on VR which is the trend in the 21st century.

2.1 Significance of project

To build such project is to enhance our skills and our market value as we will learn how to work on new technologies which will ultimately polish and enhance our skills in our specific domain. These kinds of projects have great importance and well percentage to be successful because we believe that this is the need of updated 21st century world.

2.2 Description of project

Our Survival game is based on VR with using VR properties and Bluetooth mobile controller. The main character will have to find his way out of the asylum where he was put in for a survival test. There will be different levels with each one being difficult than the previous one story will be in continuity. It will be playable for least android lollipop and IOS 10.0 Game will be completed Player will be set up.

2.3 Background of project

Unity tutorial for basic idea Documentation on unity 3d Maya Stack Overflow

3 Methodology

3.1 Design phase

In game developing attracting a player is very difficult as to why they should spend time on your game rather than other games so in order to attract player we have to make our game more jovial and attractive. Game should be fun to play as player utilizes his time for the best VR unique experience so we have to use this uniqueness on full extent

3.2 Implementation phase

This project consists of some unity frameworks, Markup languages, programming languages, Photoshop/illustrator for UI/UX design and 3d Maya for character design. The hardware used will be Google cardboard/Samsung gear VR, Bluetooth mobile controller.

3.3 Testing phase

it will be checked on Android and IOS devices as to know the game is running.

- 1. Functionality Testing: Test all components in your game are working correctly and make sure there no object is un readable. Test SCRIPT are working on game. Test the controls as it runs
 - Checking for Syntax Errors.

- Test USER INTERFACE to ensure that ALL THE user interface things are there.
- Readable color schema's.
- All the buttons are working correctly

2. Usability Testing:

Test the game menu:

- Menus, buttons or Links to different pages on your game should be easily visible and running.
- 3. Interface Testing: Three areas to be tested here are game scene user interface game controller
 - Game Scene: Test the game obj are all there.
 - User Interface: Menu is working.
 - Game Control : Is player controlling the game according to the script.
- 4. Performance Testing:
 - The game should run on 60fps.

3.4 Evaluation

We will initially develop a prototype of our proposed system and evaluate its working.

4 Features

Our game is a VR game and our idea is to give player a real experience of surviving the asylum where our main character is asked to enter a asylum if he want to get some money for the operation of his daughter. The feature in this game will be developed from scratch graphics, astonishing sound effects and a little bit of horror theme would be added in our game.

• Start with the most significant feature.

VR game
3d game
C Sharp java script to add control over our game
Bluetooth mobile controller to play the game

• Second most significant feature

Audio feature to give real life feeling

Maya to set graphics Photoshop to add textures

• And so on

Camera setting
High performance
Real life like experience



SURVIVAL VR INTRO:-

SURVIVAL VR is a science fiction survival horror video game developing for the Final Year Project on Android and IPhone OS.

Survival takes place in asylum where a poison gas has killed all the people inside created by the doctor and scientist in the asylum as the asylum hold the mad people the government didn't do much about the scientist continuously run test for how long a human can survive the gas, in that so our main player (father) find himself being a lab rat as he want money to save his daughter.

Survival's gameplay builds on an emphasis on stealthy evasion of threats, puzzle-solving and immersion. However, in a break with this tradition, it also deemphasizes aspects such as inventory management in favor of a tighter focus on narrative.

Gameplay

Survival VR is a survival horror video game played from a first-person perspective. The player will encounter a number of creatures, which will each embody an aspect of the game's themes. Survival primarily utilizes elements of psychological horror instead of conventional scares found in most video games within the genre. Throughout the game, the player will find a large array of clues, such as notes and audio tapes, which builds atmosphere and furthers the plot. Similar to most titles by Frictional Games, there is no combat, and instead the player progresses through puzzle-solving, exploration and the use of stealth.

Plot

Setting

Survival game play sets on the asylum that is closed from many years due to accident which was set up by the scientist and doctor's .the asylum is haunted and main player (father) has to survive it.

Story

Plot: On Animation

The Player is asked to survive the asylum that is closed for many years .The Player need money to pay for his daughter's operation.

He was approached by the few scientist, doctor and the Army man for the surviving test and made him sign the contract that if he die during the test no money will be transferred so he has to survive.



Enter The Asylum:-

After accepting the offer the main character make way into the Asylum Where he go through the dark forest to go into the very old Building called the Asylum before the doctor inject some chemical into his body by that he feels a little dizzy, heavy breathing , can't walk straight



Finding the Roof Top

After making into the Asylum he's only object was to find the roof top and exit it the building is old so no modern technology is inside the asylum all the keys and generate are outdate(not much but a little).

