# Zombie game recipe

## Contents

## Change properties of baseplate and spawn point

1. Set size of baseplate to (200,8,200).
2. Delete the current texture under baseplate. Add a new texture. In texture's properties, ensure Texture is set to - http://www.roblox.com/asset/?id=36403585 , Transparency to 0.4, studspertileu and studspertilev to 8.
3. Set night sky to sky from this link - https://create.roblox.com/store/asset/661640091/Night-sky .
4. Get this decal - https://create.roblox.com/store/asset/10877494056/Zombie . Drag and drop it on spawn point. Set spawn point's position to (-82, -3.5, -80).

## Create zombie spawn points

1. Create a folder called 'Spawns' in workspace.
2. In that folder, use '+' symbol to create part. Set size to (4,0.4,3). Set material to brick, color to green. Rename to Sp1.
3. To Sp1 using '+' add point light of color green, brightness 15, range 8.
4. To Sp1 using '+' add smoke. For smoke in properties, color = green, opacity = 0.1, risevelocity = 1, size = 0.1, timescale = 1.
5. Move Sp1 to a corner away from spawn point. Duplicate Sp1 to Sp2 and put it in another corner and similarly Sp3 in another corner.

6. Use this link - https://create.roblox.com/store/asset/3924238625/Drooling-Zombie-Rthro ,
and GetModel. Drag drop from inventory to 3d view.
7. Play and see.  Go near zombie and see! Escape! Stop the game.
8. Drag drop zombie from workspace to replicated storage.
9. Add a script to Spawns folder and add the code below.

```
local spawns = script.Parent

local spawntime = 10

local wave = 0

local health = 100


while true do

    wait(spawntime)

    wave = wave + 1


    for _,spn in pairs(spawns:GetChildren()) do

        if spn:IsA("Part") then

            local zCopy = game.ReplicatedStorage["Zombie"]:Clone()

            zCopy.Parent = game.Workspace

            zCopy.HumanoidRootPart.CFrame     =     CFrame.new(spn.Position     +
Vector3.new(0,3,0))

            zCopy.Humanoid.Health = health

        end

    end

end
```

10. Basically, we have a continuous while loop, which, every 10 seconds (spawntime), spawns
one zombie from spawn point location (Sp1, Sp2, Sp3 etc..) in a for loop. Note, we are cloning
the zombie stored in replicated storage. Once cloned, it's parent is workspace and health is
100 (stored in health variable).
11. Play and see. Must see many zombies spawning and attacking when we go close.

# Create standing zombie with 'wave information'

1. Drag drop zombie from inventory to 3d view. Put it in center of spawn points and player spawn. Right click on zombie in explorer and choose 'Disable Scripts'. In the properties, set scale to 1.6.
2. Play and see. Zombie just stands there.
3. To zombie, add a 'BillboardGui'. In properties, set Extents offset to (0,1.2,0) to make it appear over zombie's head.
4. To 'BillboardGui' add TextLabel. In the Textlabel properties, set the backgroundtransperency to 1, text color to white, text to Wave and text size to 58, fontface to 'permanent marker'.
5. Play and see. Not matter where you go, the billboard always faces you.
6. To Script in Spawns folder add below line just before the line wait(spawntime)
7. game.Workspace.Zombie.BillboardGui.TextLabel.Text = "Wave "..tostring(wave)
8. This is basically concatenating string "Wave" and the number wave (converted to string) and assigning it to Text property of TextLabel.
9. Play and see. Every time wave increments, you will see a new zombie at each spawn point.

# Make the Wand tool

1. Use this link - https://create.roblox.com/store/asset/5335782936/Magic-wand - do GetModel and get it into inventory. Drag drop it to 3d view. Delete all scripts which are children of the model. Delete event which is child of model. We will add it later.
2. Play and see. Gamer must be able to pick up the wand.
3. To the Wand (tool), using '+' add a local script, rename to Shoot. And add a remote event rename to ShootRe. In the Shoot local script add below code.

