2007

Basic Weapon Tutorial

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Ut3 Tutorial

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Marilol's Basic Weapon Tutorial

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Basics:

1. What do you need?

For this tutorial you are going to need the exported ut3 scripts which can be found here:

http://www.moddb.com/downloads/9183/ut3-scripts

You also need a basic text editing program such as **notepad**, don't use Microsoft word.

I am using notepad for this tutorial so it will probably be easier if you use it to.

2. Basics of Class Structure

The class structure is set up like an organization chart or a food chain.

At the beginning you have the one script which all of the scripts relate to.

All the scripts extend from one another like this: **UTWeap_Biorifle extends UTWeapon**

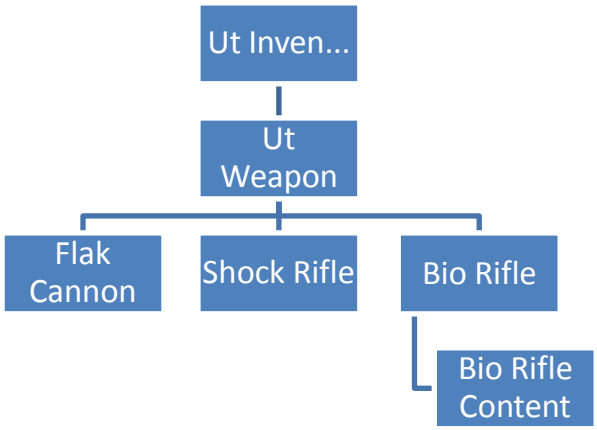
With some objects, mostly vehicles and some weapons you have another script which is the same but ends with **_content**.

So it looks like this: **UTWeap_Biorifle_Content extends UTWeap_Biorifle**

This means it has all the required details and that the one it extends was a sort of base.

If it was like this then the base will have a line saying native below the extends line. You need to delete this to make it work.

For ease of writing this tutorial I'll show you a little demo.



3. Basics of Folder Structure

Your folder structure is there to allow the game to find the custom content and use it.

Because this tutorial does not cover modelling and textures I will not show those structures but only the script structure:

My current one looks like this:

My Scripts----Weapons-----Project 1 Auto Rifle-----Classes-----UT_Weap_Auto....

Vehicles------Leech Alpha----------Classes-----.....

Composter Vehicle------.....

Inside your project folder you should have a folder called classes. This is where you need to save all your scripts for that project.

I will go into this deeper near the end of the tutorial.

Weapon Editing

4. Changing a weapons name

First make a folder called **Project1_Tutorial weapon** inside that make a folder called **classes.**

Open up the Ut3 Scripts and open the folder called UT Game.

Inside it locate the file called **UTWeap_ShockRifle**

Copy and paste into the newly created classes folder.

Now, open it and it will come up with a message saying it doesn't know what to open it with. Choose select from a list and either choose your text editing program or notepad.

It will open it and come up with a load of text that you probably don't understand.

Located at the top of the file is the line:

class UTWeap_ShockRifle extends UTWeapon;

Change it to this:

class UTWeap_RenamedShock extends UTWeapon;

At the bottom of the file there is a line saying:

Name="Default__UTWeap_ShockRifle"

Change it to this

Name="Default__UTWeap_RenamedShock"

This means the game now has a name for the weapon when it is using the scripts. But, this is not the name it will see in game. To change that you must locate the lines:

PickupMessage="Shock Rifle"

And

ItemName="Shock Rifle"

Pickup message is what is displayed when you pick up the weapon and Item name is basically the weapons name when shown in mutators etc.

Change these to whatever you want it to say or be called, for the sake of this tutorial I am going to name it

PickupMessage="Shocker Named"

And

ItemName="Renamed Shocker Rifle"

Now this weapon has been renamed to what you just changed it to.

5. Changing a weapons firing rate

Now to change the weapons firing rate. Locate the lines:

FireInterval(0)=0.770000

FireInterval(1)=0.600000

This is the time in between the weapon firing one shot to another. It is done is seconds with decimal places.

