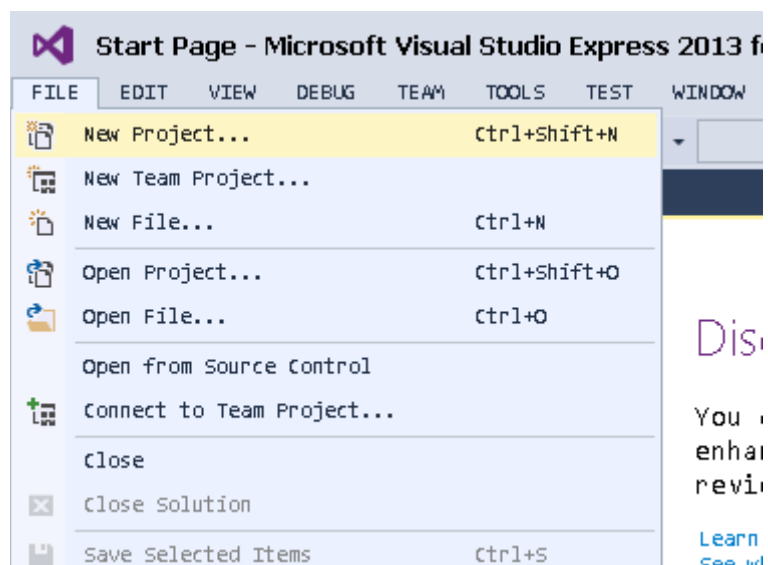
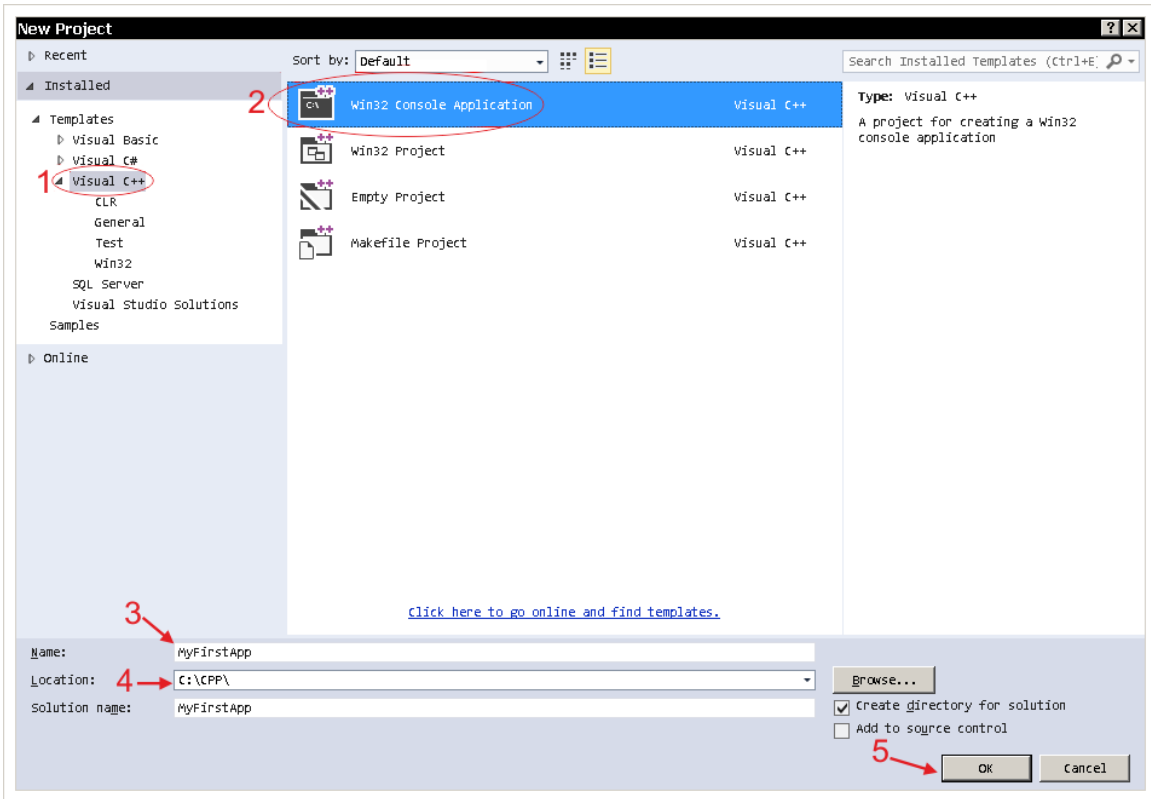
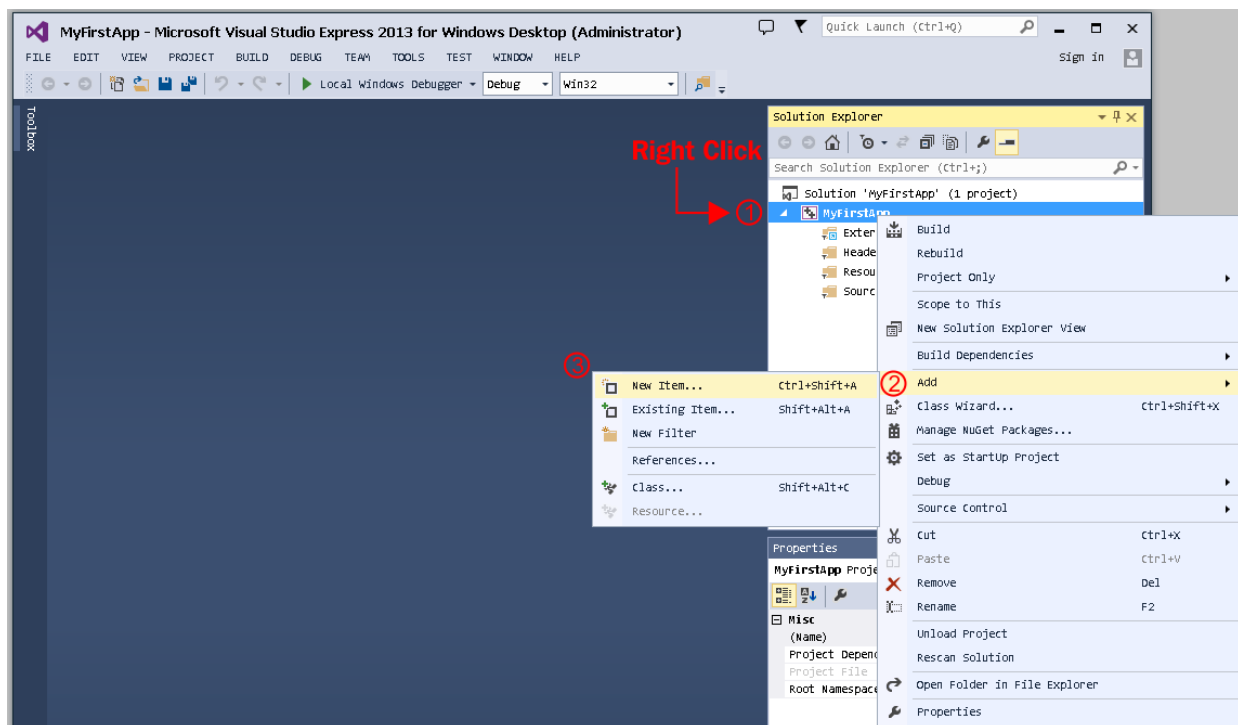
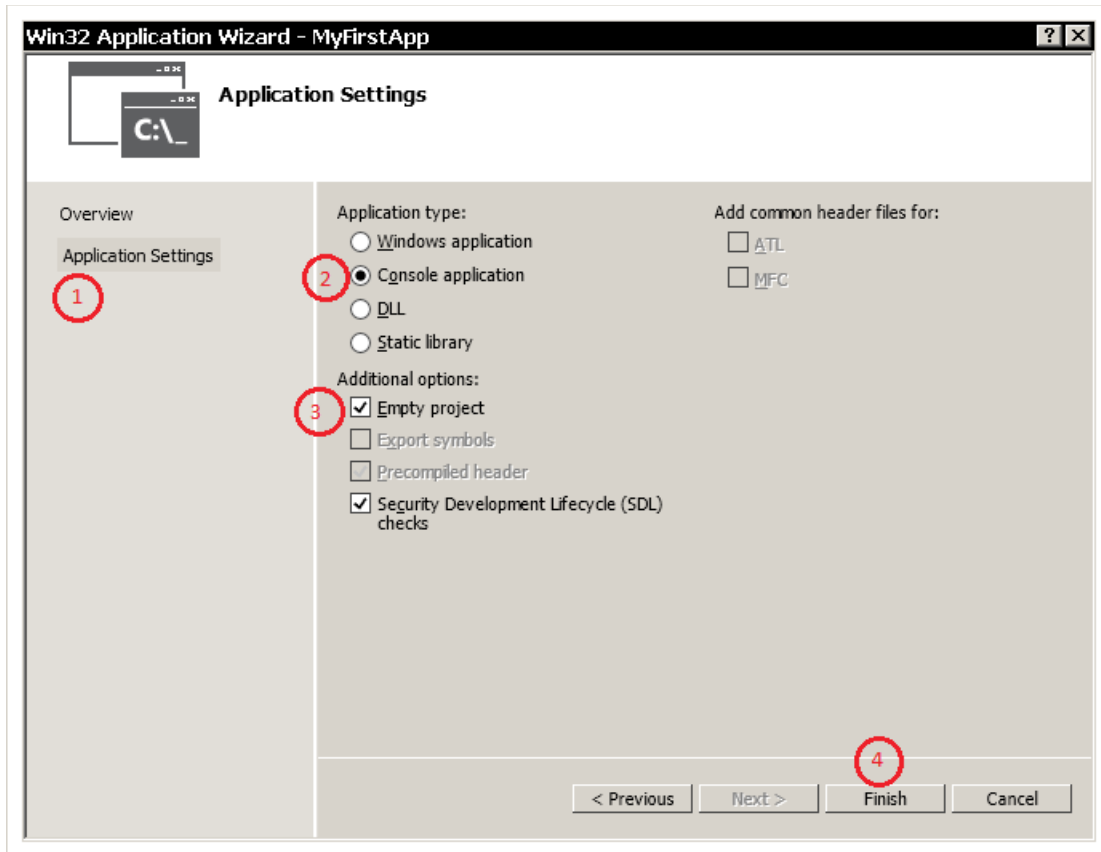
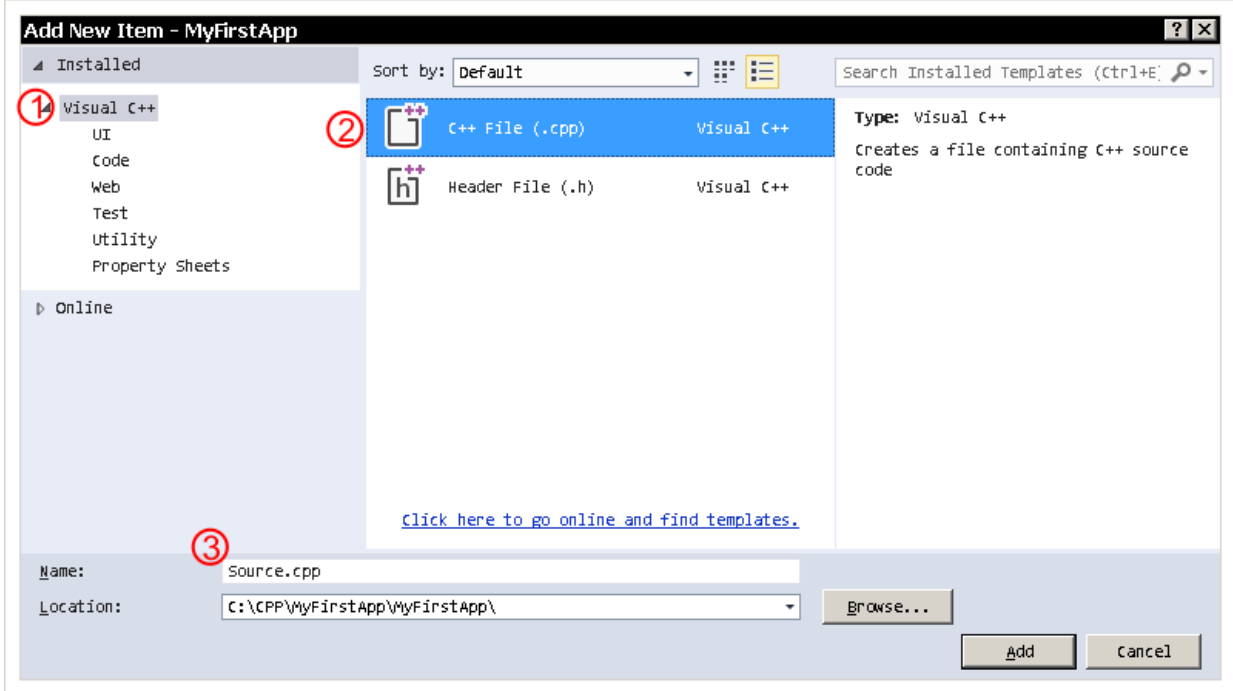


## Chapter 1. Coding with C++



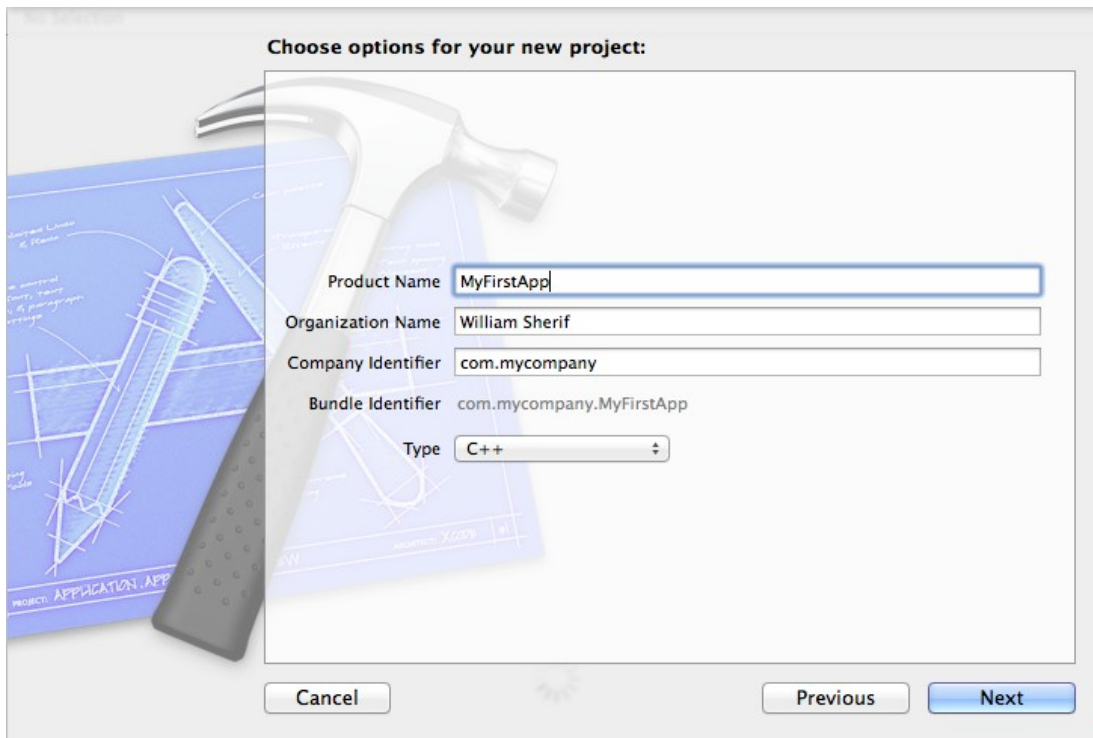
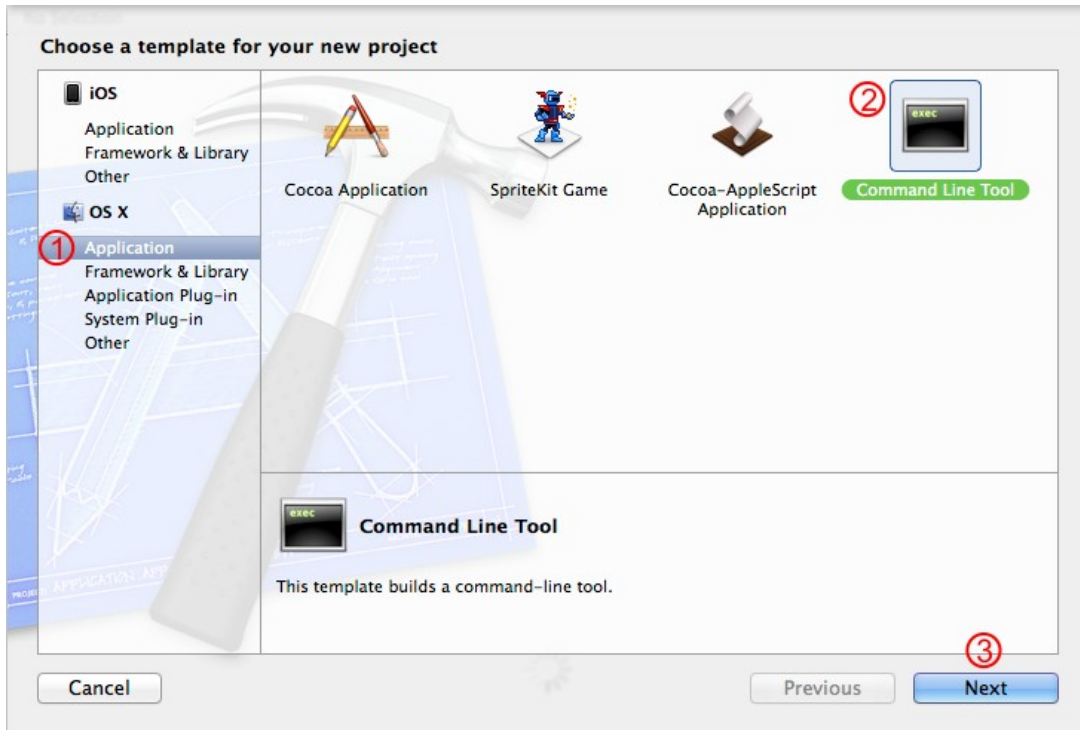