local debounce = false

local wand = script.Parent

local shootRe = wand:WaitForChild("ShootRe")

local player = nil

local mouse = nil

local connection = nil


local function onActivated()


        if not debounce then

                debounce = true

```
            shootRe:FireServer(mouse.Target)


            wait(1)

            debounce = false

        end


    end


local function onEquipped()

    player = game.Players.LocalPlayer

    mouse = player:GetMouse()

    connection = wand.Activated:Connect(onActivated)

end


local function onUnequipped()

    player = nil

    mouse = nil

    connection.Disconnect(connection)

end


wand.Equipped:Connect(onEquipped)

wand.Unequipped:Connect(onUnequipped)
```

4. Basically, this code is 'firing' or 'executing' remote even ShootRe, when we equip ourselves with wand. When equipped we are calling onEquipped() function and when un-equipped we are calling onUnequipped() function. In onEquipped() we are getting player, his mouse and when mouse left button is clicked, we are calling onActivated() function. In OnActivated() we are firing the remote event, which will be used to shoot at zombies. We are having debounce not shot shoot many times, but limit it to 1 time per second.

5. To the Wand (tool), using '+' add a script, rename to Damage. In that add the below code.

```
local shootRe = script.Parent:WaitForChild("ShootRe")
```

```
local function onShoot(player, target)

    local char = player.Character
    local charFr = char.HumanoidRootPart.CFrame

    if target and target.Parent then
        local hum = target.Parent:FindFirstChild("Humanoid")
        if hum then
            print('target hit using mouse pointer')
        end
    end

end

shootRe.OnServerEvent:Connect(onShoot)
```

6. This code 'catches' the shootRe even and executes onShot function when event is fired. We get both player and target to shoot (user has used his mouse to point to the target and has clicked left mouse button). We first check if that target is a zombie which has Humanoid, then we just print a message.
7. Play and see. Equip wand with key1. Then like first person game, point to zombie and do a left click. See the message printed out.  If you try to shoot to any other point, message is not printed.

## Make the fireball

1. First, move the Magicwand into StarterPack so that when user spawns it is already with him. Make Wand direct child of StarterPack and then delete Magicwand.
2. Play and see. Wand must already be with player. Equip and Unequip by pressing 1.
3. GetAudio using this link - [https://create.roblox.com/store/asset/9118661490/Rock-Rolls-Down-Concrete-Ramp-Tumble-1-SFX](https://create.roblox.com/store/asset/9118661490/Rock-Rolls-Down-Concrete-Ramp-Tumble-1-SFX) -  insert into a folder called SFX under workspace. Rename to BoulderRollSfx.
4. Insert part->sphere to 3d world. Give material brick and color yellow. Rename to Fireball. Use '+' next to Fireball and add fire. For fire, in properties set size to 8.
5. Move the Fireball to ServerStorage.
6. Add below code to top of Damage Script.

local bang = game.Workspace.SFX.BoulderRollSfx

local fireball = game.ServerStorage:WaitForChild("Fireball")

7. Instead of print('target hit using mouse pointer') add below code.

```
bang:Play()

local newFb = fireball:Clone()

newFb.Parent = game.Workspace
```

8. Play and see. Try to 'shoot' zombies. Fireboulder appears in a particular location (where it was created), but does not move, rolling sound is heard.
9. To make the boulder move we need to give it position and velocity.
10. For that add below code <mark>after</mark> the above code.

```
local tpFr = target.Parent.HumanoidRootPart.CFrame

local vTo = tpFr.Position - charFr.Position

vTo = vTo.Unit

newFb.CFrame = CFrame.new(charFr.Position)*CFrame.new(vTo*0.3)

local bodyVel = Instance.new("BodyVelocity")

bodyVel.Velocity = vTo*20

bodyVel.Parent = newFb

game.Debris:AddItem(newFb, 10)
```

11. Play and see. If you point your mouse and zombie and 'shoot' using left mouse button, you will be able to 'hurl a fire boulder' towards the zombie.
12. Above code first calculates the vTo (direction in which boulder must be rolled). Then it set's newly cloned boulders' position to character's position, plus, some distance toward target. Then we create a velocity object and make new boulder it's parent. Also we need to add boulder to game.Debris as it should spend 10 seconds in game and then should be automatically destroyed.
13. Add below code <mark>after</mark> above code to kill the zombie when boulder hits it.

```
newFb.Touched:Connect(function(hit)

    local chldH = hit.Parent:FindFirstChild("Humanoid")

    if chldH ~= nil then

        if hit.Parent.Name ~= player.Name then

            chldH:TakeDamage(100)

        end
```

```
                        end

                end)
```