He walk floor by floor and started seeing something, hear laugh gossip. Breath Getting heavier feel like he is dying from inside

Little helping ghost girl

On the floor he start are a girl along on his way he got scare and try to run behind and exist from the main gate but suddenly a fire started in a main hall and leaving no choice but to move forward he have to go to the on roof so have to climb all the floor by stairs.

A lot of stair cases were close and light is off where the ghost girls help him finding the thing he need In order to move forward

He doesn't believe in her so she show a little glimpse of the past so he can find the thing or know how things were.

History:-

Girl show the history to the man where he change character to play as a little girl so he can find what happen to the place.

"The asylum was full of mad people and government didn't care about them so the doctor secretly make a poison gas as an experiment which kill all the people present in the building including the doctor. Which make them ghost and no one can enter in the building, the gas in slowly killing the main player. If he don't leave the building he will also turn into the ghost ". He have to leave in order to pay for his daughter. The girl also told that a lot of people have enter in the asylum and all of them were killed.



Key to the Roof door:-

After knowing the history main player know he need to hurry and stop this survival test for happening to other people.

He found that the door to the last floor of the building where he find trouble to get through, in order to get through he need to set everything as he saw in history so, he can find the combination of lock key.



Contact to the Ride:-

In order to contact the ride he need to find the main office and fix the communication circuit so, he can contact the army man for ride.

Now, on the last floor he got chased by the mad people ghost.



Run for life:-

He is helpless against the ghost and have no time to loose. So, he run as fast as he can feeling very tired as well he finally reach the roof where he hear the helicopter sound.

Escape:-

He run toward the helicopter where he got traced and surrounded by the ghost enable to escape.

Will he able to escape and save his daughter or not?

This mystery can't resolve unless you accept our project proposal.

LEVEL

Accept the offer

1. Sign the contract to begin the game

Enter Asylum

- 1. Walk towards the asylum
- 2. Find the flash light in your pocket

3. Find the way

Find the roof top

- 1. Stair case to move forward
- 2. Can't go back to the main gate

Little ghost girl

- 1. Little girl to help the main character
- 2. Follow her

History

- 1. Play as a little girl
- 2. Knowing the history
- 3. Use it help yourself
- 4. Know villain
- 5. Weak body find the cure to survive for a little time

Key to the roof door

- 1. Find combination to the lock by using history
- 2. Open the stairs case to go the last floor

Contact to rider

1. Use screwdriver to fix the machine contact the ride

Run for the life

1. Race against time and the mad ghost?

Escapes

1. Jump on the helicopter if he can

Characters

- 1. Main player:-
- 2. A father
- 3. Little ghost girl
- 1. Surviving test unit:-
- 2. Scientist
- 3. Doctor
- 4. Army man

$\underline{\mathbf{Ghost}}$

- 1. Children
- 2. Little ghost girl
- 3. Nurse
- 4. Security guard
- 5. **Doctor**
- 6. Mad patient

<u>Object</u>

- 1. Flash light
- 2. Helicopter
- 3. Lock
- 4. Screwdriver
- 5. Shot gun
- 6. Chain cutter

Controls:-

Use y axis and x axis to move the player in to the direction it's looking.

Press A to set the direction.

Press B to interact to things.

Press C to turn flash light on/off

Press X to run/crouch (sit)..

Save and load game

Game will be auto saved and loading will be chapter vise and load the saved game \dots

5 Project Planning

The project plan is considered as completion on end of each phase.

Each member of group is assigned a task who will be responsible for his task to be completed on given dates.

Completion on every phase encourages our team mates and will make queries and planning according to the situations

Phase 1: basic idea on our game to be made once the basic game is made then we move on to the next phase.

Phase 2: After completing phase 1 we will focus on making our game beautiful using Photoshop and Maya3d and add few extra thing to make game more fun to play

6 Required Hardware and Software

Operating Systems: Windows 7, 8.1, 10

Integrated development Environment: Mono development,

Markup Software : Photoshop. Maya3d. Programming Languages : javascript, C-Sharp

Game Engine: Unity 5.5

Technology: VR

Input device : Bluetooth controller Run on : android lollipop/IOS 10.0 above

Appendix

A. Expected Internal Advisor

Sir Shariq Sir Muslim Jameel Sir Noman Ali Khan