FireInterval(0)=0.770000 = 0.77 seconds in between each primary fire shot.

FireInterval(1)=0.600000 = 0.6 seconds in between each secondary / alt fire shot.

We are going to make this gun shoot its primary fire a lot faster.

So, change

FireInterval(0)=0.770000

To:

FireInterval(0)=0.270000

This means it fires its primary shot every 0.27 seconds making it very fast.

To change the secondary fire you would also change the **FireInterval(1)=0.600000** to something else such as:

FireInterval(1)=0.470000

6. Changing a weapons projectile

Now locate the line that says:

WeaponProjectiles(1)=Class'UTGame.UTProj_ShockBall'

This tells the game that the shock rifle fires a shock ball with its secondary fire.

We are going to change it and make it shoot Paladin Shock Bolt instead.

So, Change

WeaponProjectiles(1)=Class'UTGame.UTProj_ShockBall'

To

WeaponProjectiles(1)=Class'UTGame. UTProj_PaladinEnergyBolt'

This is the same in all weapons that shoot a projectile.

Be careful though, some weapons like the sniper rifle, the stinger and the shock rifle have InstantHit primary attacks so they don't use a projectile.

I will not be covering the basics of instant hit but will touch upon it a few times in this tutorial.

7. Changing the weapons ammo

Now, to change the amount of ammo a weapon has locate the lines:

AmmoCount=20

LockerAmmoCount=30

MaxAmmoCount=50

Because the weapon shoots the Paladin primary fire I am going to lower it to:

AmmoCount=5

LockerAmmoCount=7

MaxAmmoCount=15

As you may have guessed, MaxAmmoCount is the maximum ammo. LockerAmmoCount is how much you get when you pick up the weapon and AmmoCount is how much you get from picking up ammo.

This is really easy to grasp and you should get it straight away.

Projectile Editing

9. Changing a Projectile Damage Type

Open up your UT3 scripts folder and go into UT Game. Locate the files named:

UTProj_ShockBall and **UTDmgType_ShockBall**

The **UTProj_ShockBall** is the projectile itself and the **UTDmgType_ShockBall** is what type of damage the projectile is registered as.

Open up the **UTProj_ShockBall** and find the line:

MyDamageType=Class'UTGame.UTDmgType_ShockBall'

Change it to read:

MyDamageType=Class'UTGame.UTDmgType_ShockBallmod'

Now, close that file and open the **UTDmgType_ShockBall.**

Locate the lines:

DeathString="`o was wasted by `k's Shock core."

FemaleSuicide="`o snuffed herself with the Shock core."

MaleSuicide="`o snuffed himself with the Shock core."

This is the message displayed when you kill someone or commit suicide with that projectile.

I am going to change it to read:

DeathString="`o was wasted by `k's Shock ball mod."

FemaleSuicide="`o snuffed herself with the Shock ball mod."

MaleSuicide="`o snuffed himself with the Shock ball mod."

Now in game when those events happen it will display these messages on the screen and in the console.

Remember to change the lines **class UTDmgType_ShockBall extends UTDamageType**

To

class UTDmgType_ShockBallmod extends UTDamageType

and

Name="Default__UTDmgType_ShockBallmod"

To:

Name="Default__UTDmgType_ShockBallmod"

For now this has no effect whatsoever in its current form.

We are going to use this later on when creating our Uber Shocker Rifle.

Mini Weapon Project: The Uber Shock Rifle

In this section we are going to create a new weapon that has its own Instagib Mutator.

The weapon we are going to make is the Uber Shock Rifle

12. Changing the Name

As seen in section 4 we need to change the name and the extension of the weapon.

First make a new folder called Project_2 Uber Shock Rifle

Inside that folder make another one called Classes

Open up the Ut3 Scripts and open the folder called UT Game.

Inside it locate the file called **UTWeap_ShockRifle**

Copy and paste into the newly created classes folder.