14. Play and see. Any zombie coming in boulder's way are killed!

# Teleport to next level

1. Duplicate the Baseplate and rename to Baseplate2. Drag it to the right so that there is space between them.
2. Create a part->block. Make it's size (4,0.5,4). Anchor it. Rename to Pad1. Give it diamond plate material and yellow (or any desired) color. Put it on Baseplate near an edge.
3. Duplicate the Pad1, rename to Pad2 and move it on Baseplate2. See image below.



4.
5. In explorer, in starterCharacterScripts add a 'boolean' value. Rename it to 'CurrentlyTeleporting'.
6. Add a script to Pad1 and add the code below.

```
local pad = game.Workspace.Pad2


script.Parent.Touched:Connect(function(hit)

    local plyr = game.Players:GetPlayerFromCharacter(hit.Parent)


    if plyr then

            local currTel = plyr.Character:FindFirstChild("CurrentlyTeleporting")
```

```
            if not currTel then

                    return true end


            if not currTel.Value then

                    currTel.Value = true

                    plyr.Character.HumanoidRootPart.CFrame        =        pad.CFrame        +
Vector3.new(0,5,0)

                    wait(3)

                    currTel.Value = false

            end

    end

end)
```

7. Play and see. When player steps on Pad1, he gets 'teleported' to Pad2.
8. (Optional) – can add Pad1a and Pad2a to teleport from Baseplate2 to Baseplate. Using same code as above.

## Spider attack

1. Use this link - https://create.roblox.com/store/asset/11717154549/Enemy-Spider  - and do GetModel. Drag and drop it on Baseplate2.
2. To kill the spider with boulder, update the StarterPack -> wand->Damage script to below.

```
local shootRe = script.Parent:WaitForChild("ShootRe")


local bang = game.Workspace.SFX.BoulderRollSfx

local fireball = game.ServerStorage:WaitForChild("Fireball")



local function onShoot(player, target)


    local char = player.Character

    local charFr = char.HumanoidRootPart.CFrame
```

```lua
if target and target.Parent then

        local hum = target.Parent:FindFirstChild("Humanoid")

        local hum2 = target.Parent:FindFirstChild("Torso")

        if hum or hum2 then

                bang:Play()

                local newFb = fireball:Clone()

                newFb.Parent = game.Workspace


                local tpFr = nil

                if target.Parent:FindFirstChild("HumanoidRootPart") ~= nil then

                        tpFr = target.Parent.HumanoidRootPart.CFrame

                else

                        tpFr = target.Parent.Torso.CFrame

                end



                local vTo = tpFr.Position - charFr.Position

                vTo = vTo.Unit

                newFb.CFrame = CFrame.new(charFr.Position)*CFrame.new(vTo*0.3)

                local bodyVel = Instance.new("BodyVelocity")

                bodyVel.Velocity = vTo*20

                bodyVel.Parent = newFb

                game.Debris:AddItem(newFb, 10)


                newFb.Touched:Connect(function(hit)

                        local chldH = hit.Parent:FindFirstChild("Humanoid")
```

```
                    if chldH ~= nil then

                            if hit.Parent.Name ~= player.Name then

                                    chldH:TakeDamage(100)

                            end

                    end

            end)


        end

    end


end


shootRe.OnServerEvent:Connect(onShoot)
```

3. Basically extra code added is - local hum2 = target.Parent:FindFirstChild("Torso") and if target.Parent:FindFirstChild("HumanoidRootPart") ~= nil then and else part tpFr = target.Parent.Torso.CFrame
4. Replace the code in EnemySpider->Respawn script to below code

```
local robo=script.Parent:clone()


while true do

    wait(2)

    if script.Parent.Humanoid.Health<1 then

            wait(3)

            script.Parent:Destroy()

            break

    end

end
```

5. Play, teleport to Baseplate2 and see. You must be able to kill the spider by clicking on it with mouse and 'shooting a boulder' towards it.

