RCSTAR

UNREAL ENGINE4

TEAM 11
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PROBLEM :
Spreading awareness about waste disposal and waste recycling.

DESCRIPTION :
1) A game where Game Bots drop two types of wastes and the user must properly dispose each type of waste in their respective dustbin.
   (Educates the user about waste disposal)
2) User also carries a gun and he gets bullets by disposing the waste in the respective dustbin.
   (Educates the user about waste recycling)
3) The waste that is not disposed in the given time by the user shall be converted into a Zombie/Monster.
   (Shows that lack of proper lack of waste disposal is harmful for earth,other living beings and also human beings)
4) These Zombies Chase the User and try to kill.
5) User must try to escape from these Zombies and kill them using the Gun and Bullets that he obtained.

GAMEPLAY AND RULES:

1) When the Game Begins, Users Should choose Time Mode or Endless Survival Mode.
2) In Time Mode , User must survive For a Total of 5 Minutes and Score at least 30 Points.
3) In Endless Survival Mode , User Can Play as long as he/she wants until he is killed by the Zombie.
4) There are Three Maps in total. Users can Choose any Map to Play.
5) User Gets 1 point if he picks up the waste.
6) User Gets 2 points and 50 bullets if he drops the waste in the correct dustbin.
7) Users can Pause the game in between.
8) Bullet will damage the zombie by 10% i.e 10 bullets will be required to kill a zombie.
9) "w" key is to move Forward.
10) "a" key is to move Leftward.
11) "d" key is to move Rightward.
12) "s" key is to move Backward.
13) "upper arrow" key is to move Forward.
14) "Lower arrow" key is to move Backward.
15) "Right arrow" key is to move Rightward.
16) "Left arrow" key is to move Leftward.
17) Hold "Shift" while moving to sprint.
18) Left Mouse Click to Shoot.
19) "r" key is to Reload the gun if you have bullets.
20) "e" key is to pick up objects.
21) "f" key is to discard the object in the correct dustbin.
22) "p" or "esc" to pause the game.
23) Hold "left ctrl" or "right ctrl" to crouch.
24) Press "spacebar" to jump.
25) Hold "right mouse click" in order to aim at the zombie.
26) To pick up objects, User must go near the Waste and press the "e" and to Discard the waste, the User must go near the Respective Bin and press "f".

27) User must be close to the object inorder to pick it and the user must be close to the dustbin inorder to dispose waste.

LINK TO GAME :

GAME INSTALLATION SETUP :

- Go to the drive folder link above.
- Download the Game Files from there.
- Go to RCStar/WindowsNoEditor.
- Click on the "RCstar.exe" file to play the game.

GITHUB REPOSITORY:

https://github.com/chirag2706/RCstar
https://github.com/Sripranav-m/RCstar

PLATFORMS SUPPORTED:

Windows10

CONTRIBUTIONS:

SRIPRANAV MANNEPALLI (CS18B036):

- Main Menu and other menu widgets , Maps , Design of waste and bins , AIBots , AIBots throwing waste randomly , User Picking Waste , User throwing waste in the respective Bin , Zombies , Left Widget showing Points/Time /other Details , Two Types of Levels(Endless/Time Mode) , Conversion of the wastes to zombie, Integration of all features,sound effects , Deploying.

CHIRAG GUPTA (CS18B006):
- Maps, AIZombies , Right Widget showing Health/Armor/ and other details , Design of widgets , Zombies trying to kill user , Aiming , Character animations , Zombies randomly coming near user and smart actions , User kills zombies with gun and bullets , Conversion of waste to zombie, Integration of features,sound effects , Deploying.

DIFFICULTIES FACED:
1) We Faced Difficulty in designing maps and characters.
2) We faced Difficulty in integrating all the components at the end that are made by us.
3) We faced Difficulty in Learning Blueprints and visual scripting but later fell in love with Visual scripting.
4) We faced difficulty in Debugging in the code as the Visual Scripting and Blueprints are too big and there are a lot of connections in between them.
5) We found "GIT" to be difficult to use for this project unlike other projects because there a lot of files and merge conflicts become difficult to solve as a lot of them are binary files.
6) We faced Difficulty in Building maps because both our laptops are not able to handle the graphics.
7) We faced Difficulty in Testing the Game as the testing stage is also taking a lot of time in our laptops.