Locate in the text the line

class UTWeap_ShockRifle extends UTWeapon;

Change it to this:

class UTWeap_UberShock extends UTWeapon;

At the bottom of the file there is a line saying:

Name="Default__UTWeap_ShockRifle"

Change it to this

Name="Default__UTWeap_UberShock"

Now inside the text find the lines:

PickupMessage="Shock Rifle"

And

ItemName="Shock Rifle"

Change them to:

PickupMessage="Uber Shock Rifle"

And

ItemName="Uber Shock Rifle"

Save the file for now. We have just renamed the weapon.

13. Changing fire speed and the Ammo

As seen before in section 5 we are going to change the weapons firing speed.

Locate the lines:

FireInterval(0)=0.770000

FireInterval(1)=0.600000

And change them to:

FireInterval(0)=0.400000

FireInterval(1)=0.500000

Now it fires significantly faster than normal.

Now we are going to change the amount of ammo the weapon has. Locate the lines:

AmmoCount=20

LockerAmmoCount=30

MaxAmmoCount=50

And change them to:

Now, to change the amount of ammo a weapon has locate the lines:

AmmoCount=20

LockerAmmoCount=30

MaxAmmoCount=50

Because this is an Uber (Meaning Super / Ultimate / Overpowered) I am going to give it loads of ammo.

AmmoCount=50

LockerAmmoCount=120

MaxAmmoCount=180

Because the weapon shoots the Paladin primary fire I am going to lower it to:

AmmoCount=5

LockerAmmoCount=7

MaxAmmoCount=15

14. Changing how much damage the weapons primary does

Now we are going to change how much damage primary fire does. This is not the same as changing every weapons because this one is instant hit / hitscan.

First, find the lines:

InstantHitDamage(0)=45.000000

InstantHitMomentum(0)=60000.000000

InstantHitDamageTypes(0)=Class'UTGame.UTDmgType_ShockPrimary'

We are going to increase the damage quite a bit so that it is almost a 1 hit KO.

Change it to:

InstantHitDamage(0)=95.000000

InstantHitMomentum(0)=160000.000000

InstantHitDamageTypes(0)=Class'UTGame.UTDmgType_UberShockPrimary'

The momentum is how much it knocks / pushes / Bounces people or object such as vehicles.

Now the weapon as well as being deadly also can stop vehicles such as the scorpion in the their tracks like in UT2004.

Note that i have also changed it so that there is a new damage type called UberShockPrimary.

So now we have to make a script called **UTDmgType_UberShockPrimary.**

Locate the file:

UTDmgType_ShockPrimary

And Copy it to your classes folder.

Rename it: **UTDmgType_UberShockPrimary**

Open it and do the necessary editing shown in section 4 to rename its extensions to:

class UTDmgType_UberShockPrimary extends UTDamageType

and

Name="Default__UTDmgType_UberShockPrimary

Now edit the lines saying:

DeathString="`o was fatally enlightened by `k's Shock beam."

FemaleSuicide="`o somehow managed to shoot herself with the Shock Rifle."

MaleSuicide="`o somehow managed to shoot himself with the Shock Rifle."

And change them to:

DeathString="`o was fatally Ubered by `k's Shock beam."

FemaleSuicide="`o somehow managed to Uberate herself with the Uber Shock Rifle."

MaleSuicide="`o somehow managed to Uberate himself with the Uber Shock Rifle."

Save the file. We now have a custom dmg type along with an edited primary fire.

15. Creating Uber Shock Ball

Now open the script **UTWeap_UberShock** and locate the line that says:

WeaponProjectiles(1)=Class'UTGame.UTProj_ShockBall'

Change it to say:

WeaponProjectiles(1)=Class'UTGame.UTProj_UberShockBall'

Now the gun fires an Uber Shock Ball projectile. Save and close the script.

We are now going to create our Uber Shock Ball.

Open up your UT3 scripts and go into UT Game.

Find the file: **UTProj_ShockBall**

Copy and paste it into the classes folder.

Now rename it appropriately such as in section 4. We called it the UberShockBall in the other script so thats what it has to be called when changing the extensions.

