

## UnrealScript Tutorial-2 Your First Program

### Overview:

This tutorial picks up where the last tutorial (Tutorial-1 Introduction to UnrealScript) left off. Make sure that you have completed all of the steps in this first tutorial before you try the steps in this one.

### Opening Your Script Folder

In the first tutorial you created a folder to keep your new scripts. The folder is:

**C:\UDK\UDK-2009-11-2\Development\Src\ MyScripts\Classes**

Where: **UDK-2009-11-2** may be different for your installation (this is the actual directory where your version of the UDK editor is installed).

Now create a new text document in the folder (right-click select New, select Text Document).

In your new text document enter the following (exactly as shown below):

```
class MyNote extends Note;  
  
var( ) string MyString;  
var string AnotherString;
```

**[Observe the ; (semi-colon) at the end of each line.]**

Save the text file and rename it: **MyNote.uc** (you will get a warning message, just click on the OK button).

Next open the UDK editor. You will get a pop-up Message stating: "Scripts are outdated. Would you like to rebuild now?". Click on Yes.

A new window will open up and begin to update your script. What is actually happening is that your UnrealScript is being compiled (changed from the text you entered into a machine readable code) and also being checked for any errors. This may take a little time to do. If you get errors, read carefully what the error message says and then go back and make the changes. When you try to open your program file (MyNote.uc) it may not want to open in Notepad. If this happens, go back and right-click on it selecting **Open With** then **Select Program**. In the pop-up window select **Notepad** and check the box that says: "**Always use the selected program to open this kind of file.**". Once you make any required changes, go back on re-open the UDK editor, selecting Yes on the resulting pop-up selection box. Your program will begin the compiling process again.

If everything compiled OK you should get a green message saying:

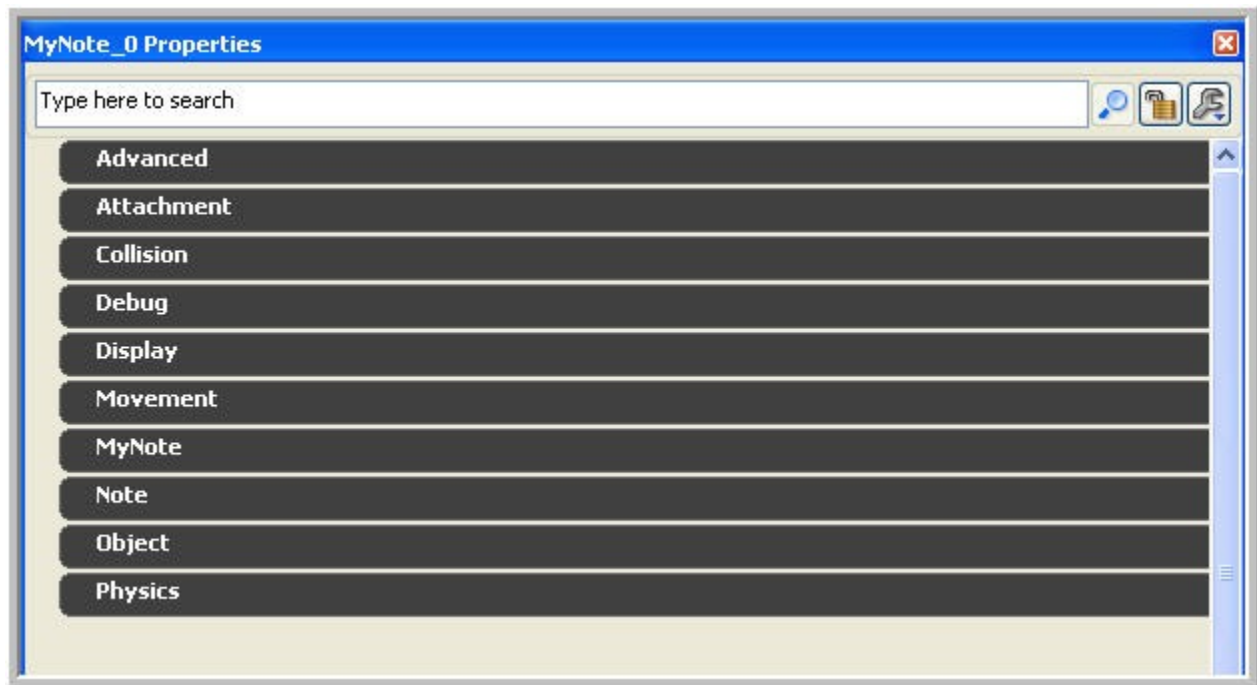
**Success – 0 error(s), 0 warinig(s)**

## Seeing Your First Program

Open again the UDK editor. Since your program compiled successfully you will not get the pop-up selection box. Instead the UDK editor should come up normally.

Go to the **View** menu and select **Browser Window** then Actor **Classes**. In the resulting Actor Class window, look for **Note**. You will now see a + sign in front of it indicating that it is now the parent of another class (remember that in the last lesson, the Note class did not have a + sign in front of it). Click on the + sign. You will now see the new child class called: **MyNote** This is the UnrealScript program that you just created! Now, right-click on it and select to view the source code. You will now see the code that you made for your first program.

Left-click on **MyNote** then go to the 3-D viewport in the editor and right-click selecting **Add MyNote here**. You will now see a large image of a note graphic. Hit the **F4** key (to select the MyNote properties). You will see the following pop-up window:



Note that the header of this properties window says: MyNote-0 Properties. If you made another instance of your MyNote class, it's Properties window would say: MyNote-1 Properties, and so on for as many copies (instances) as you wish to make. All of the above properties (except for your **MyNote** class) come from the **Note** class which originally comes from the **Actor** class. Thus, Debug, Display, Movement, etc all come from the Actor class.

The new class that you just made (MyNote) has the property **MyString**. You can see this property by left-clicking on your **MYNote** class.



[Viewing the MyString property of the MyNote class.]

You can now type some text into this property:



The MyString property is from your original program:

```
class MyNote extends Note;  
  
var( ) string MyString;  
var string AnotherString;
```

From the program you can see: **var( ) string MyString;**  
However, you can also see: **var string AnotherString;**

But, **AnotherString** did not show up as a property in the Property window. The reason why is because of the missing ( ) after the **var** in **string AnotherString;**

What this means is that **MyString** can let the user change what it can contain while **AnotherString** will only allow something in the program (more code) to change what it can contain.

## Summary

Here you created your first UnrealScript program. What you saw was that what you really did was to create a new UnrealScript class. You could give this new class properties, some of which could be changed by the user and other properties that could be changed only by a program. You also saw that by creating a child of Note which is itself a child of the class Actor, that you inherited all of the properties of both the Note and the Actor classes. This is a powerful feature of Object Oriented Programming (OOP) called inheritance that can save you hundreds of hours of programming time by using already tested and proven code.