# Spawning spider from spawn points

1. In workspace create a folder 'Spawns2' just like 'Spawns'.
2. Duplicate Sp1 and move to Baseplate2, rename to Sp1a. In explorer drag and drop it to Spawns2. Duplicate Sp1a to Sp2a and Sp3a and put them in couple of other locations.
3. Drag drop 'Enemy Spider' into ReplicatedStorage.
4. Add a script to Spawns2, add the code below.

```
local spawns = script.Parent

local spawntime = 10

local health = 100


while true do

    wait(spawntime)


    for _,spn in pairs(spawns:GetChildren()) do

            if spn:IsA("Part") then

                    local zCopy = game.ReplicatedStorage["Enemy Spider"]:Clone()

                    zCopy.Parent = game.Workspace

                    zCopy.Torso.CFrame = CFrame.new(spn.Position + Vector3.new(0,3,0))

                    zCopy.Humanoid.Health = health

                    zCopy:makeJoints()

            end

    end

end
```

5. Play and see. Every 10 seconds one spider will spawn from each of Sp1a, Sp2a and Sp3a and player will be able to kill them by hurling boulders at them.

# Getting points and winning

1. In workspace add IntValue and rename it to Points.
2. In the starterpack->Wand->Damage script add below line after chldH:TakeDamage(100)
3. workspace.Points.Value = workspace.Points.Value + 1

4. To StarterGUI, add ScreenGUI. To that add a frame color and size appropriately. To the frame add text label, color and size appropriately. To the label add local script and add the code below.

```
local function updatepoints()
    script.Parent.Text = "Points: " .. tostring(workspace.Points.Value)
end


workspace.Points.Changed:Connect(updatepoints)
```
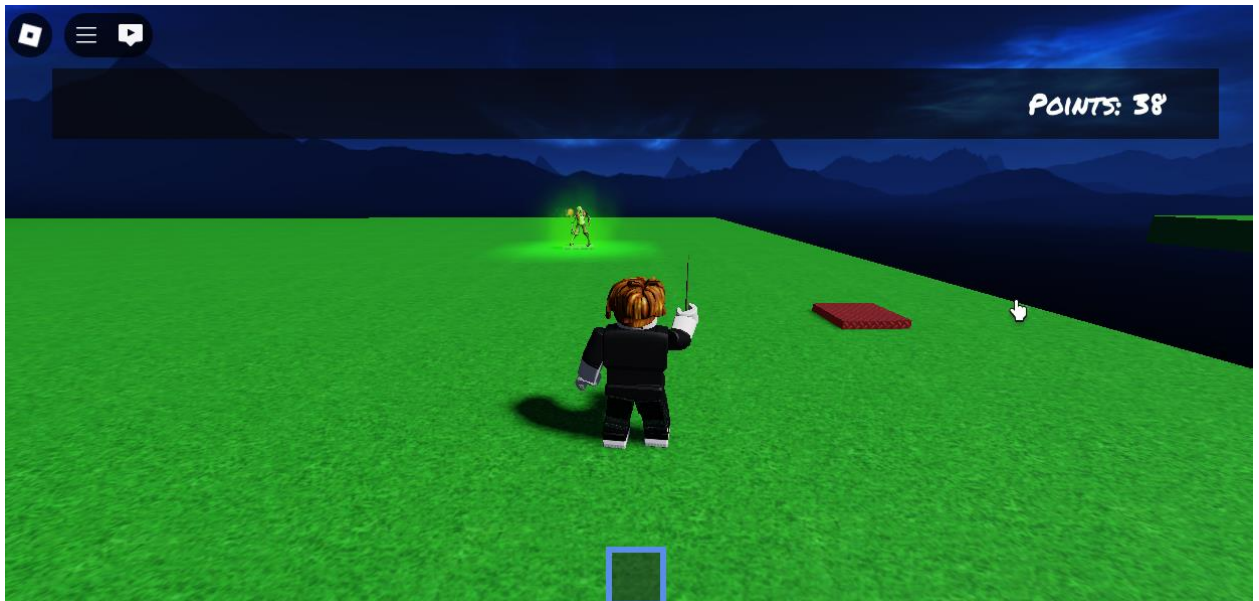


5.
6. Play and see, you should see the points as shown in above image.
7. Add another textLabel to Frame and have the text 'You have won the match!'. In properties uncheck the visible. Rename to WonLabel.
8. Update the above code to –

```
local function PauseGame()
    for i,v in pairs(game:GetDescendants()) do
            if v == game:GetService("StreamingService") then
                    print("StreamingService")
            elseif v:IsA("BasePart") then
                    v.Anchored = true
            elseif v:IsA("Humanoid") then
                    v.WalkSpeed = 0
```

```
            elseif v:IsA("Script") or v:IsA("LocalScript") then

                    v.Disabled = true

            end

        end

    end

    local function updatepoints()

        if workspace.Points.Value > 100 then

                workspace.Won.Value = true

                wait(12)

                script.Parent.Parent.WonLabel.Text = "You have won the match!"

                script.Parent.Parent.WonLabel.Visible = true

                PauseGame()

        else

                script.Parent.Text = "Points: " .. tostring(workspace.Points.Value)

        end

    end

    workspace.Points.Changed:Connect(updatepoints)
```

9. Update the Spawn scripts to say if we have won, spawn function while loop can 'break'.
10. Update while loop statement as -

while workspace.Won.Value == false do

11. Play and see.
12. Player must be able to hurl boulders at zombies and spiders and kill them and earn points and as soon as you earn more that 500 points, you must be able to win the game! Enjoy!
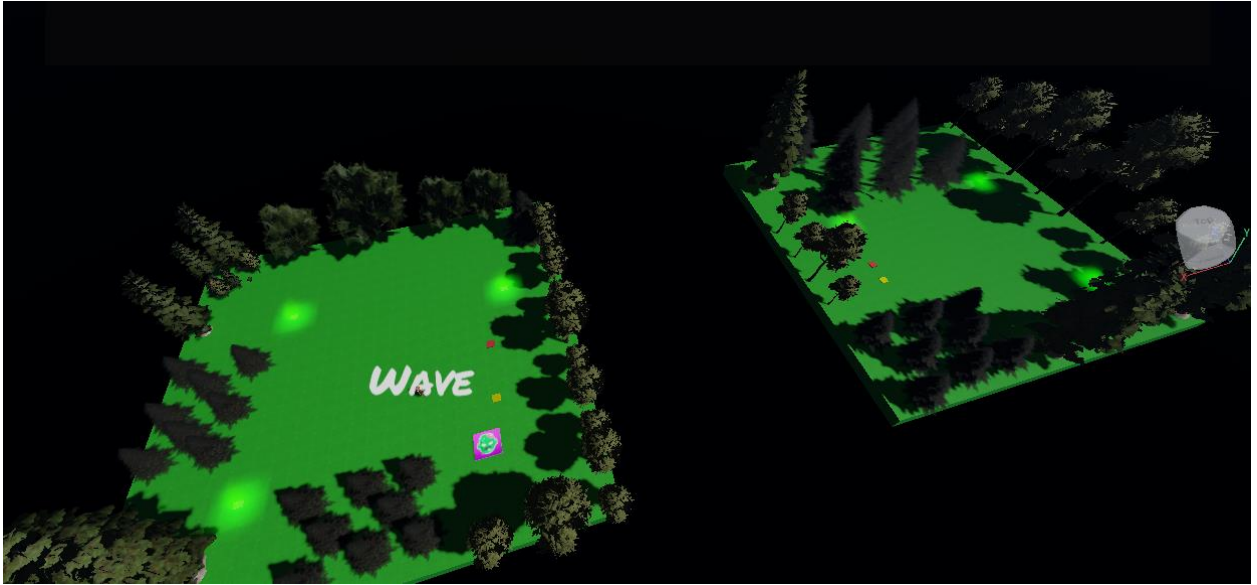
# Decorating both stages (optional)

1. Use the below links and do 'GetModel'
    a. https://create.roblox.com/store/asset/3256343670/Realistic-Trees
    b. https://create.roblox.com/store/asset/2309193275/pine-tree
    c. https://create.roblox.com/store/asset/9271152246/Realistic-Tree
    d. https://create.roblox.com/store/asset/18965522634/Trees-PBR-Moving
2. Use the models to place trees in the border of baseplate and baseplate2
3. Design the level as you wish!

4.



5.

6.
7.