Now open up the file and locate the lines:

ProjectileLightClass=Class'UTGame.UTShockBallLight'

Speed=1150.000000

MaxSpeed=1150.000000

Damage=55.000000

DamageRadius=120.000000

MomentumTransfer=70000.000000

MyDamageType=Class'UTGame.UTDmgType_ShockBall'

We are going to change the damage class to the one we made earlier so change

MyDamageType=Class'UTGame.UTDmgType_ShockBall'

To:

MyDamageType=Class'UTGame.UTDmgType_ShockBallmod'

Remember to copy the damage type we made earlier into the Uber Shock Rifle classes folder and not the tutorial folder one because otherwise the game won't be able to find and will crash.

Now we are going change its speed momentum transfer so change:

Speed=1150.000000

MaxSpeed=1150.000000

To:

Speed=4250.000000

MaxSpeed=4250.000000

And change

MomentumTransfer=70000.000000

To:

MomentumTransfer=110000.000000

Now we have our Uber Shock Ball that can be used in game.

16. Creating an ammo pickup

Now we need to create our ammo pickup.

Open up the UT3 Scripts and go into UT Game and find the file **UTAmmo_ShockRifle**

Copy it into our classes folder and Rename it **UTAmmo_UberShock**

Then open it and change the extensions so that it reads like in section 4.

Now, locate the lines:

AmmoAmount=10

TargetWeapon=Class'UTGame.UTWeap_ShockRifle'

PickupSound=SoundCue'A_Pickups.Ammo.Cue.A_Pickup_Ammo_Shock_Cue'

PickupMessage="Shock Core"

Change the ammo amount to what we specified as Ammo Count in UTWeap_UberShock.

Change the Pickup Message to read what you want it to say.

I am going to make it say Uber Shock Power Core so my lines would say:

AmmoAmount=10

TargetWeapon=Class'UTGame.UTWeap_ShockRifle'

PickupSound=SoundCue'A_Pickups.Ammo.Cue.A_Pickup_Ammo_Shock_Cue'

PickupMessage="Uber Shock Power Core"

Now we have our ammo pickup that can be placed in the editor.

17. Creating basic weapons Instagib Mutator

For now we are going to create a basic instagib mutator to allow us to use the weapon in game.

Open up the UT3 Scripts folder and then open UT Game. Find the script called **UTMutator_Instagib** and copy it to our classes folder. Rename UberShockInstagib and thenopen it and change the extensions to the appropriate ones such as:

UTMutator_UberShockInstagib extends UTMutator

And follow on via reading section 4.

Now we need to make it use our weapon.

First find the line:

UTGame(WorldInfo.Game).DefaultInventory[0] = class'UTGame.UTWeap_InstagibRifle';

And change it to:

UTGame(WorldInfo.Game).DefaultInventory[0] = class'UTGame.UTWeap_UberShock';

Then find the line:

if (Other.IsA('UTWeapon') && !Other.IsA('UTVehicleWeapon') && !Other.IsA('UTWeap_InstagibRifle') && !Other.IsA('UTWeap_Translocator'))

And change it to:

if (Other.IsA('UTWeapon') && !Other.IsA('UTVehicleWeapon') && !Other.IsA('UTWeap_UberShock') && !Other.IsA('UTWeap_Translocator'))

Now we have told the game to use the UberShock instead of the Instagib Rifle.

You can also change the **UTWeap_Translocator** to ano ther weapon if you wish to make your mutator use another one but translocator is default.

Compilling:

Now we need to check what files we have. In our Project Uber Shock Rifle folder – classes we should have the following files:

UTWeap_UberShock

UTAmmo_UberShock

UTMutator_UberShockInstagib

UTProj_UberShockBall

UTDmgType_ShockBallmod

UTDmgType_UberShockPrimary

If you don’t have all of these files then i suggest you go back through the mini mod walkthrough and do the files you haven’t got.

To be continued:

If you really want to know how to compile it then click below: