-- new script file

function OnAfterSceneLoaded(self)

G.fireballs = {}

G.CreateFireball = CreateNewFireball

end

function OnThink(self)

local numFireBalls = table.getn(G.fireballs)

--for each bullet, update it's position and delete if necessary

if numFireBalls > 0 then

for i = 1, numFireBalls, 1 do

local fireball = G.fireballs[i]

if fireball ~= nil then

--if the udate bullet function returns true, delete the bullet \*\*\*won't be true if bullet ricochets

if UpdateFireball(fireball) then

fireball.particle:Remove()

table.remove(G.fireballs, i)

--decrement i since the size of the table has decreased by 1

i = i - 1

end

end

end

end

end

function CreateSpell(owner)

end

function CreateNewFireball(owner)

local ownerPos = owner:GetPosition()

ownerPos.z = ownerPos.z + owner.eyeHeight

local spellParticle = Game:CreateEffect(ownerPos, owner.fireballPath)

spellParticle:SetDirection(owner:GetObjDir() )

local newFireball = {}

newFireball.speed = owner.fireballSpeed

newFireball.damage = owner.fireballDamage

newFireball.range = owner.fireballRange

newFireball.startPos = ownerPos

newFireball.pos = newFireball.startPos

newFireball.distance = 0

newFireball.owner = owner

newFireball.dir = owner:GetObjDir()

newFireball.particle = spellParticle

newFireball.HitCallBack = function(fireball, hitObj)

if hitObj ~= nil and hitObj:GetKey() == "Enemy" then

--

end

end

--add the new fireball to the array

table.insert(G.fireballs, newFireball)

end

function UpdateFireball(fireball)

local nextPos = (fireball.dir \* fireball.speed) + fireball.pos

local dist = fireball.pos:getDistanceTo(nextPos)

local hitObject = false

if dist > .1 then

local rayStart = fireball.pos

local iCollisionFilterInfo = Physics.CalcFilterInfo(Physics.LAYER\_ALL, 0,0,0)

local hit, result = Physics.PerformRaycast(rayStart, nextPos, iCollisionFilterInfo)

if hit == true then

if result ~= nil then

if result["HitType"] == "Entity" then

local hitObj = result["HitOjbect"]

fireball:HitCallBack(hitObj)

end

end

hitObject = true

else

fireball.distance = fireball.distance + (nextPos - fireball.pos):getLength()

fireball.pos = nextPos

fireball.particle:SetPosition(nextPos)

hitObject = (fireball.distance > fireball.range)

end

end

return hitObject

end

function ModifyMana(self, amount)

self.currentMana = self.currentMana + amount

if self.currentMana > self.maxMana then

self.currentMana = self.maxMana

elseif self.currentMana < 0 then

self.currentMana = 0

end

end