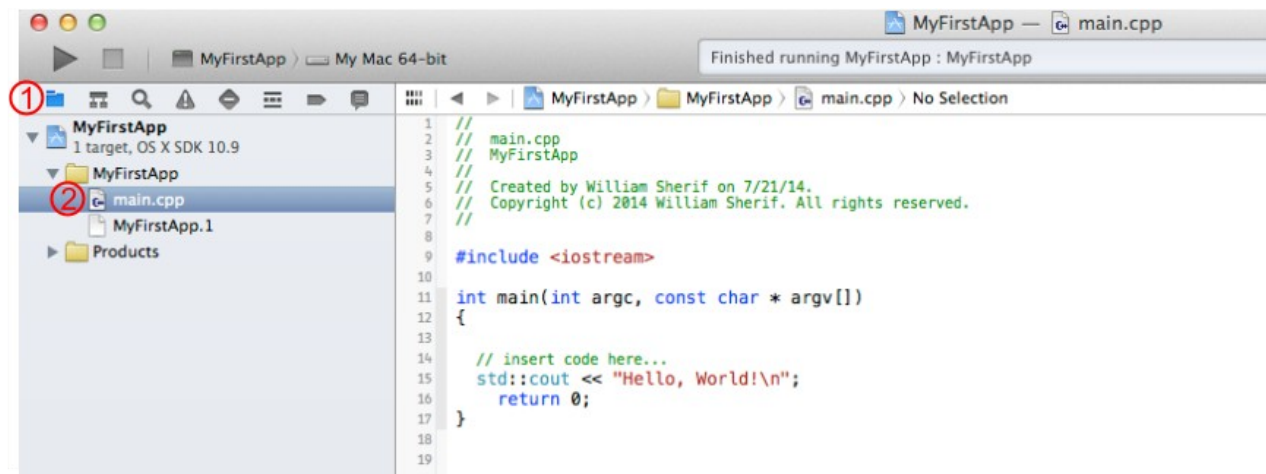
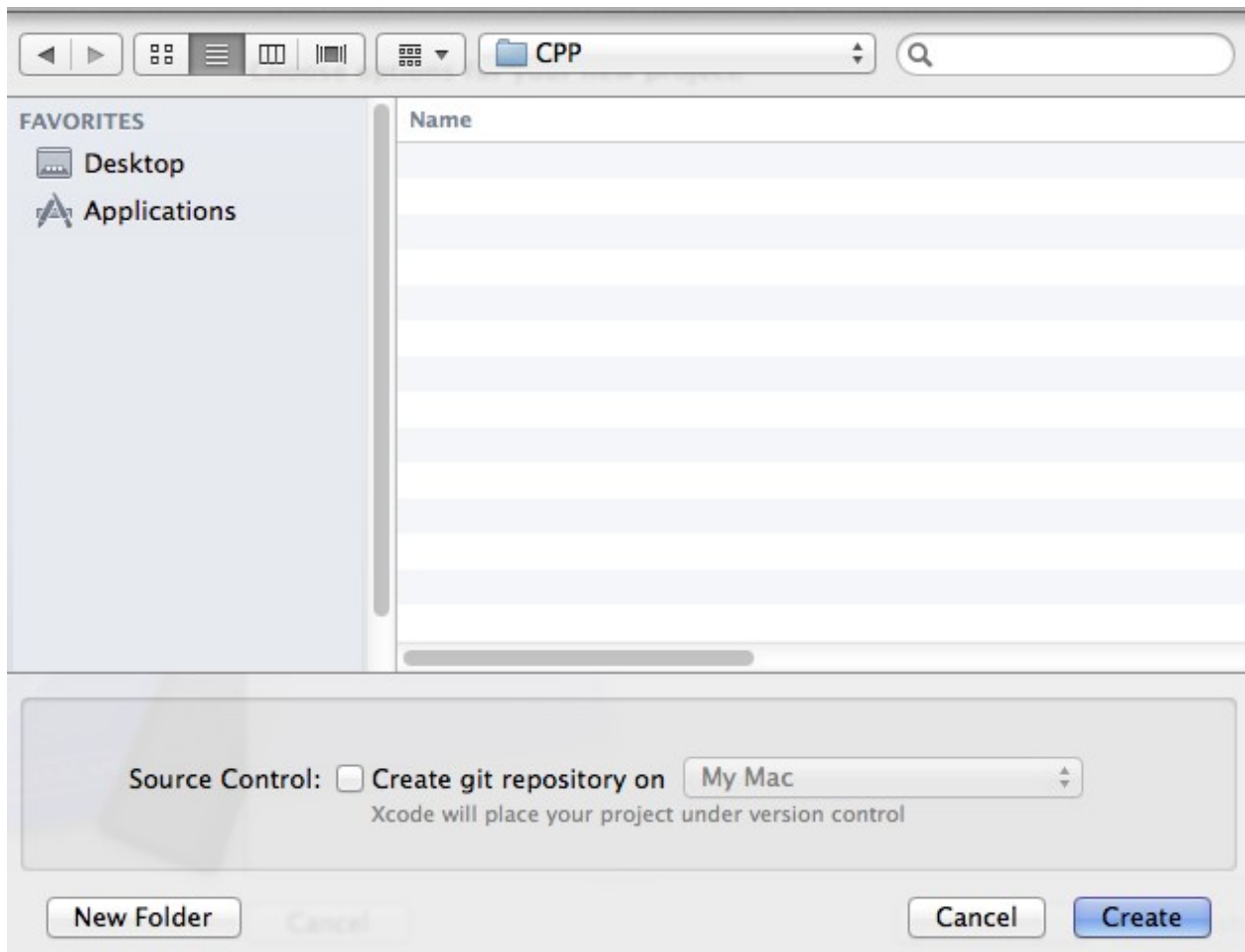


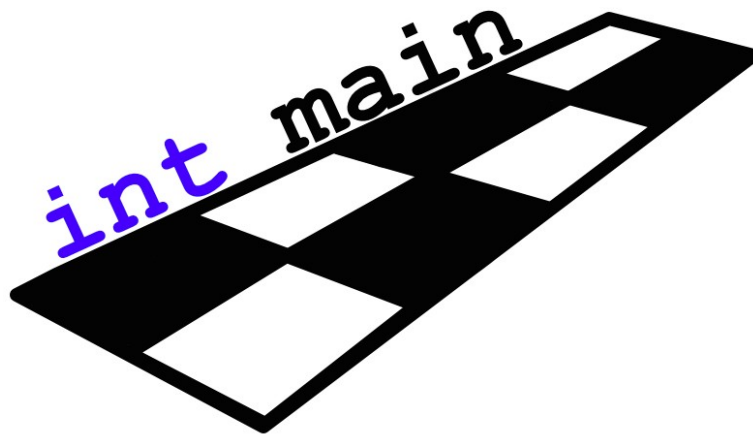
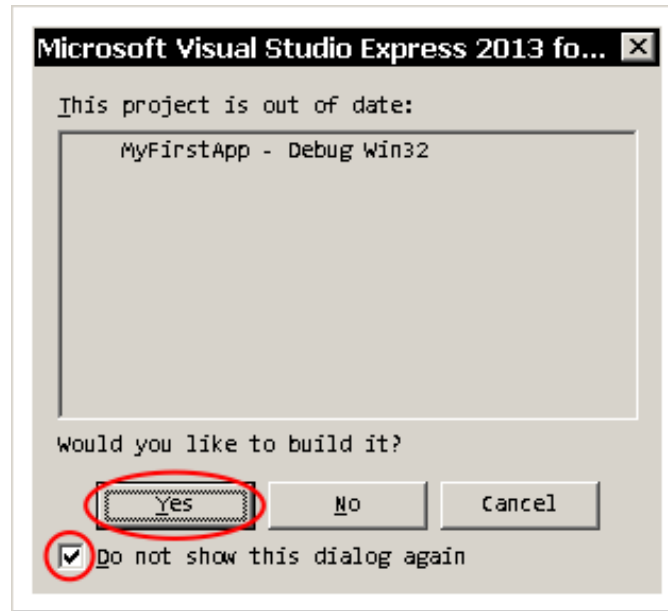




<b>New</b> ▶		Tab	⌘T
Add Files...	⇧⌘A	Window	⇧⌘T
Open...	⌘O	File...	⌘N
Open Recent	▶	Target...	
Open Quickly...	⇧⌘O	<b>Project...</b>	⇧⌘N
Close Window	⌘W	Workspace...	^⌘N
Close Tab		Group	⇧⌘N
Close Document	^⌘W	Group from Selection	
Close Workspace	⇧⌘W		
Save	⌘S		
Duplicate...	⇧⌘S		
Revert to Saved...			
Unlock...			
Export...			
Show in Finder			
Open with External Editor			
Save As Workspace...			
Workspace Settings...			
Create Snapshot...	^⌘S		
Restore Snapshot...			
Page Setup...	⇧⌘P		
Print...	⌘P		







```
#include <iostreams>\nusing namespace std;\nint main(\n{\n  count << "Hello, world << ender:\n  count << "I am now a C++ programmer." << ender;\n}\n
```

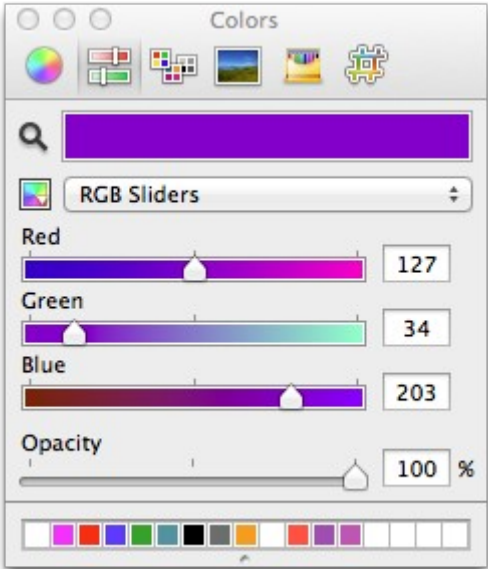
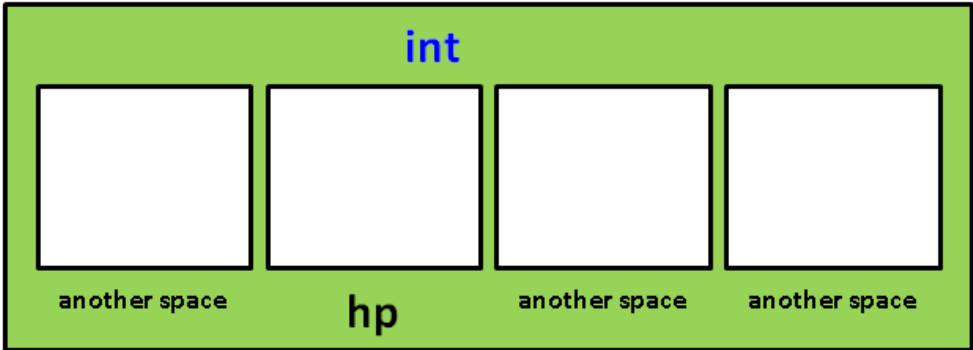
**ERROR**

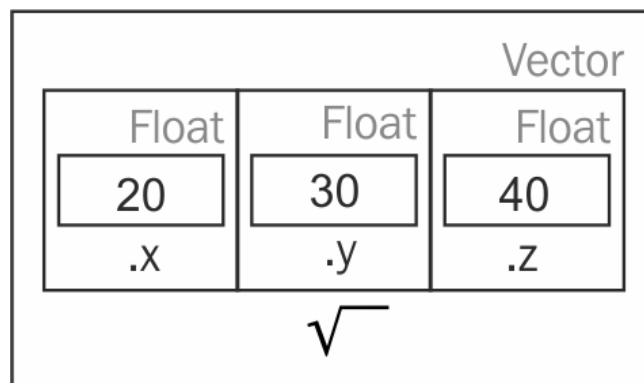
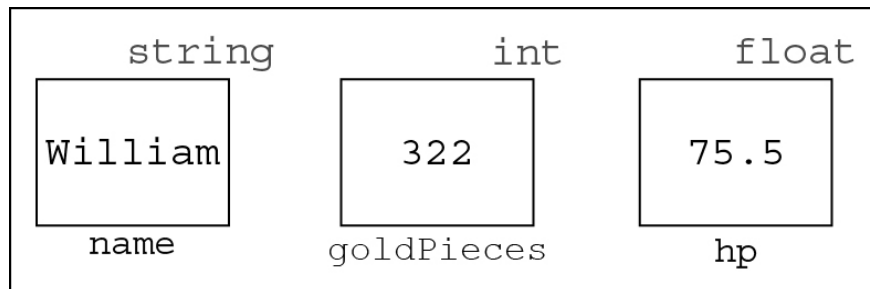
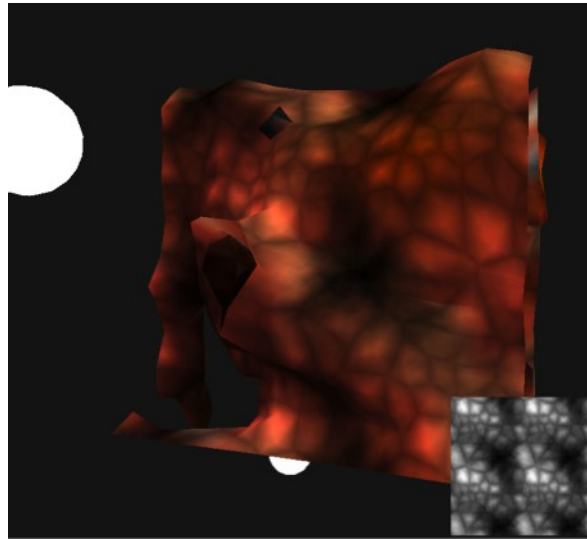
```
1 #include <iostreams>
2 using namespace std;
3
4 int main()
5 {
6     cout << "Hello, world << endl;
7     cout << "I am now a C++ programmer." << endl;
8 }
9
```

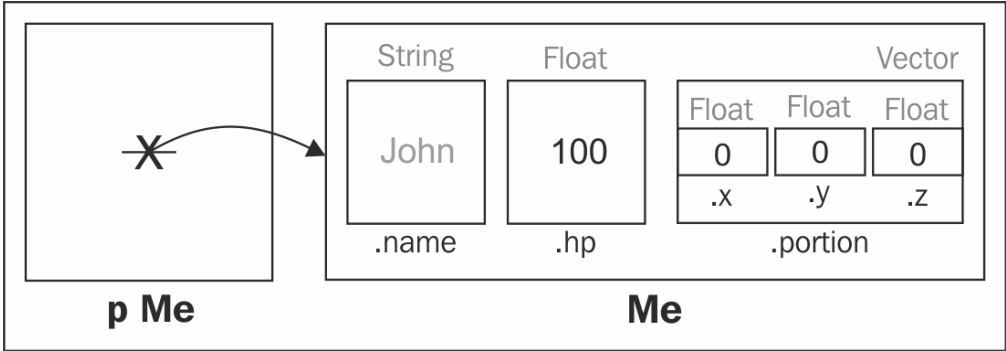
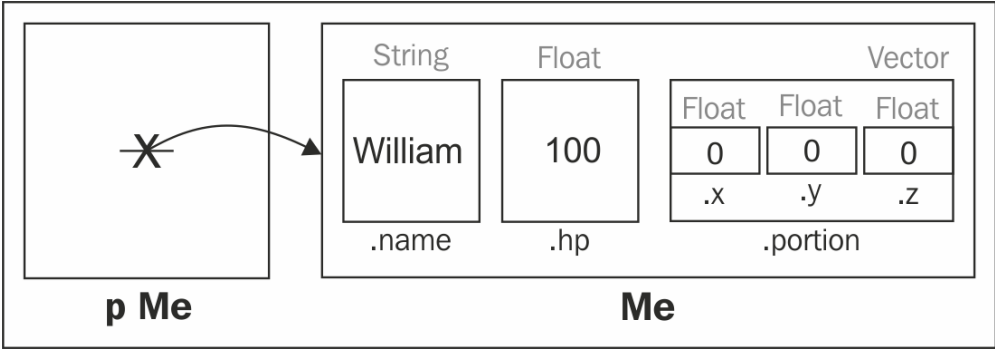
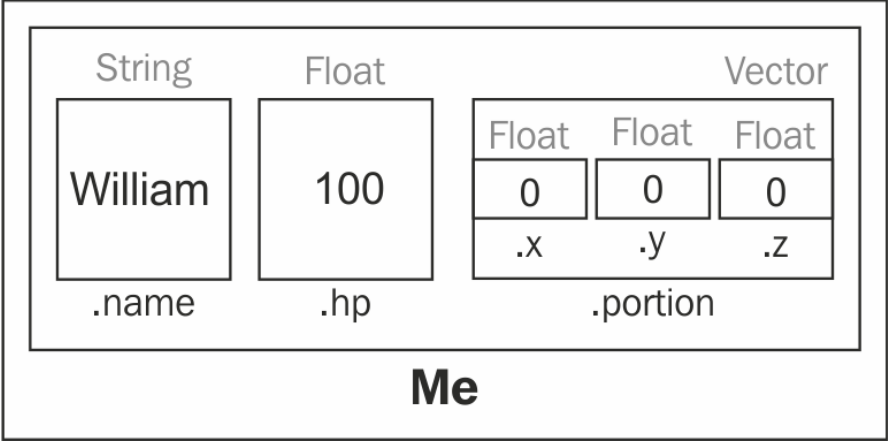
```
1 #include <iostream> // Import the input-output library
2 using namespace std; // allows us to write cout
3 // instead of std::cout
4
5 int main()
6 {
7     cout << "Hello, world" << endl;
8     cout << "I am now a C++ programmer." << endl;
9     return 0;
10 }
11
```

```
C:\Windows\system32\cmd
Hello, world
I am now a C++ programmer.
Press any key to continue . . .
```

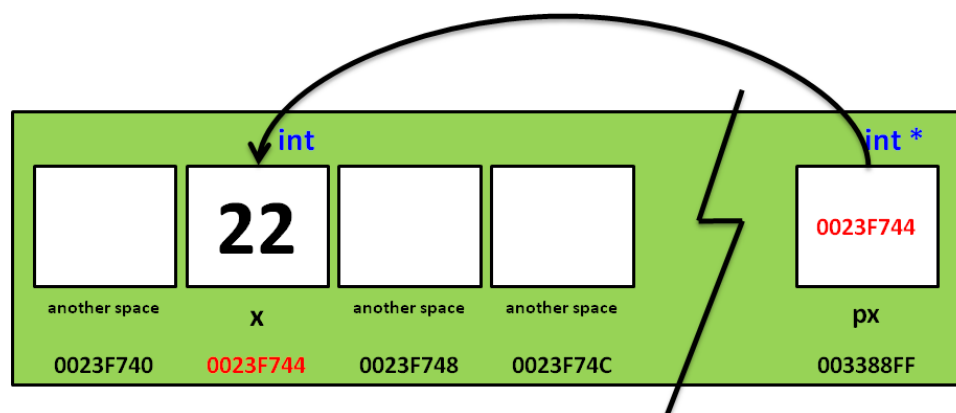
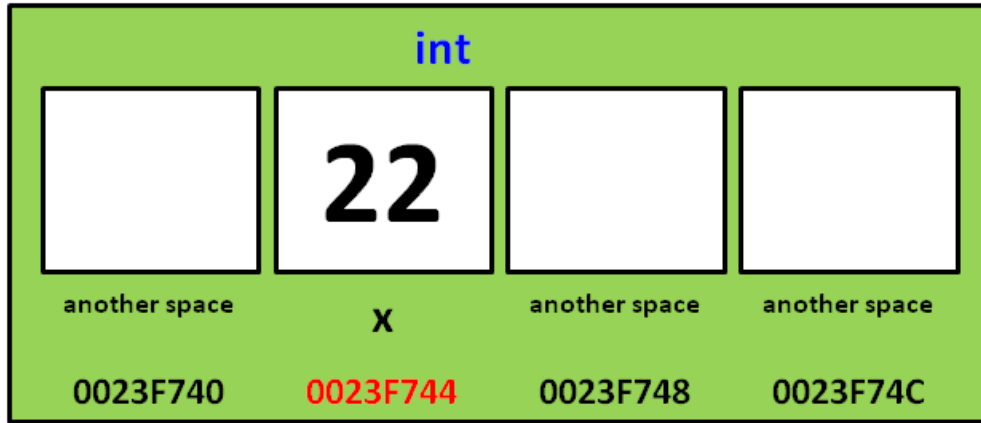
# Chapter 2. Variables and Memory







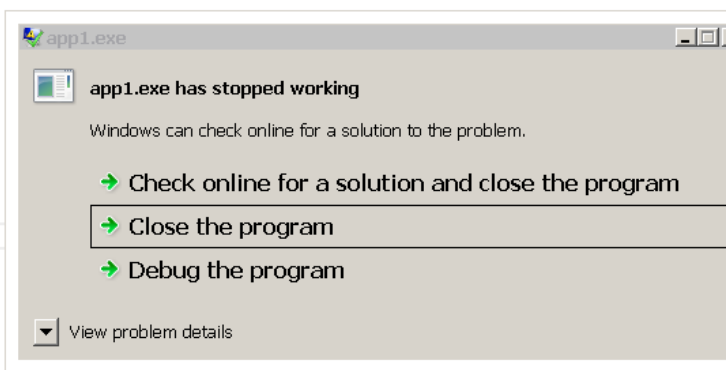




```

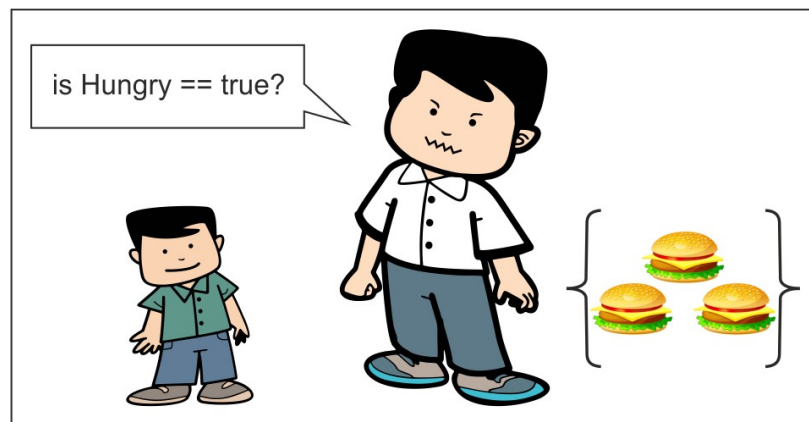
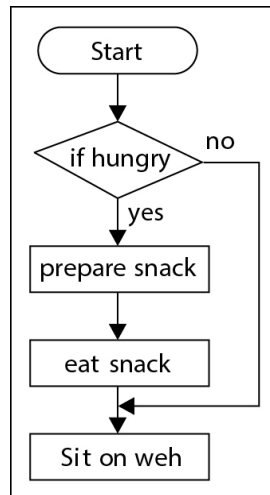
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     int *x = 0;
7     cout << *x << endl;
8
9 }

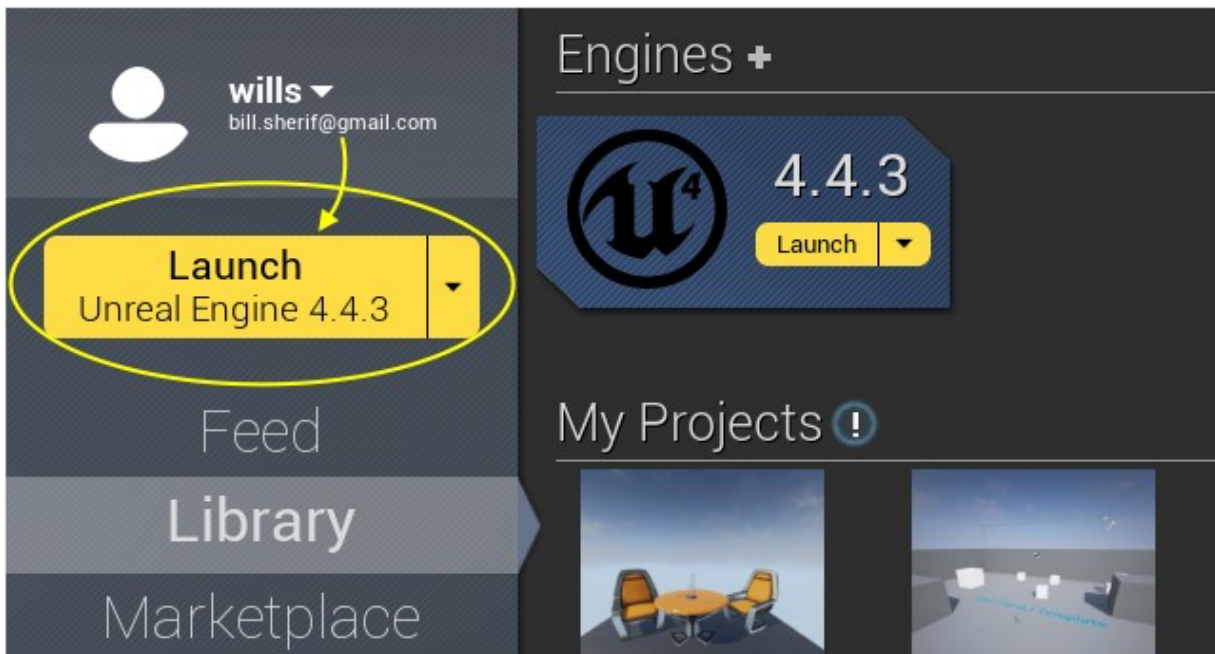
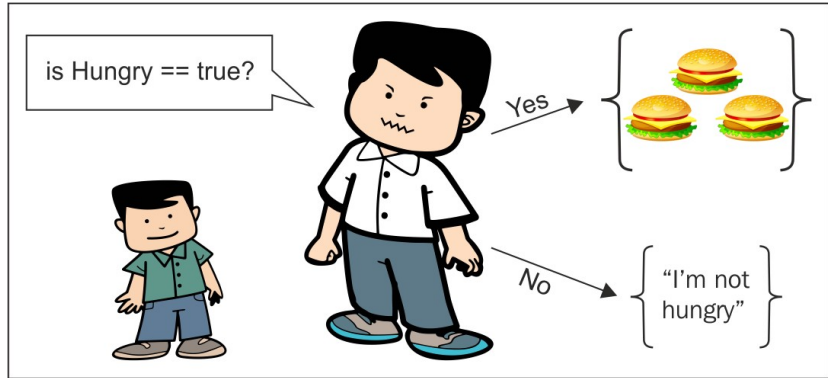
```

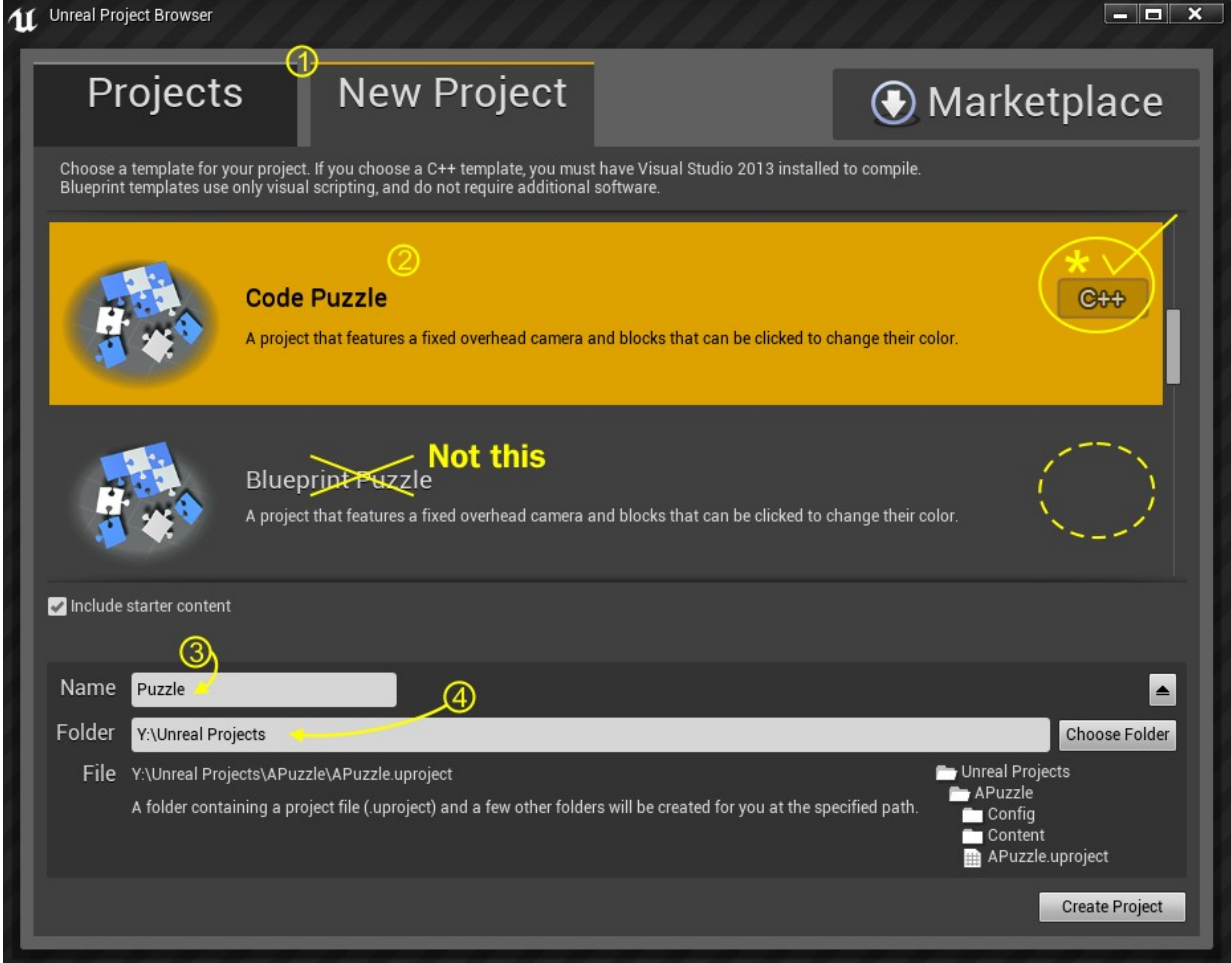


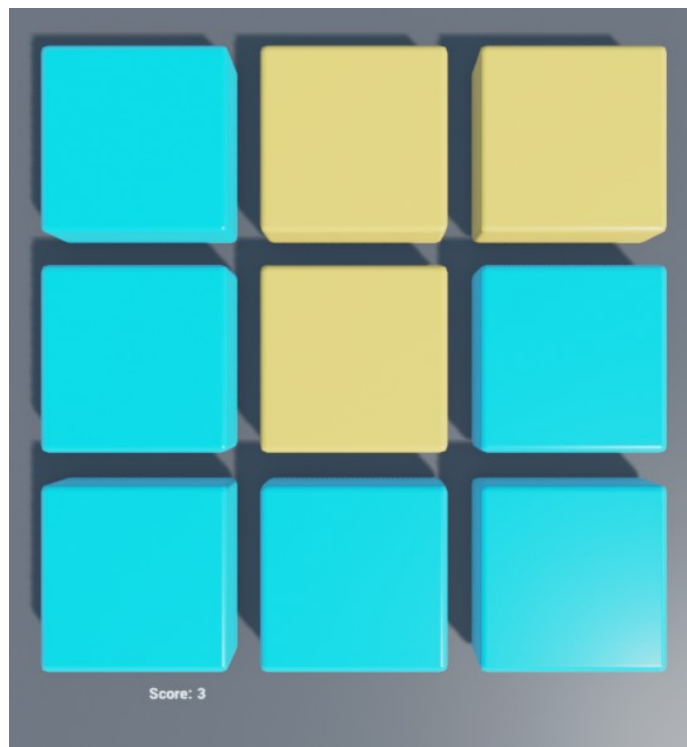
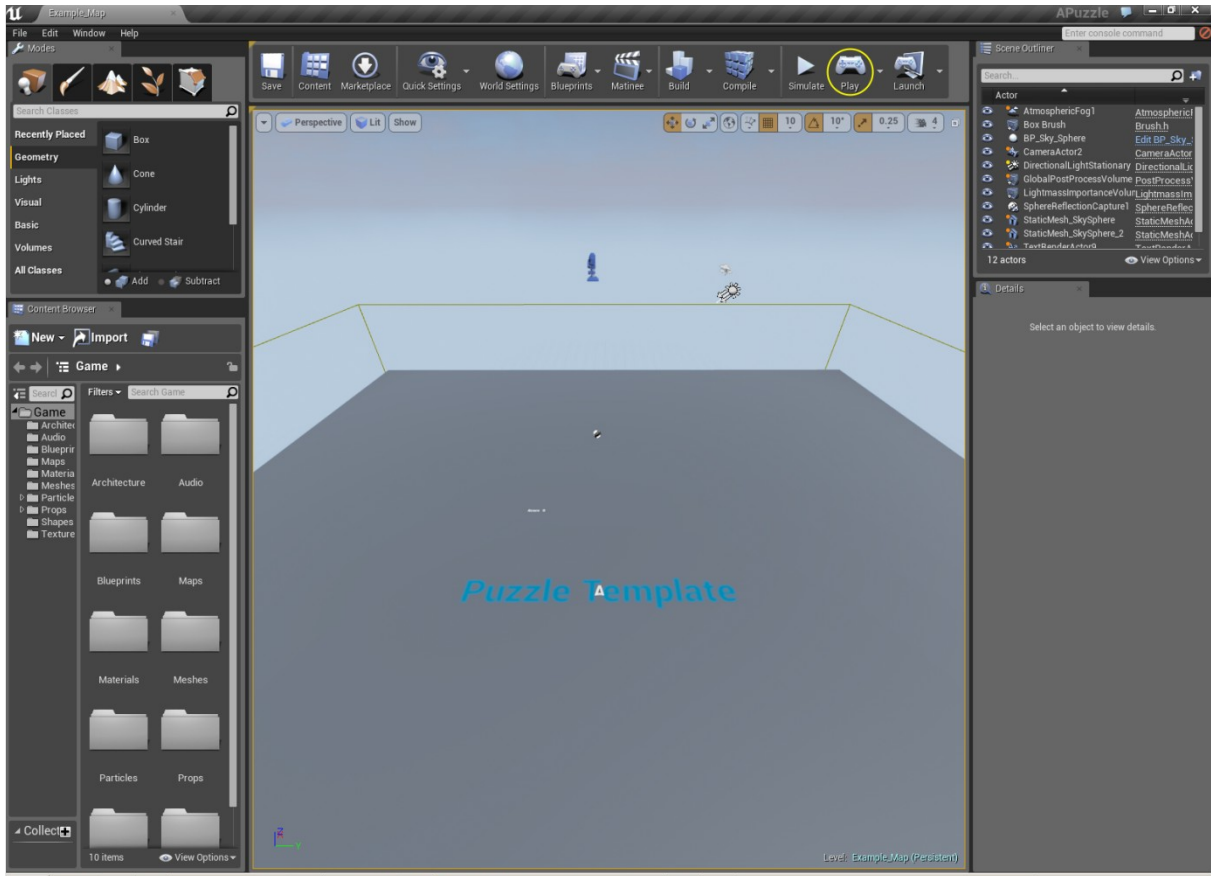
printf( "integer %d, character %c\n",  
integer, character );

## Chapter 3. If, Else, and Switch









Solution Explorer

Search Solution Explorer (Ctrl+;)

Solution 'Puzzle' (1 project)

- Puzzle
  - Config
  - External Dependencies
  - Source
    - Puzzle
      - Private
        - Puzzle.cpp
        - PuzzleBlock.cpp**
        - PuzzleBlockGrid.cpp
        - PuzzleGameState.cpp
        - PuzzlePlayerController.cpp
      - Public
      - Resources
      - Puzzle.Build.cs
      - Puzzle.Target.cs

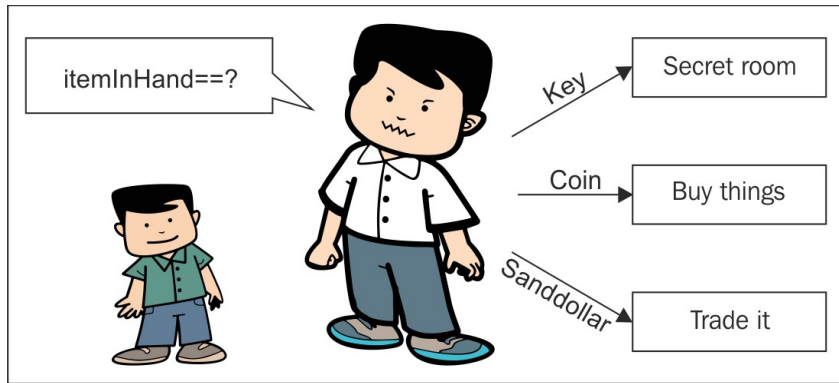
PuzzleBlock.cpp

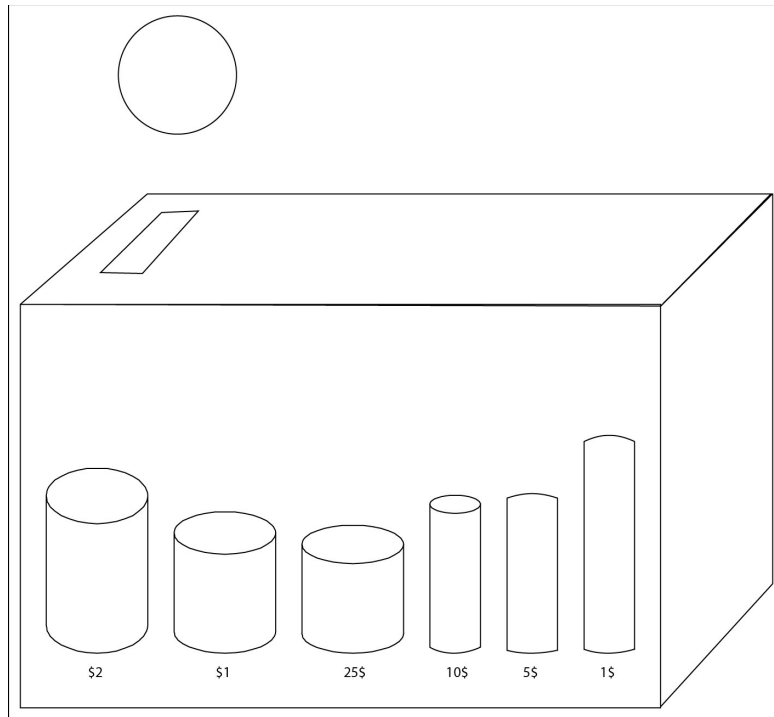
(Global Scope)

```
void APuzzleBlock::BlockClicked(UPrimitiveComponent* ClickedComp)
{
    // Check we are not already active
    if (!bIsActive)
    {
        bIsActive = true;

        // Change material
        BlockMesh->SetMaterial(0, OrangeMaterial);

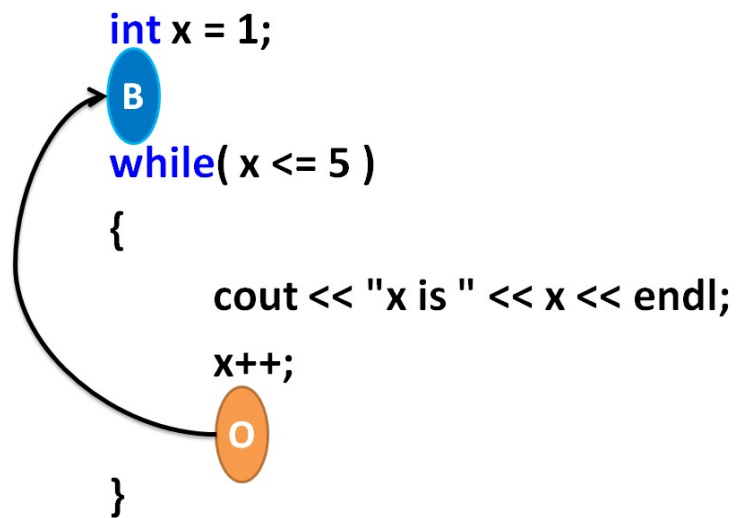
        // Tell the Grid
        if (OwningGrid != NULL)
        {
            OwningGrid->AddScore();
        }
    }
}
```



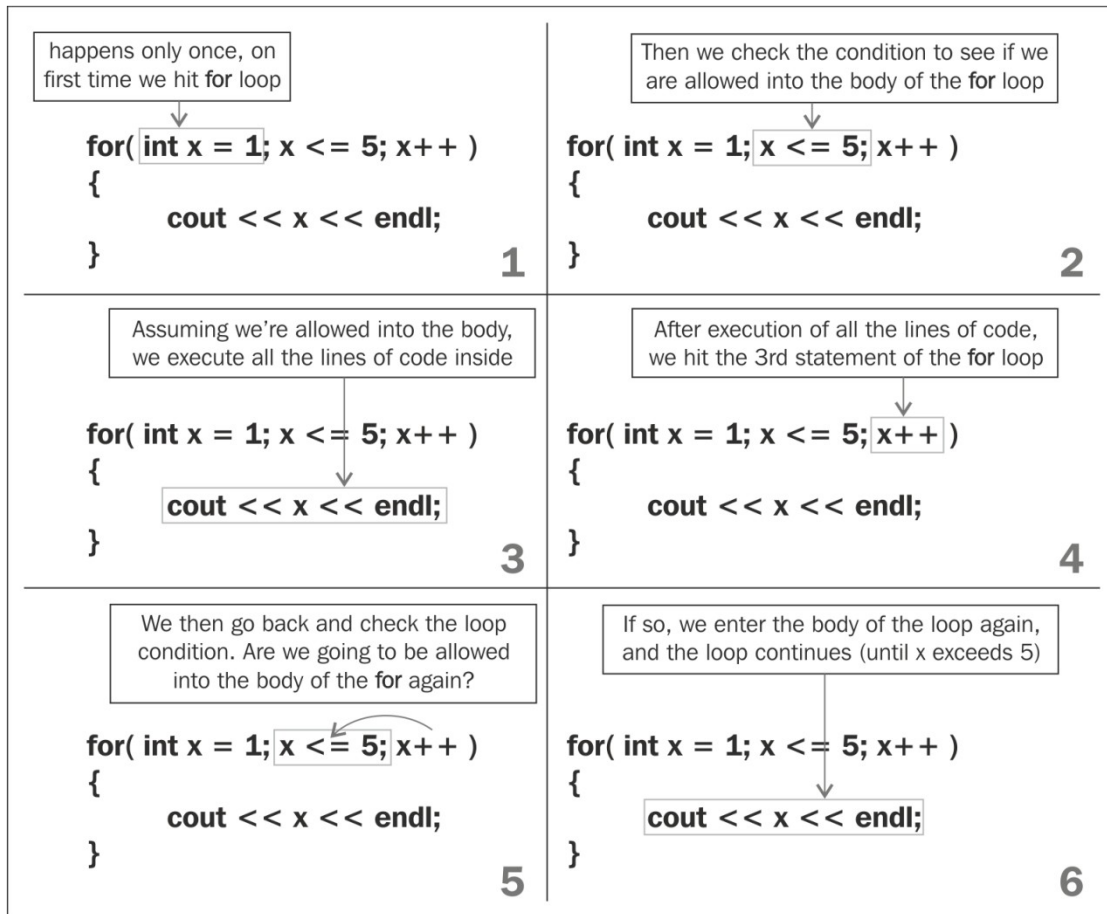













```
Food food = Fish; // Change the food here
① switch( food )
{
  ② case Fish:
    ③ cout << "Here fishy fishy fishy" << endl;
    ④ break;
  case Bread:
    cout << "Chomp! Delicious bread!" << endl;
    break;
}
cout << "End of switch" << endl;
```

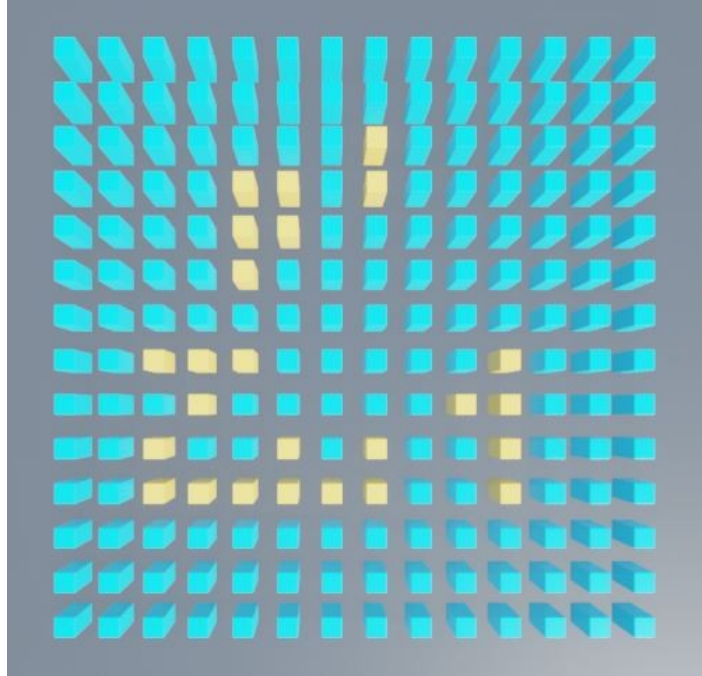
## Chapter 4. Looping



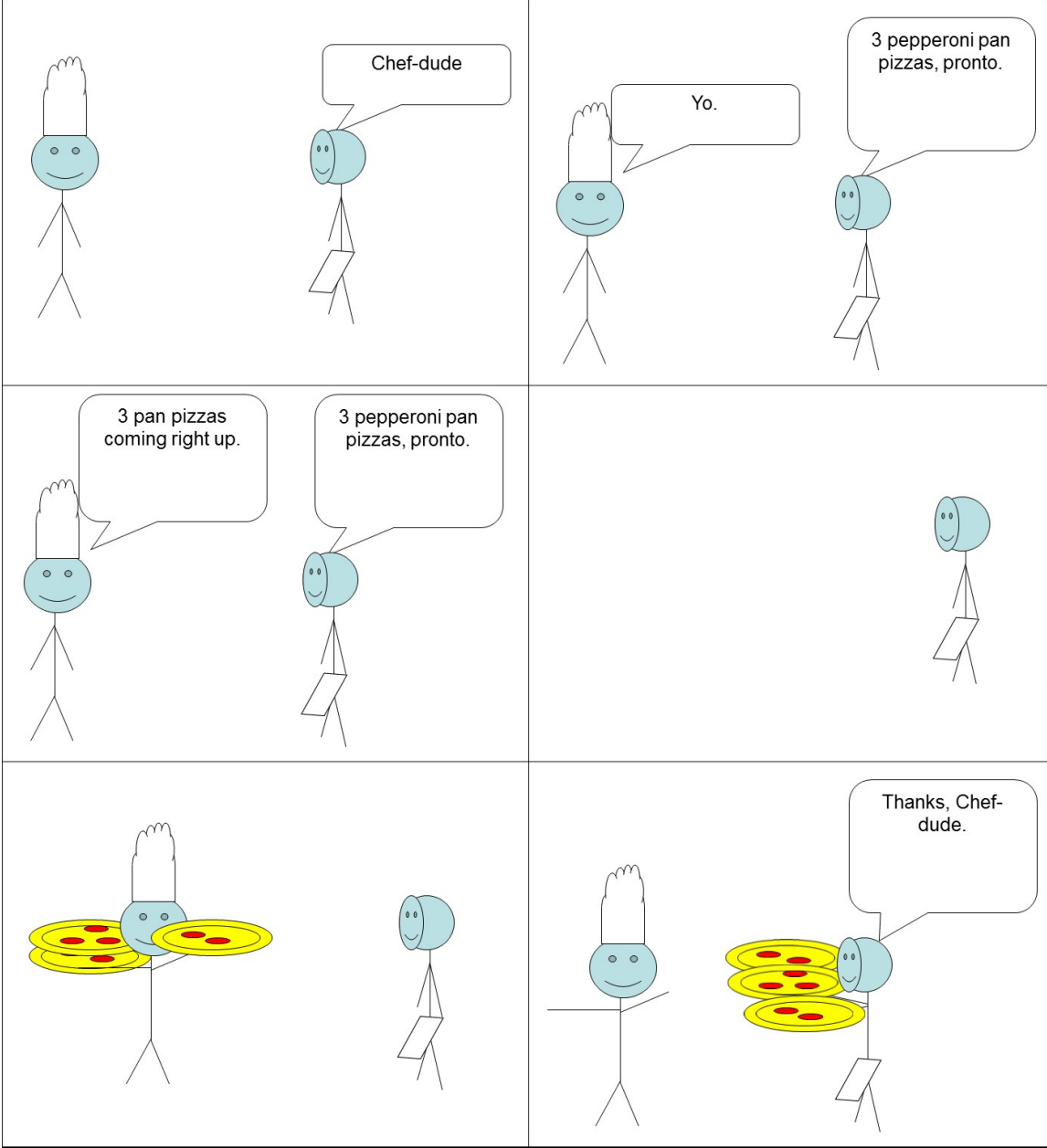


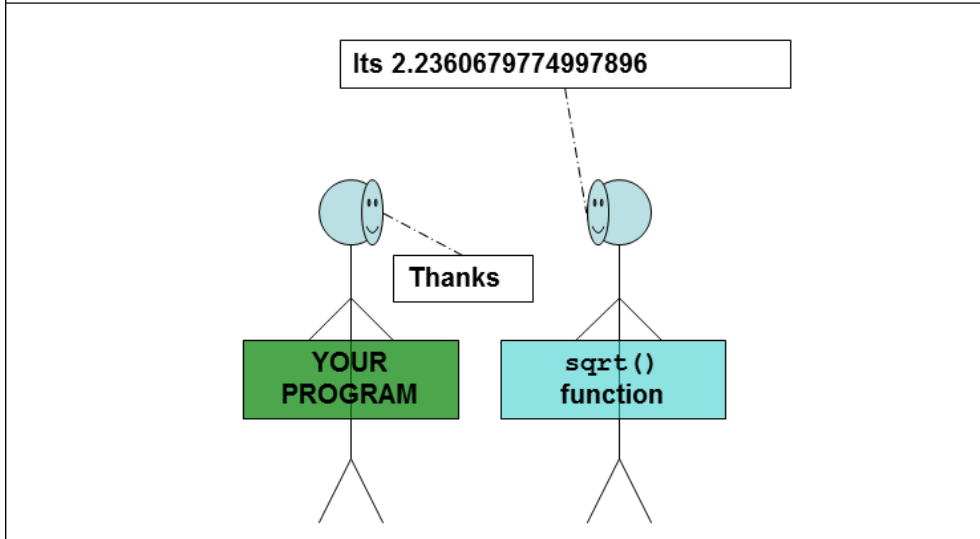
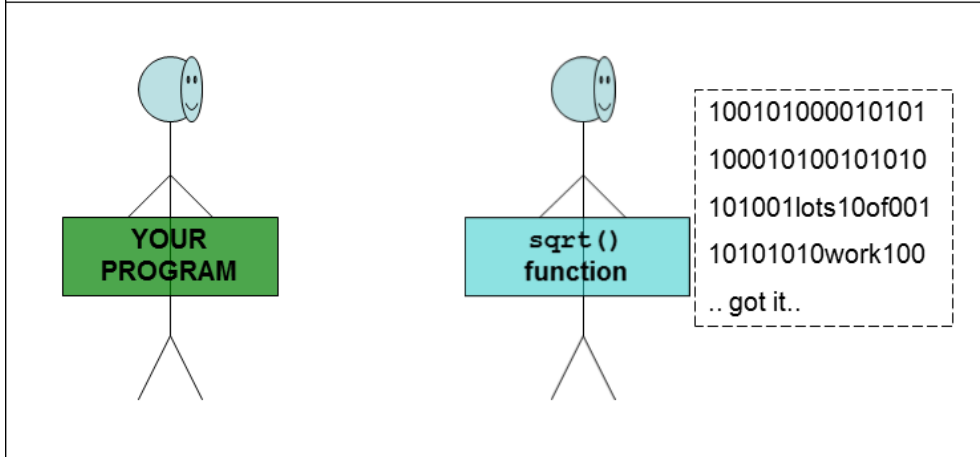
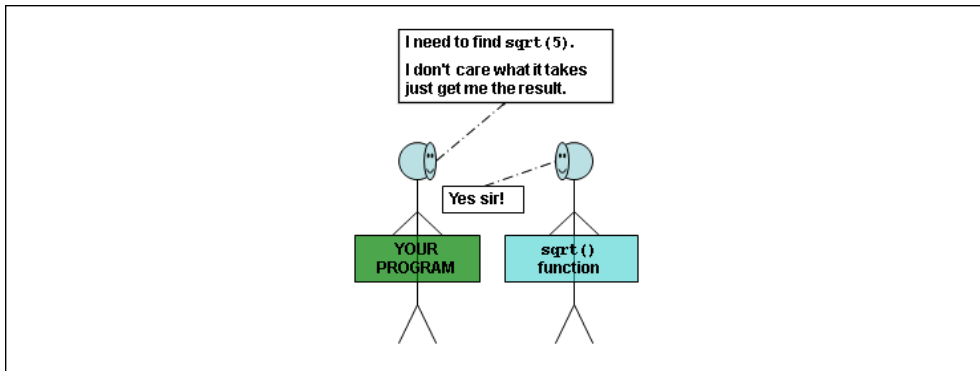


 Binaries	9/25/2014 5:56 AM	File folder	
 Config	9/25/2014 5:56 AM	File folder	
 Content	9/25/2014 5:56 AM	File folder	
 Intermediate	9/27/2014 8:42 AM	File folder	
 Saved	9/25/2014 5:56 AM	File folder	
 Source	9/25/2014 5:56 AM	File folder	
 Puzzle.opensdf	9/27/2014 8:42 AM	OPENSDF File	0 KB
 Puzzle.sdf	9/27/2014 8:42 AM	SDF File	49,088 KB
 <b>Puzzle.sln</b>	<b>9/24/2014 10:01 AM</b>	<b>Microsoft Visua...</b>	<b>2 KB</b>
 Puzzle.uproject	9/24/2014 10:01 AM	Unreal Engine P...	1 KB
 Puzzle.v12.suo	9/27/2014 8:42 AM	Visual Studio S...	30 KB



## Chapter 5. Functions and Macros





```
function name
↓
void printRoad()
{
function body → cout << "*" << endl;
                 cout << "*" | "*" << endl;
                 cout << "*" | "*" << endl;
                 cout << "*" << endl;
}
```

```
parameter
↑
void printRoad(int num)
{
```

```
void printRoad(int numSegments)
{
```

The assignment of **numSegments** happens at function invocation time

return type

parameters

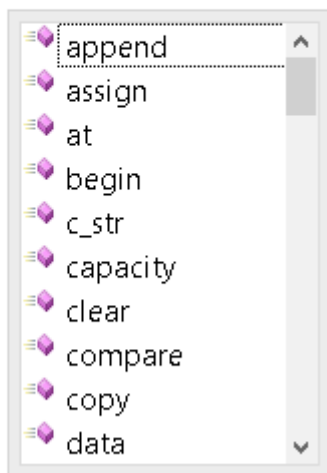
```
int sum( int a, int b )  
{  
    return a + b;  
}
```

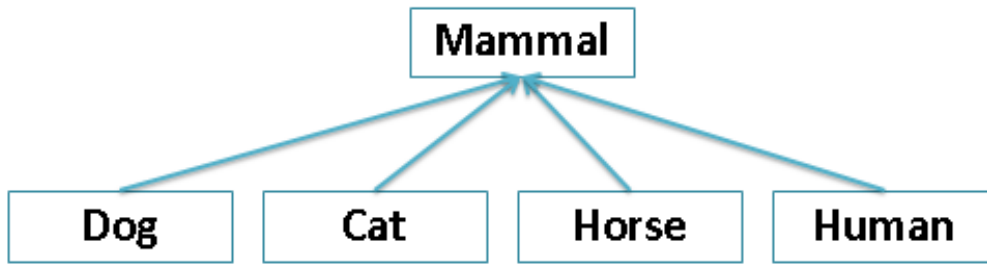
The screenshot shows three code editors side-by-side. The first editor, 'main.cpp', contains the main function that calls 'isPositive' and 'absEqual'. The second editor, 'prototypes.h', contains the function prototypes for 'isPositive', 'absEqual', and 'getGrade'. The third editor, 'funcs.cpp', contains the implementations of 'isPositive', 'absEqual', and 'getGrade'.

- Header Files
  - prototypes.h
- Resource Files
- Source Files
  - funcs.cpp
  - main.cpp

## Chapter 6. Objects, Classes, and Inheritance

```
4 | L  
5 | int main()  
6 | {  
7 |     string s = "strings are objects";  
8 |     s.  
9 |     s.append("11");  
10| }
```





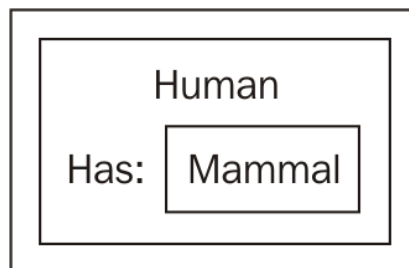
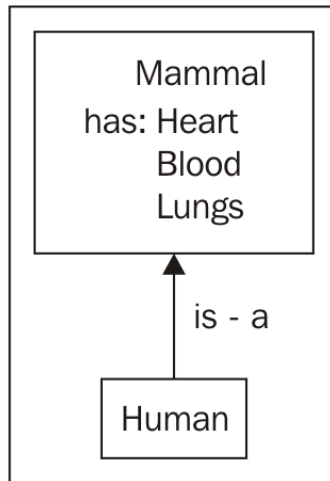
new, inheriting  
class - **derived**  
**class**

The colon means  
"inherits from",  
or, "is-a"

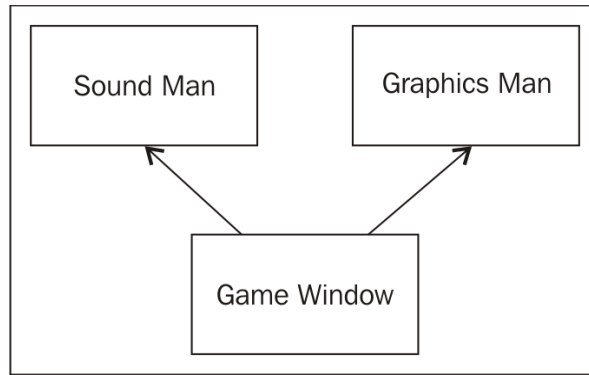
The class to  
inherit from -  
**base class**

```

class Human : public Mammal
{
  
```







```

Source.cpp
1 #include <iostream>
2 using namespace std;
3
4 #include "Mammal.h"
5
6 // This next line says "class Dog inherits from Mammal"
7 class Dog : public Mammal // : is used
8 {
9 public:
10 Dog()
11 {
12 cout << "A dog is born!" << endl;
13 }
14 ~Dog()
15 {
16 cout << "The dog died" << endl;
17 }
18 virtual void talk() override
19 {
  
```

```

Mammal.h
1 #include <iostream>
2 using namespace std;
3
4 class Mammal
5 {
6 protected:
7 // protected variables are accessible
8 // but not outside the class
9 int hp;
10 double speed;
11
12 public:
13 // Mammal constructor - runs FIRST before Mammal()
14 Mammal()
15 {
16 hp = 100;
17 speed = 1.0;
18 cout << "A mammal is created!" << endl;
19 }
  
```

```

Source.cpp
1 #include <iostream>
2 using namespace std;
3
4 #include "Mammal.h"
5 #include "Dog.h"
6
7 class Cat : public Mammal
8 {
9 public:
10 Cat()
11 {
12 cout << "A cat is born" << endl;
13 }
14 ~Cat()
15 {
  
```

```

Dog.h
1 #include <iostream>
2 using namespace std;
3
4 #include "Mammal.h"
5
6 // This next line says "class Dog inherits from Mammal"
7 class Dog : public Mammal
8 {
9 public:
10 Dog()
11 {
12 cout << "A dog is born" << endl;
13 }
14 ~Dog()
15 {
  
```

```

Mammal.h
1 #include <iostream>
2 using namespace std;
3
4 class Mammal
5 {
6 protected:
7 // protected variables are accessible
8 // but not outside the class
9 int hp;
10 double speed;
11
12 public:
13 // Mammal constructor - runs FIRST before Mammal()
14 Mammal()
15 {
  
```

**Error List**

17 Errors | 0 Warnings | 0 Messages

Description
1 error C2011: 'Mammal' : 'class' type redefinition

```

Source.cpp
1 #include <iostream>
2 using namespace std;
3
4 #include "Mammal.h"
5 #include "Dog.h"
6
7 class Cat : public Mammal
8 {
9 public:
10     Cat()
11     {
12         cout << "A cat is born"
13     }
}

Dog.h
1 #pragma once
2
3 #include <iostream>
4 using namespace std;
5
6 #include "Mammal.h"
7
8 // This next line says
9 class Dog : public Mamm
10 {
11 public:
12     Dog()
13     {
}

Mammal.h
1 #pragma once
2
3 #include <iostream>
4 using namespace std;
5
6 class Mammal
7 {
8 protected:
9     // protected variab
10    // but not outside
11    int hp;
12    double speed;
13 }

```

```

Source.cpp
1 #include <iostream>
2 using namespace std;
3
4 #include "Mammal.h"
5 #include "Dog.h"
6 #include "Cat.h"
7 #include "Human.h"
8
9 int main()
10 {
11     Human human;
12     human.breathe();
}

Human.h
1 #pragma once
2
3 #include <iostream>
4 using namespace std;
5
6 #include "Mammal.h"
7
8 class Human
9 {
10 // Data memb
11 bool civ
12 public:
}

Cat.h
1 #include <iostream>
2 using namespace std;
3
4 #include "Mammal.h"
5
6 class Cat :
7 {
8 public:
9     Cat()
10 {
11     cout
12 }

Dog.h
1 #pragma once
2
3 #include <iostream>
4 using namespace std;
5
6 #include "Mammal.h"
7
8 // This nex
9 class Dog :
10 {
11 public:
12     Dog()
13 }

Mammal.h
1 #pragma once
2
3 #include <iostream>
4 using namespace std;
5
6 class Mammal
7 {
8 protected:
9     // prot
10    // but
11    int hp;
12    double
}

```


## Chapter 7. Dynamic Memory Allocation

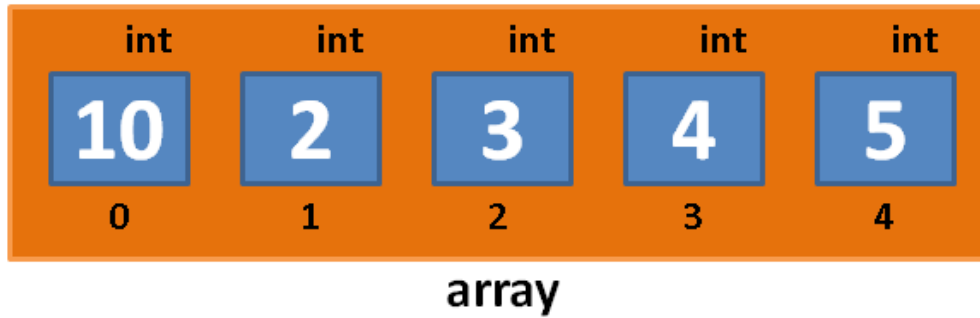
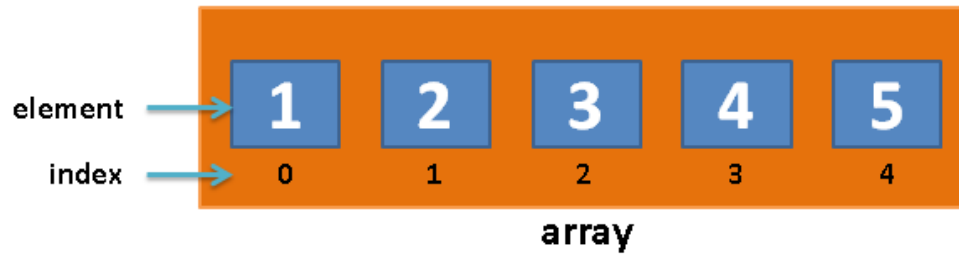
```

int main()
{
    // -----> begin main() block
    int x; // -----> x's scope is from here to the end of main()

    if( some_condition )
    {
        // -----> begin if block
        int y; // -----> y's scope is from here to the end of the if
    } // -----> end if block [y destroyed]
} // -----> end main() block, [x destroyed]

```

Name	Status	CPU	Memory
 dynmem.exe (32 bit)		26.3%	1,961.9 MB



## Chapter 8. Actors and Pawns

willis  
bill.sherif@gmail.com

Engines + Add Engine

4.4.3 Launch

4.5.1 Launch

Launch Unreal Engine 4.4.3

News  
Learn  
Marketplace  
Library

My Projects ! Search Projects

BasicCode Open

BlankProject Open

FirstPerson Open

Flying Open

Puzzle Open

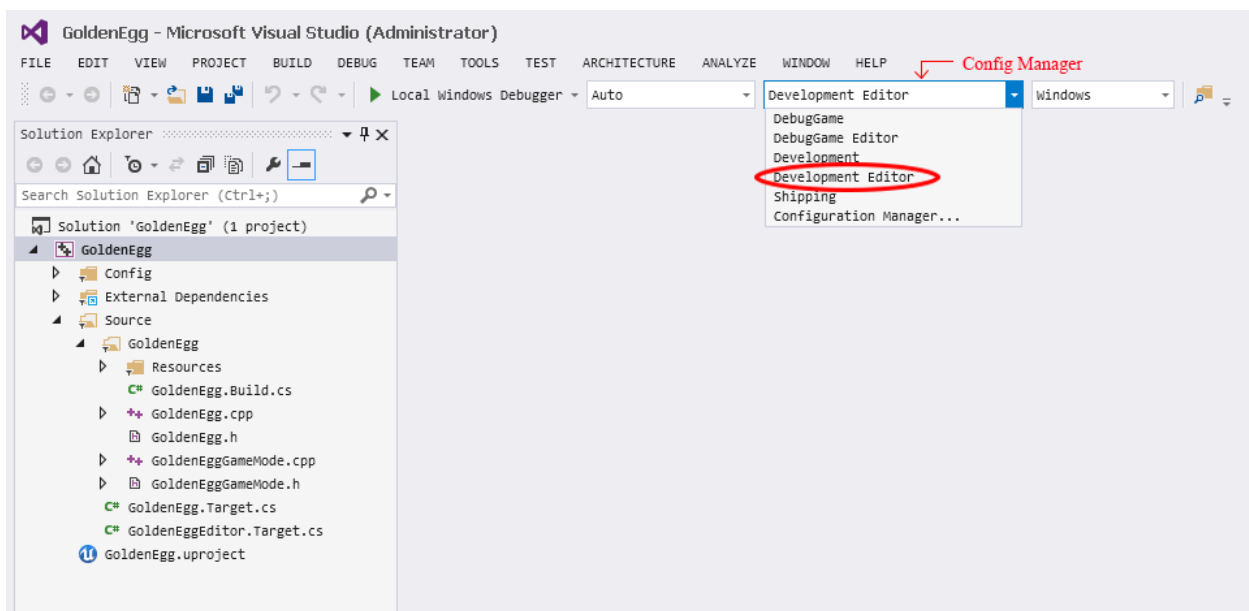
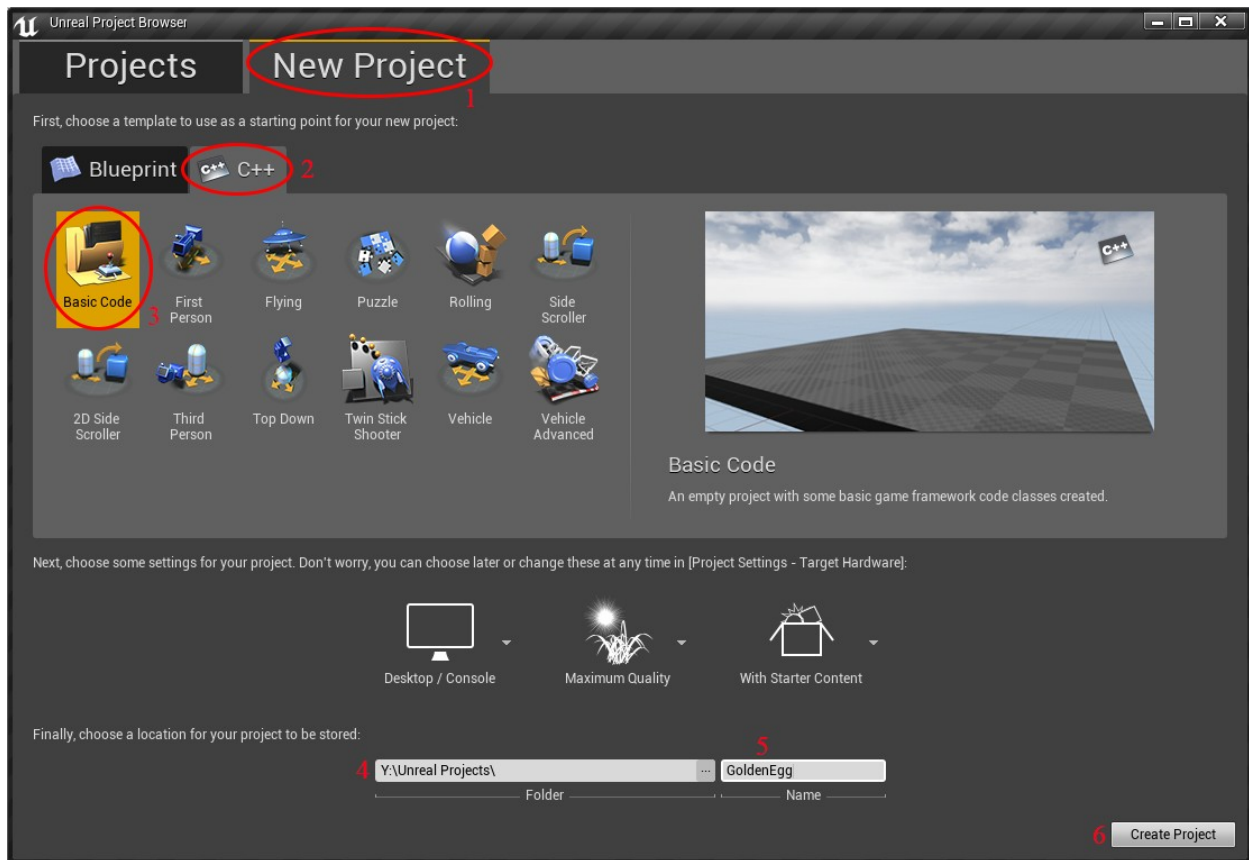
SideScroller Open

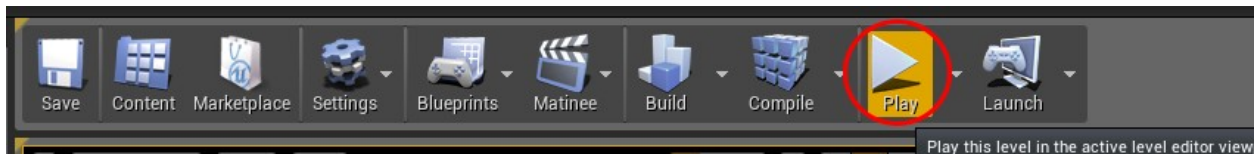
TopDown Open

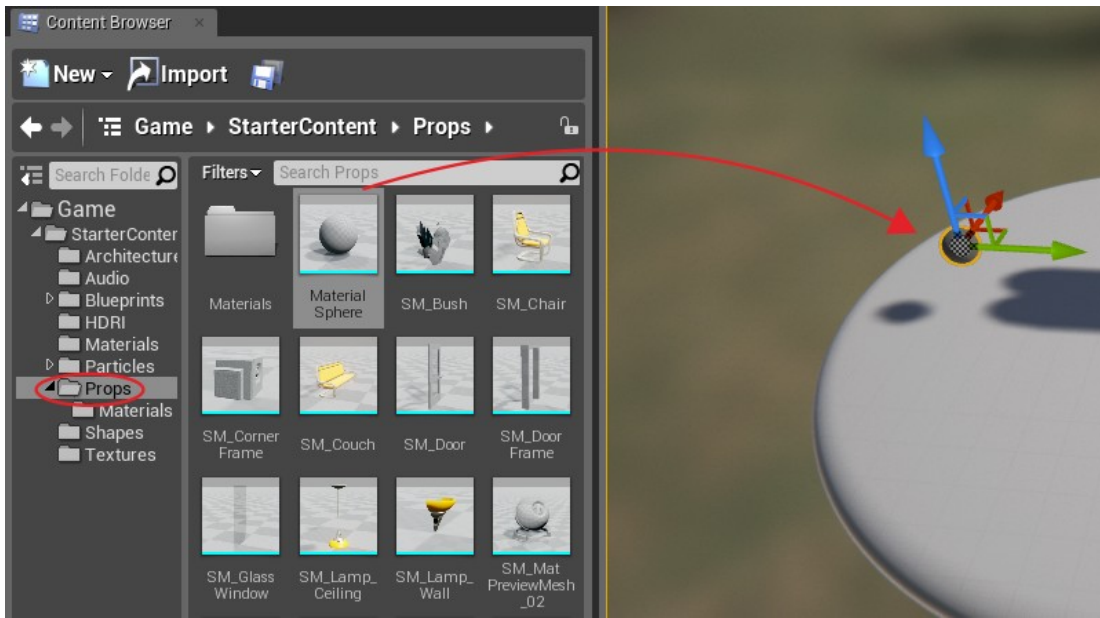
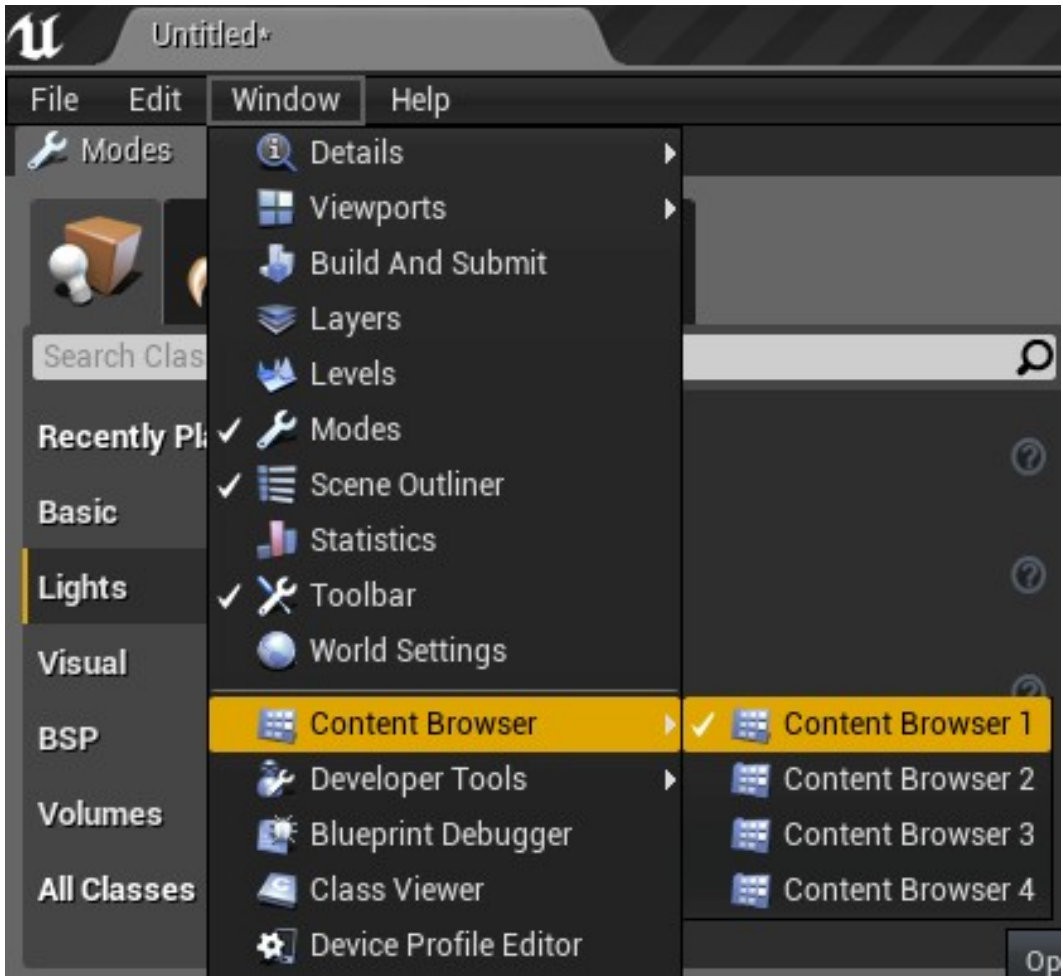
Vault ! Search Vault

UE4 Links  
AnswerHub  
Forums  
Roadmap  
Twitch Stream  
account support>

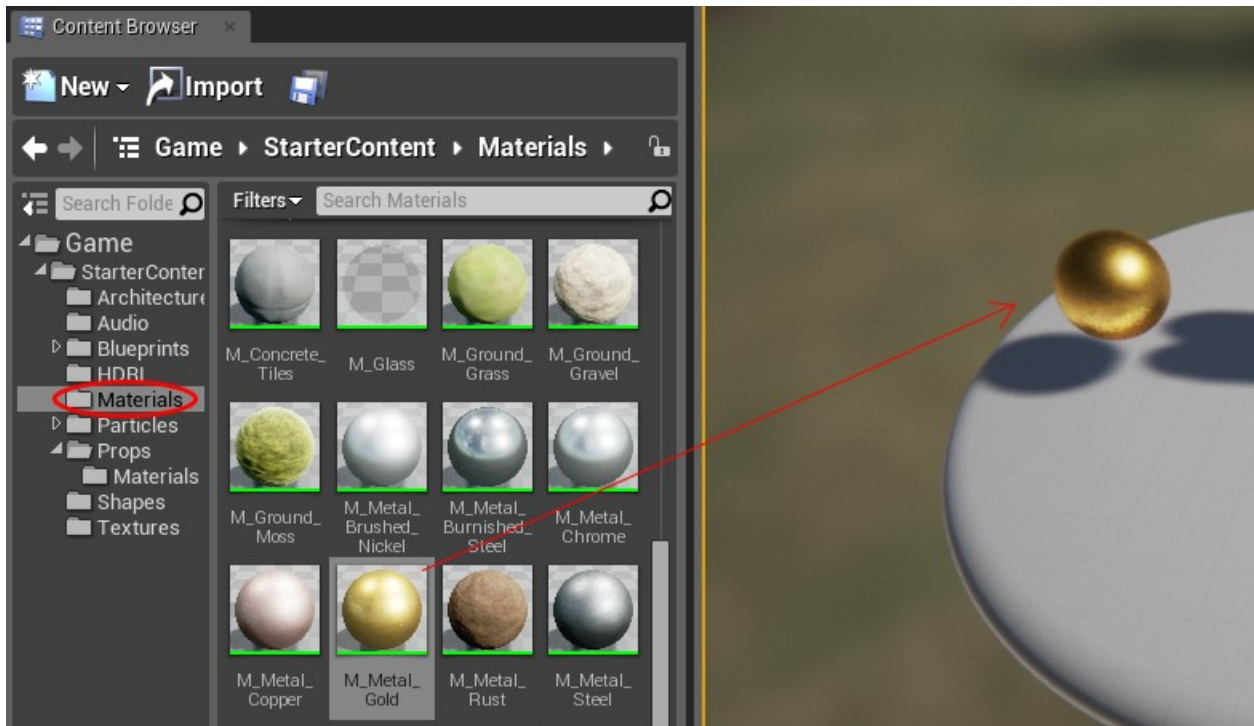
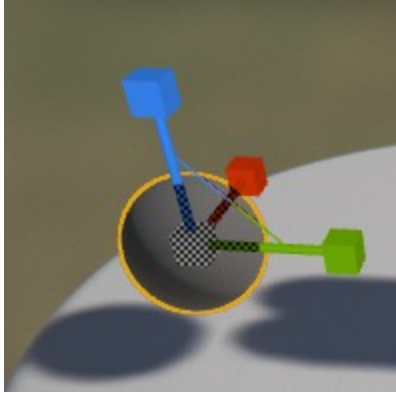
1.9.1-2352264+++depot+UE4-LauncherLive



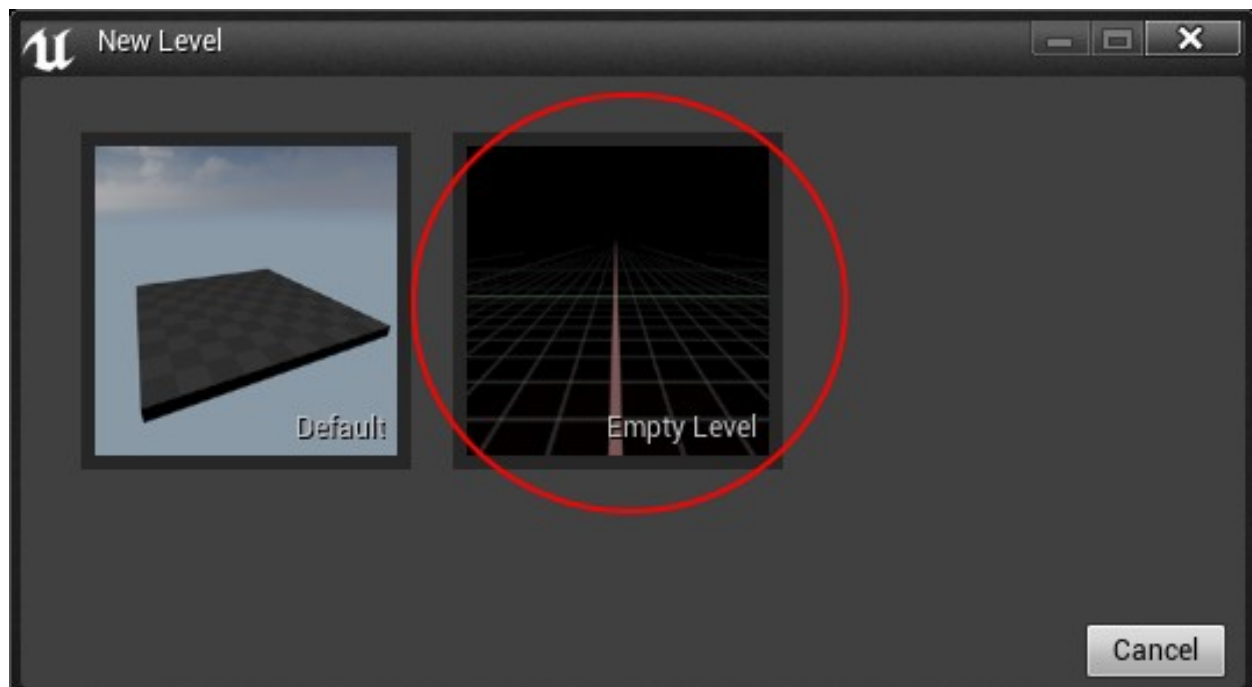
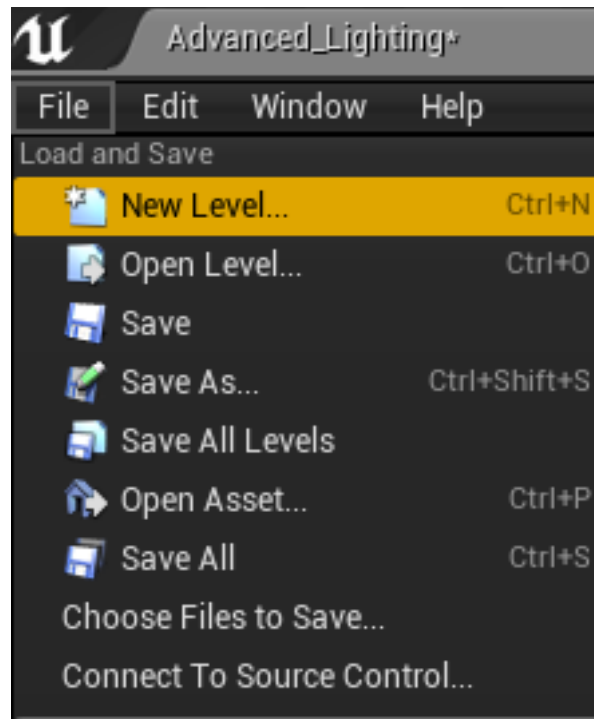


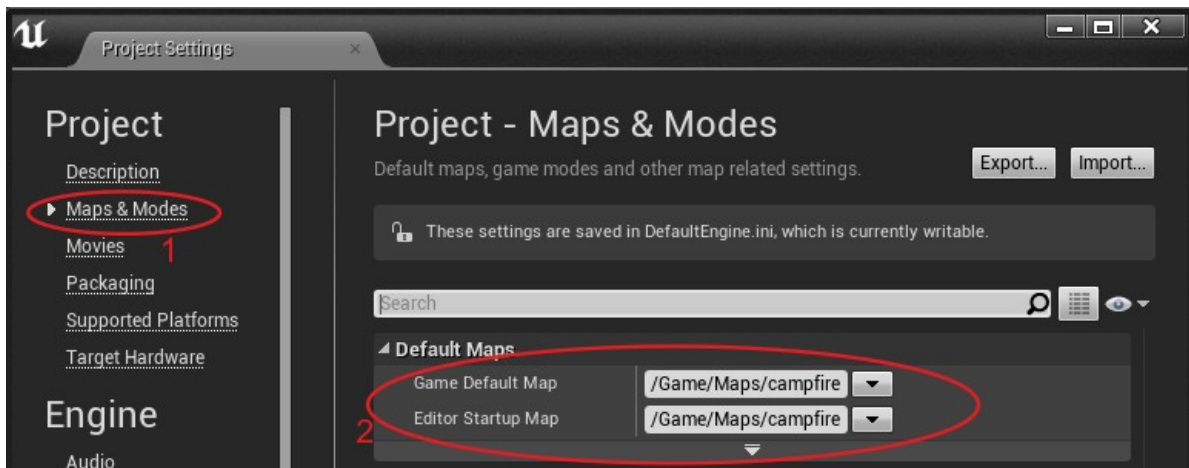


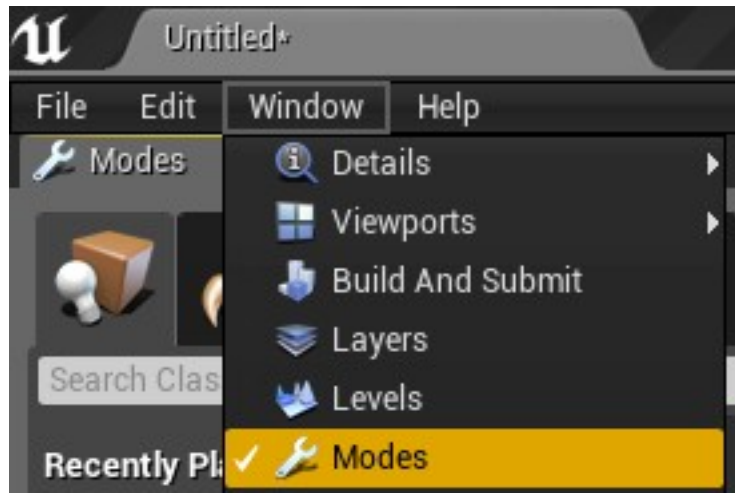


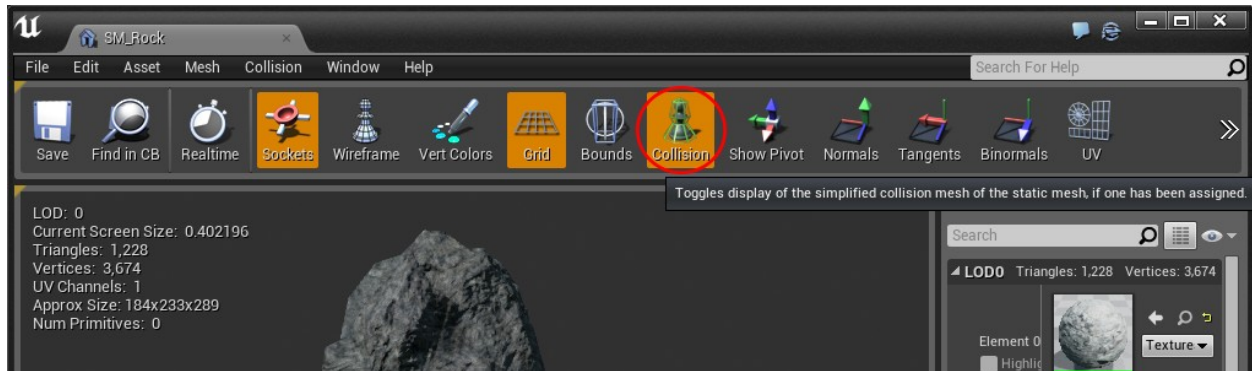
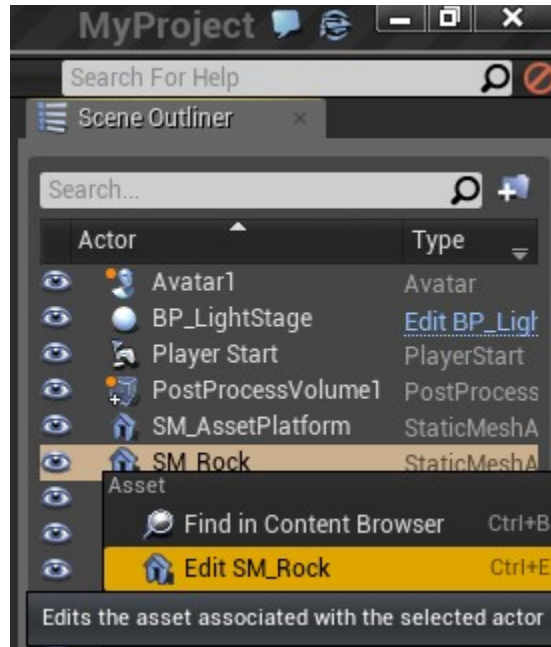


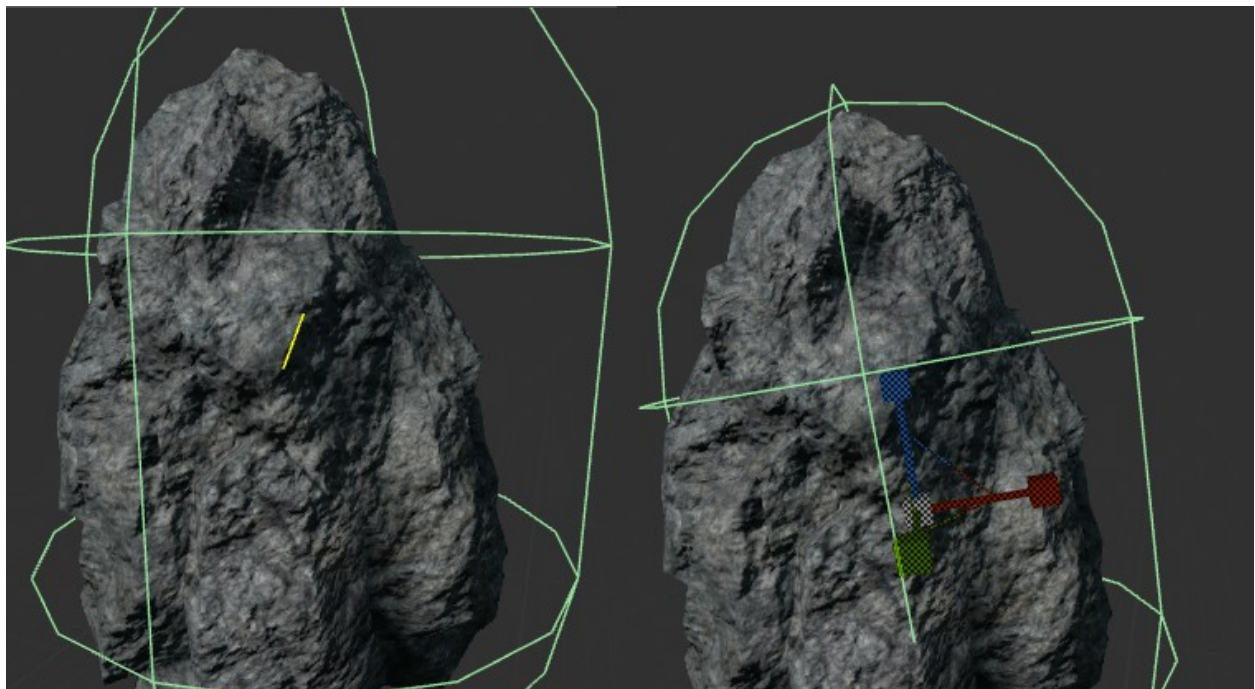
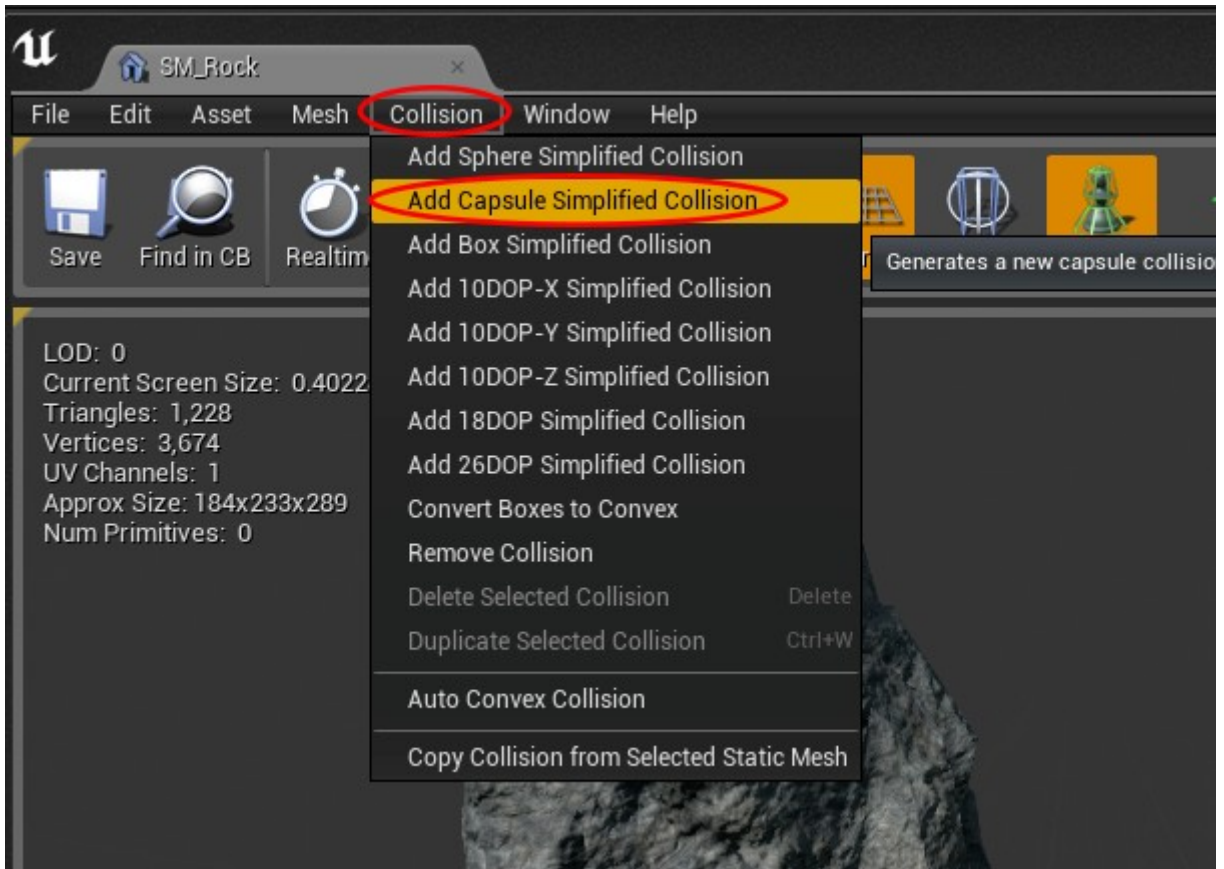




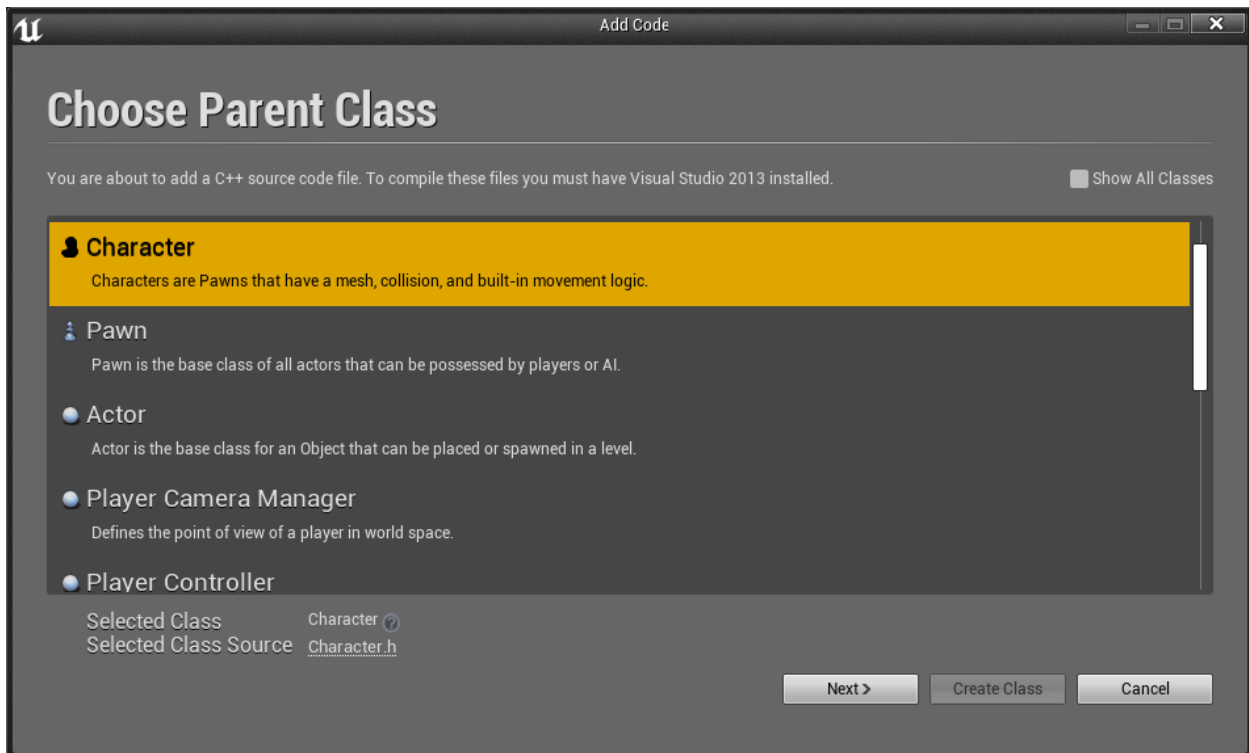
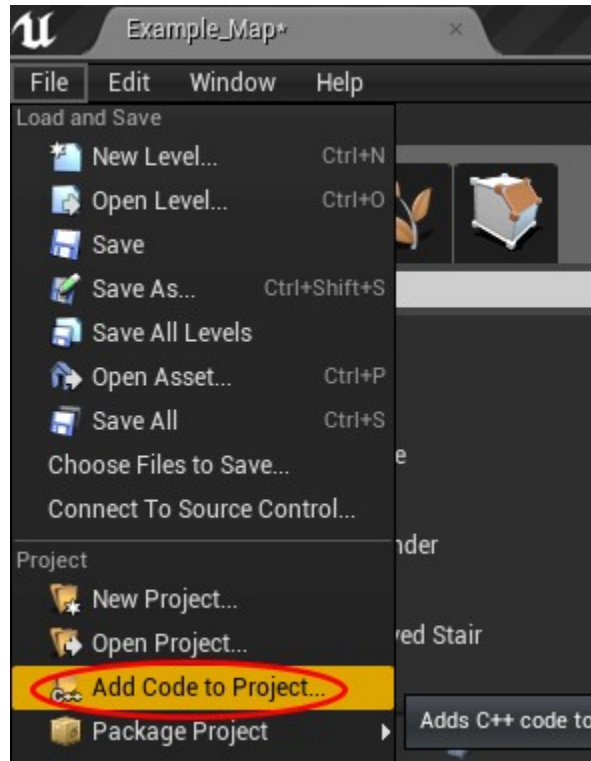












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# Name Your New Character

Enter a name for your new class. Class names may only contain alphanumeric characters, and may not contain a space.  
When you click the "Create" button below, a header (.h) file and a source (.cpp) file will be made using this name.

Name	<input type="text" value="Avatar1"/>	MyProject (Runtime) ▾	Public Private
Path	<input type="text" value="C:/Users/user/Documents/Unreal Projects/MyProject/Source/MyProject/"/>		Choose Folder
Header File	C:/Users/user/Documents/Unreal Projects/MyProject/Source/MyProject/Avatar.h		
Source File	C:/Users/user/Documents/Unreal Projects/MyProject/Source/MyProject/Avatar.cpp		

willis  
bill.sherif@gmail.com

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
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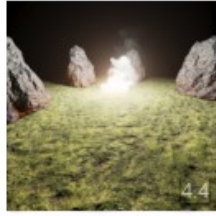
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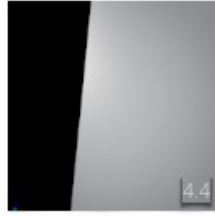


# Select Project(s) to Add the Asset to

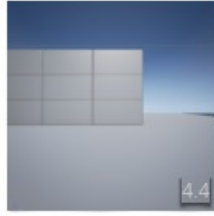
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BasicCode



FirstPerson



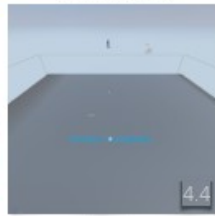
Flying



fps



GoldenEgg



Puzzle

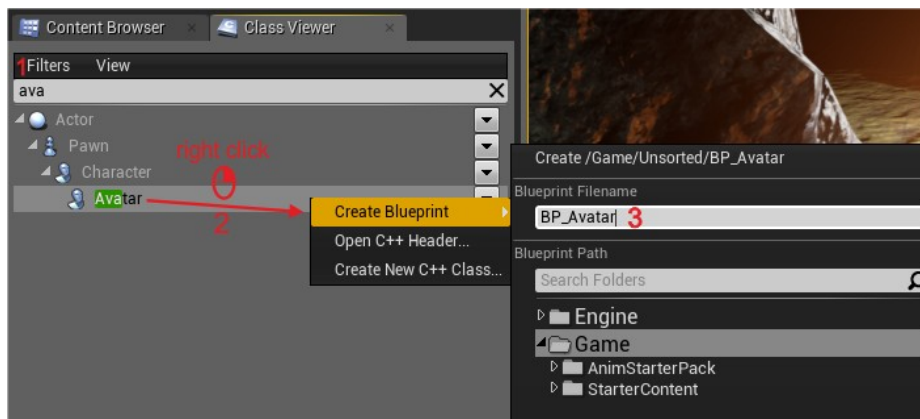
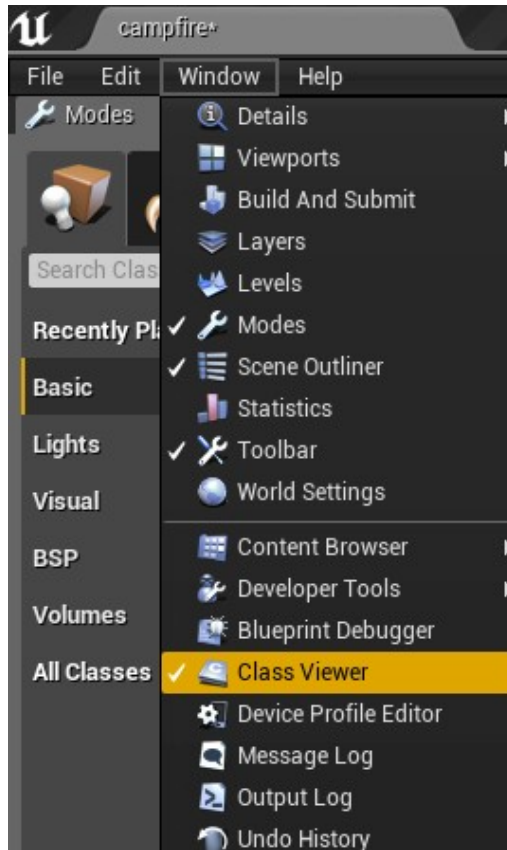


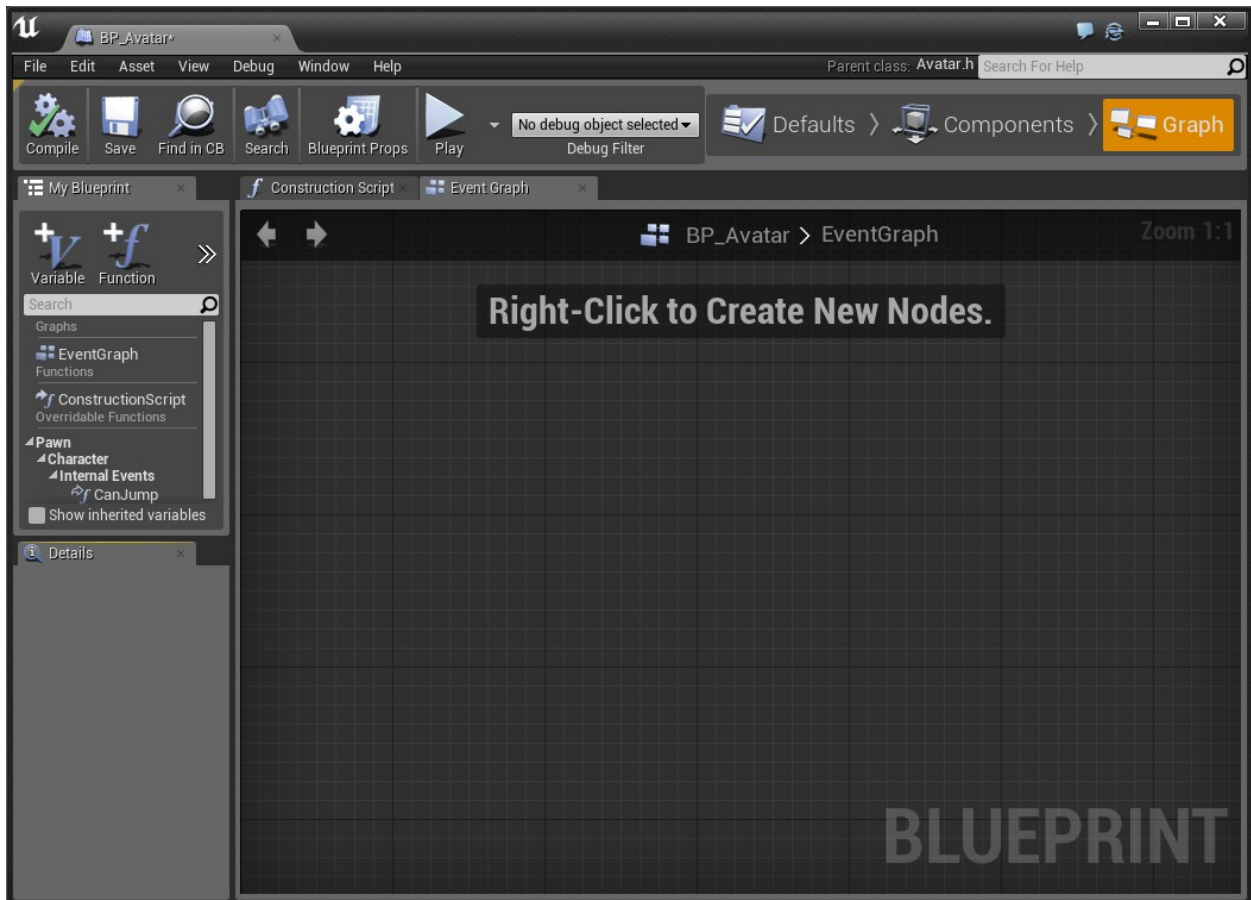
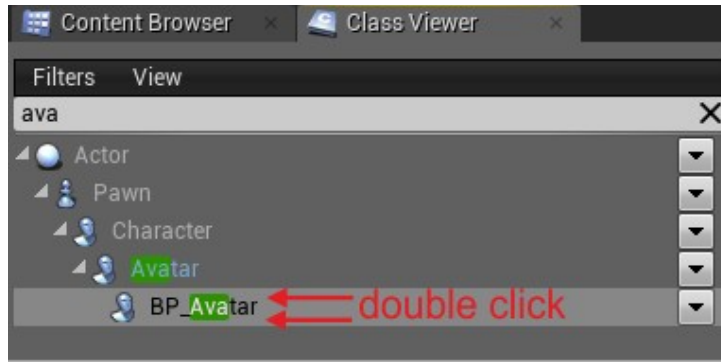
TopDown

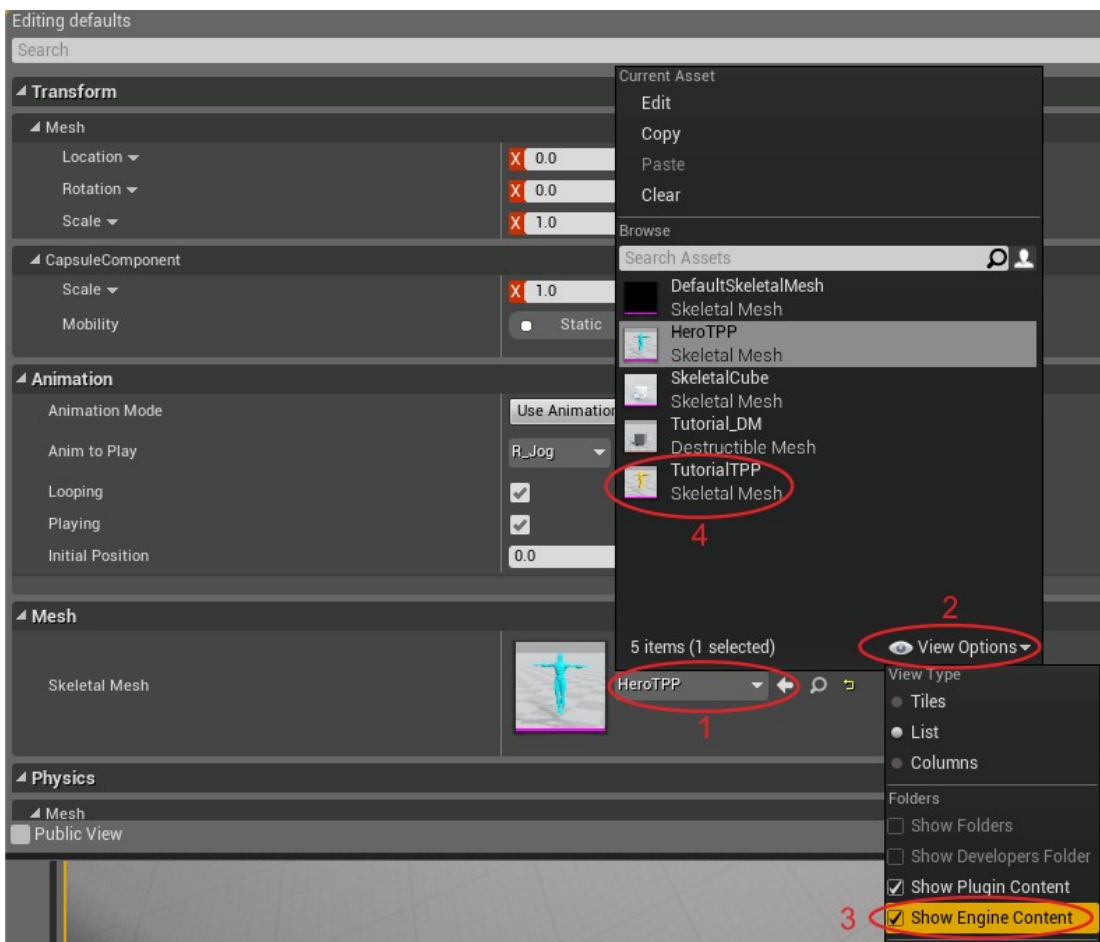
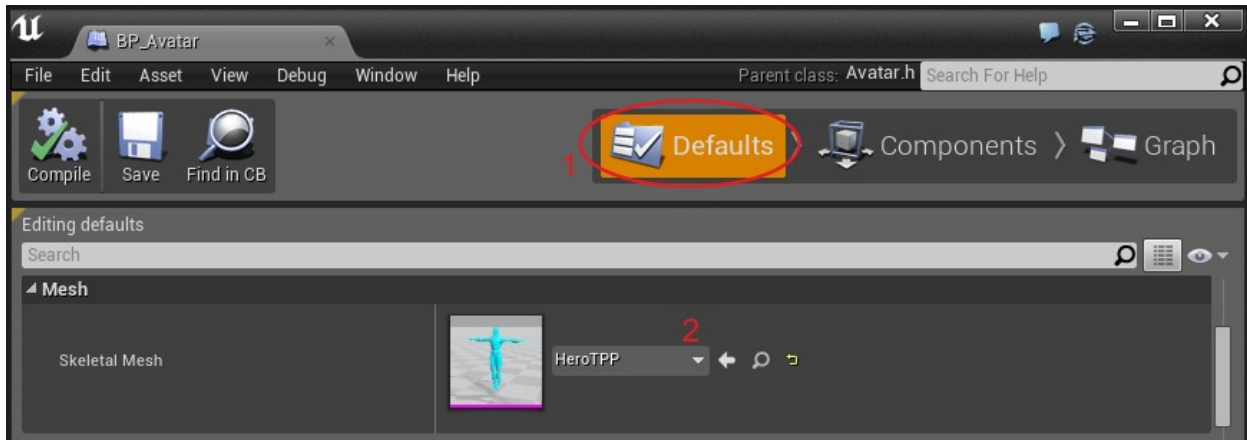


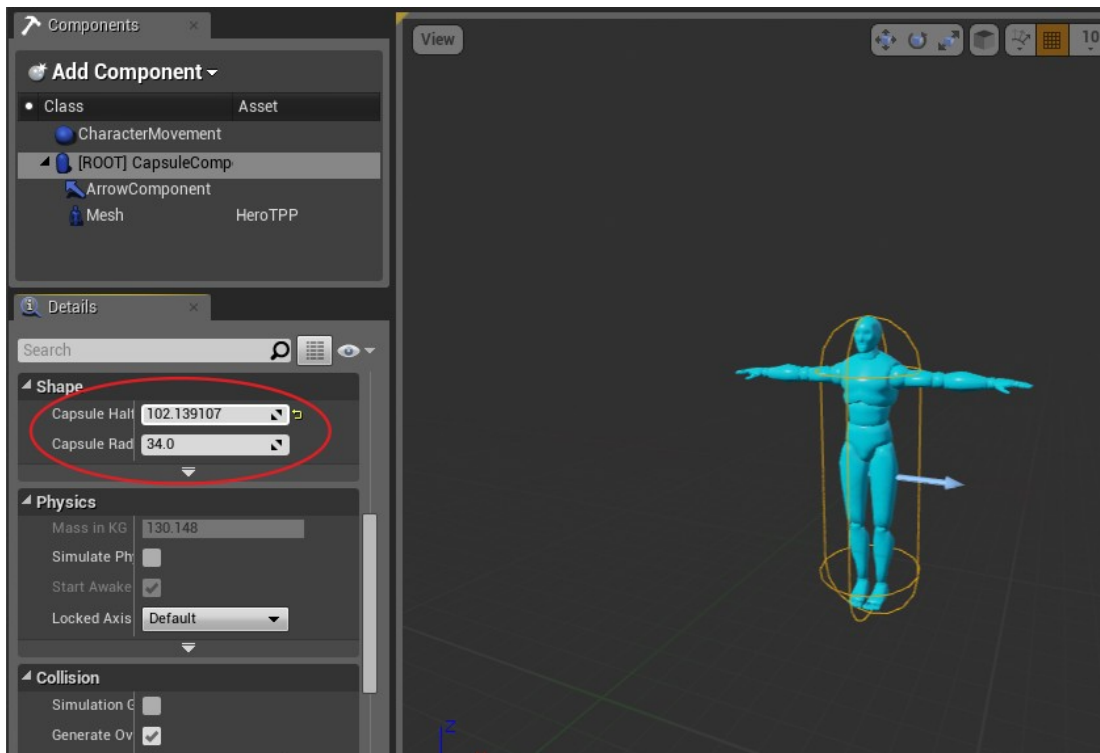
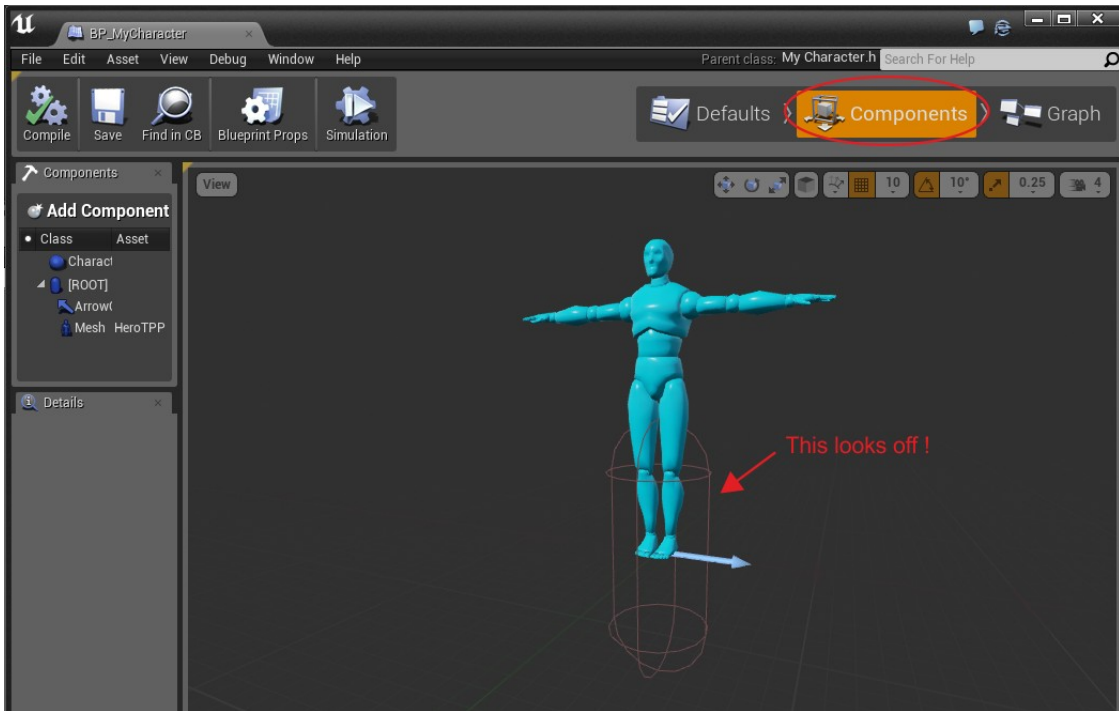
Add to Project

Don't Add











**Animation**

Animation Mode

Anim Blueprint Generated Class

Use Animation Blueprint ▾

ASP\_HeroTF ▾ 🔍 ←

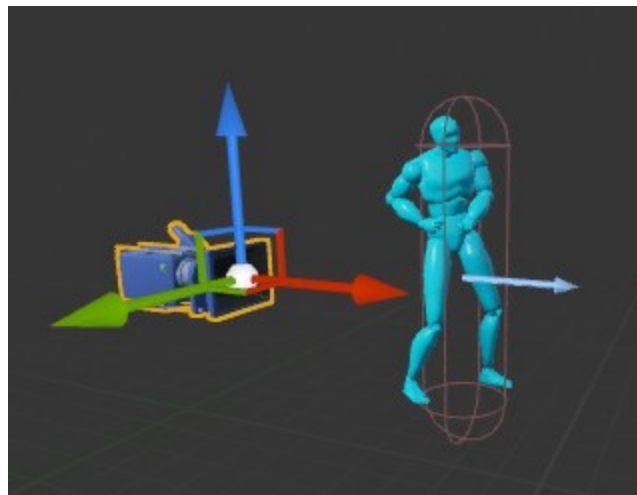
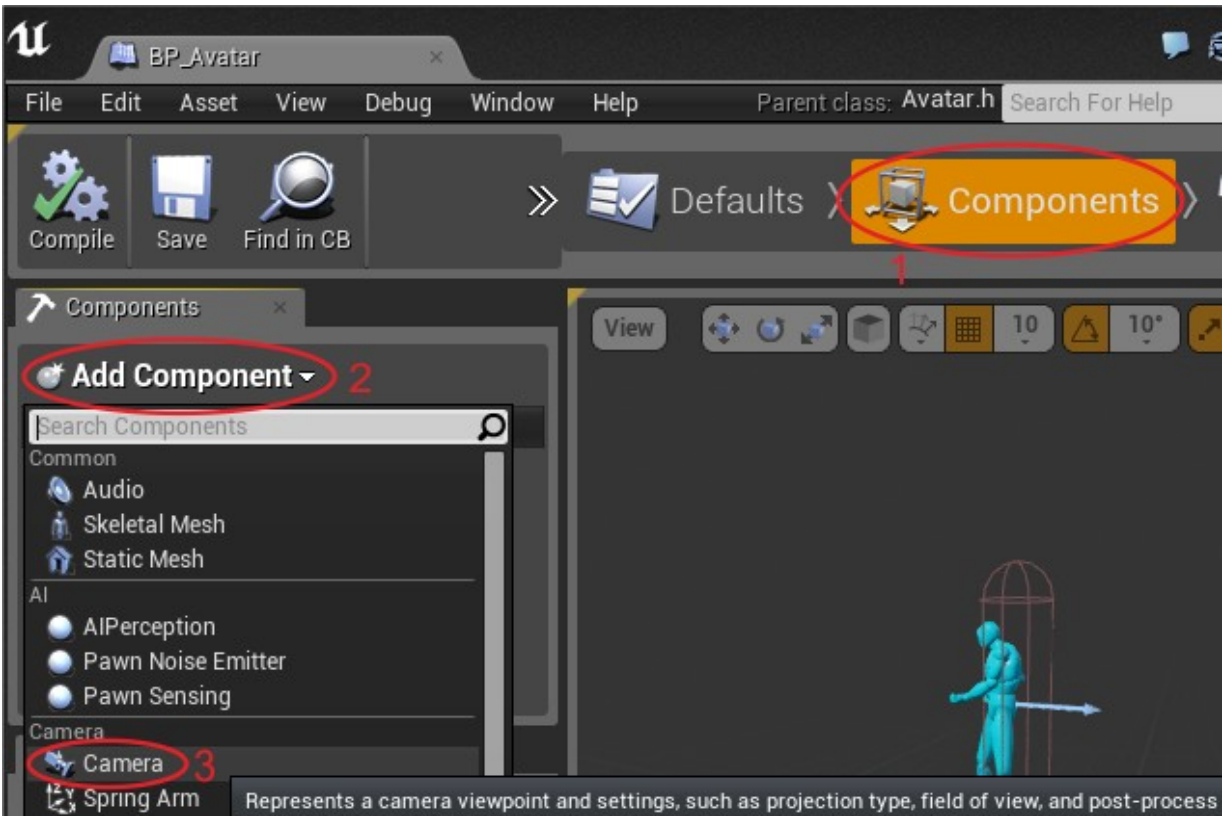
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- None
- AnimInstance
- AnimPreviewInstance
- AnimSingleNodeInstance
- ASP\_HeroTPP\_AnimBlueprint

**Mesh**

Skeletal Mesh





## Choose Parent Class

You are about to add a C++ source code file. To compile these files you must have Visual Studio 2013 installed.

### Player Controller

PlayerControllers are used by human players to control Pawns.

### Game Mode

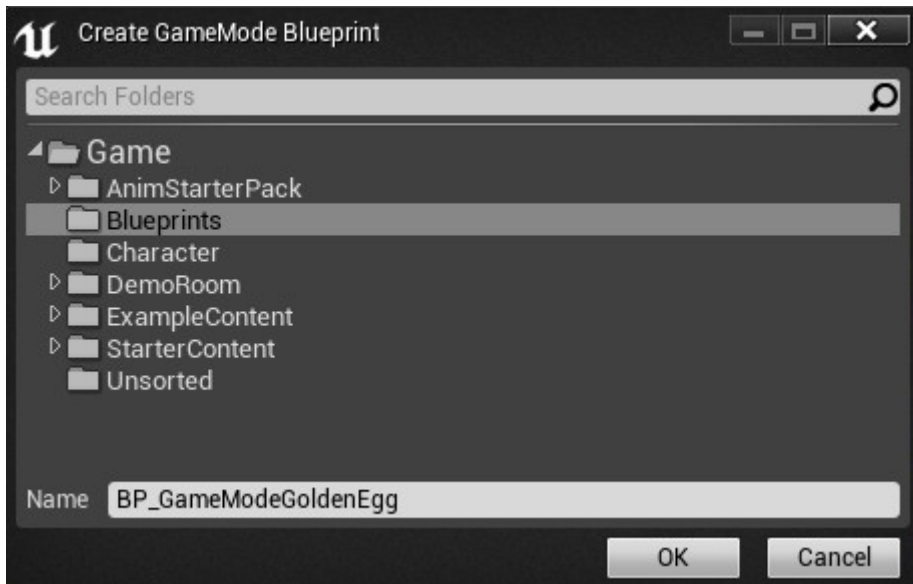
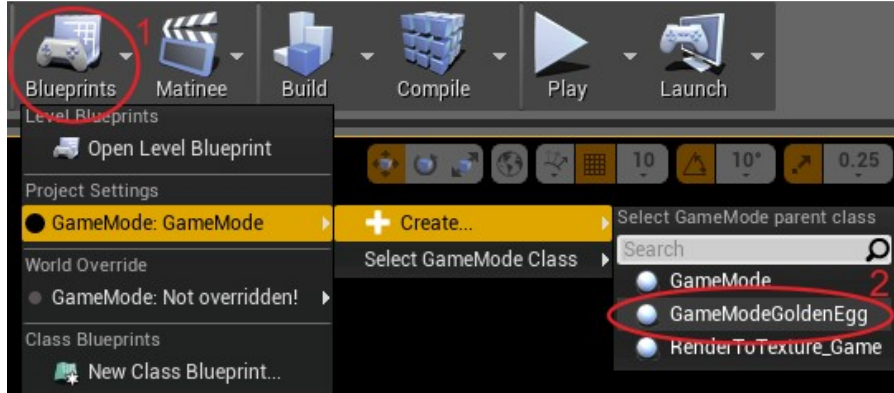
The GameMode defines the game being played.

## Name Your New Game Mode

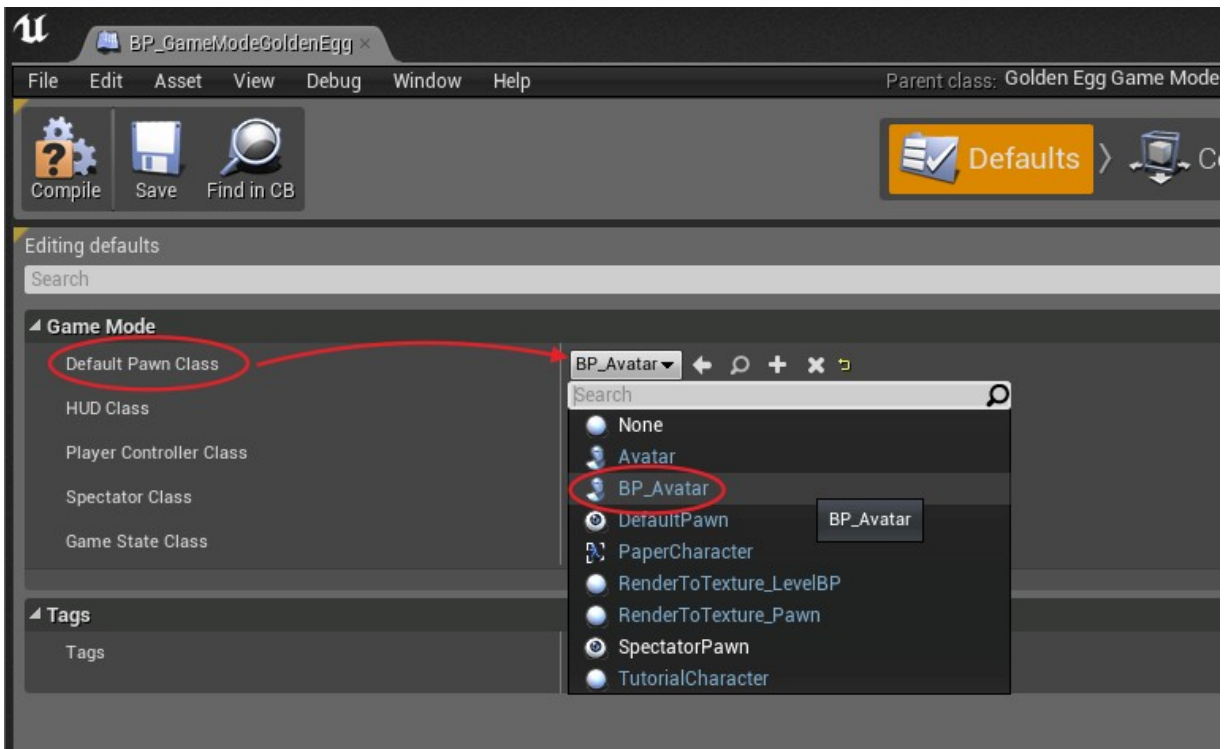
Enter a name for your new class. Class names may only contain alphanumeric. When you click the "Create" button below, a header (.h) file and a source (.cpp)

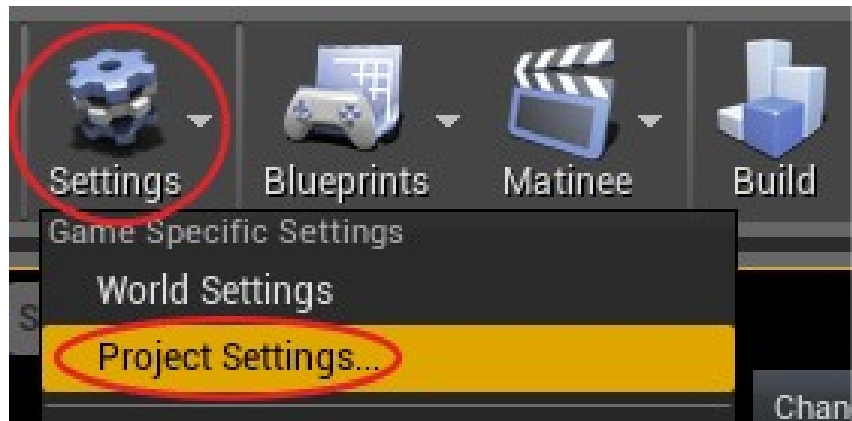
Name

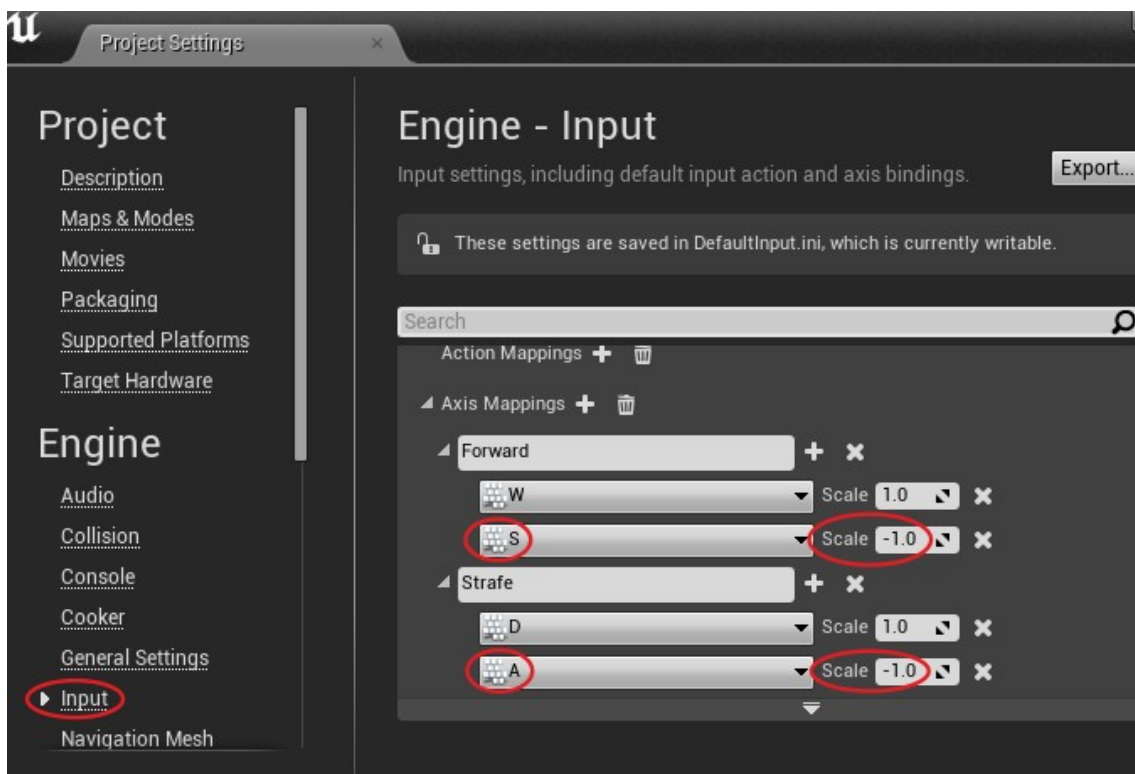
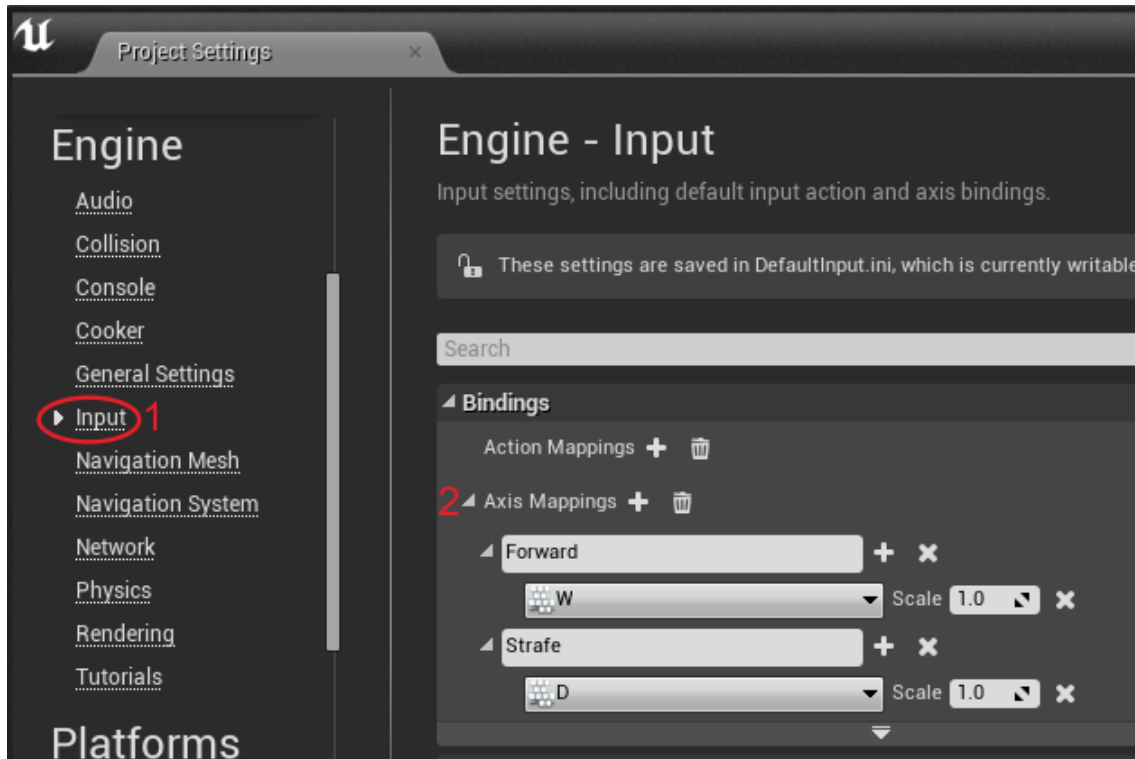
Path

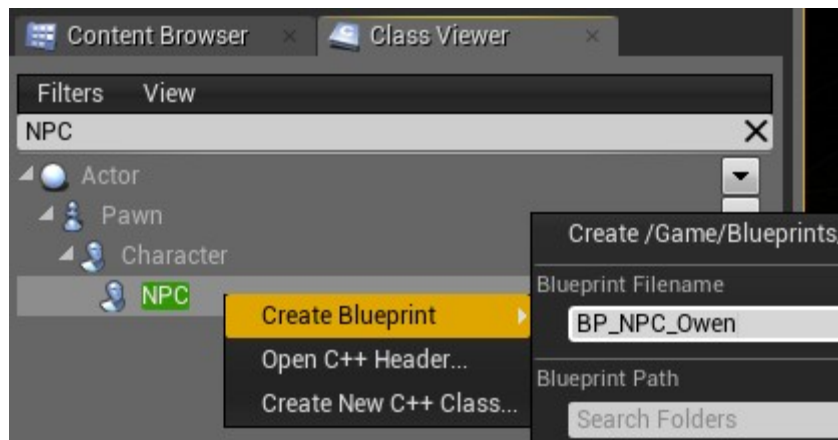
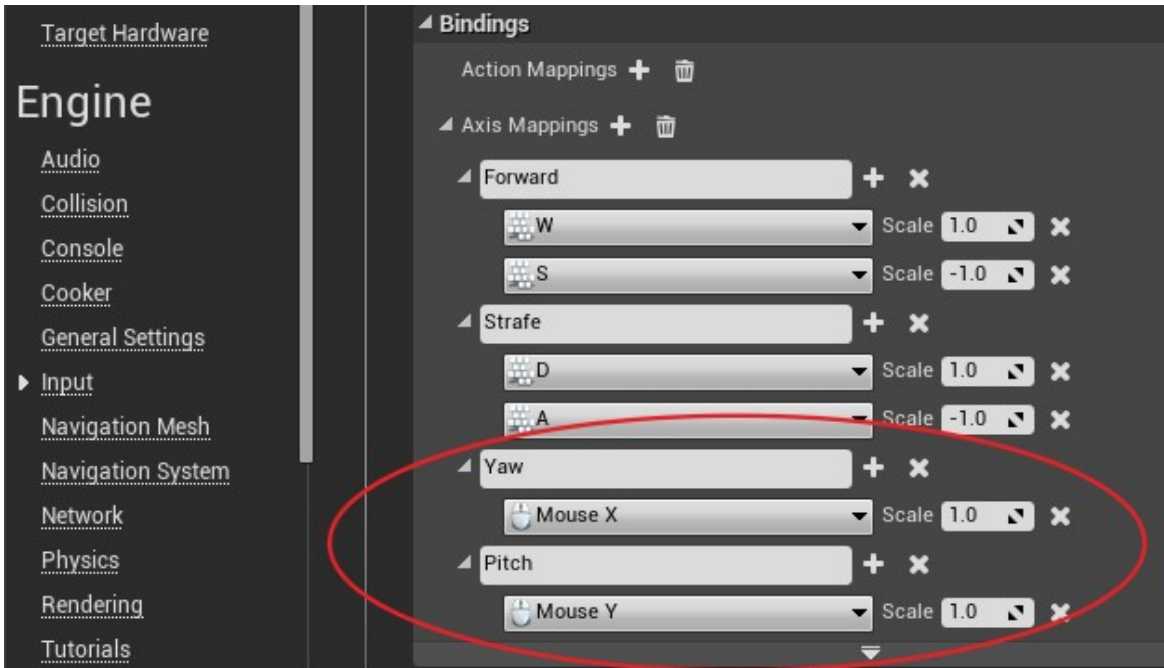


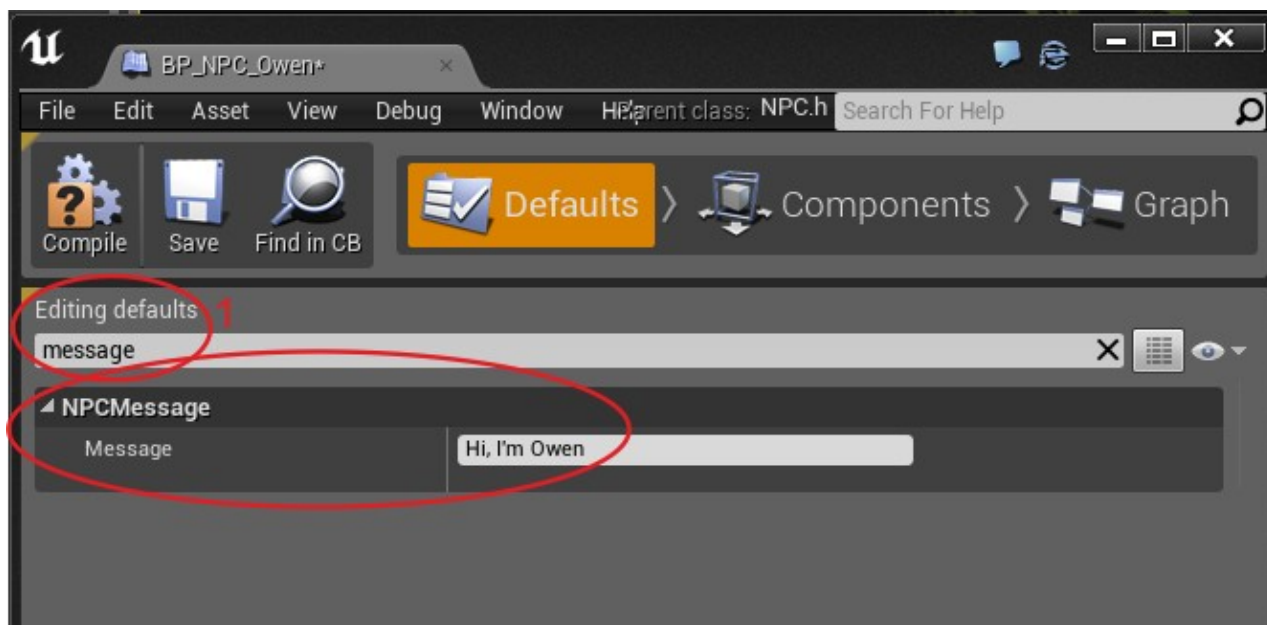
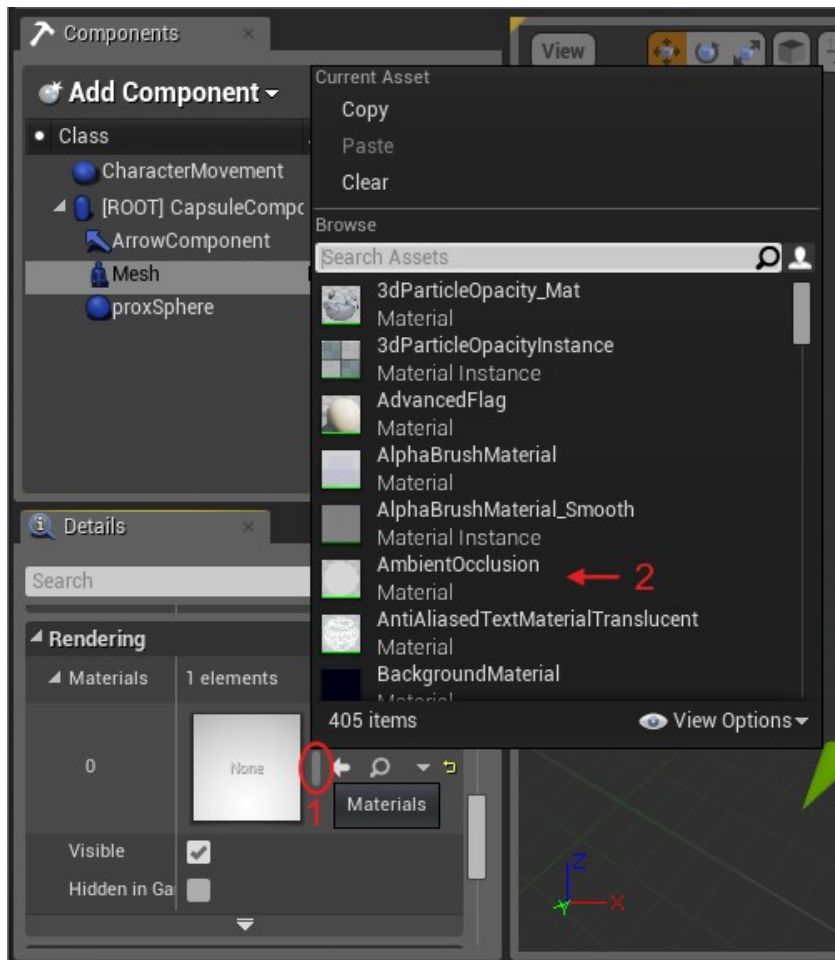


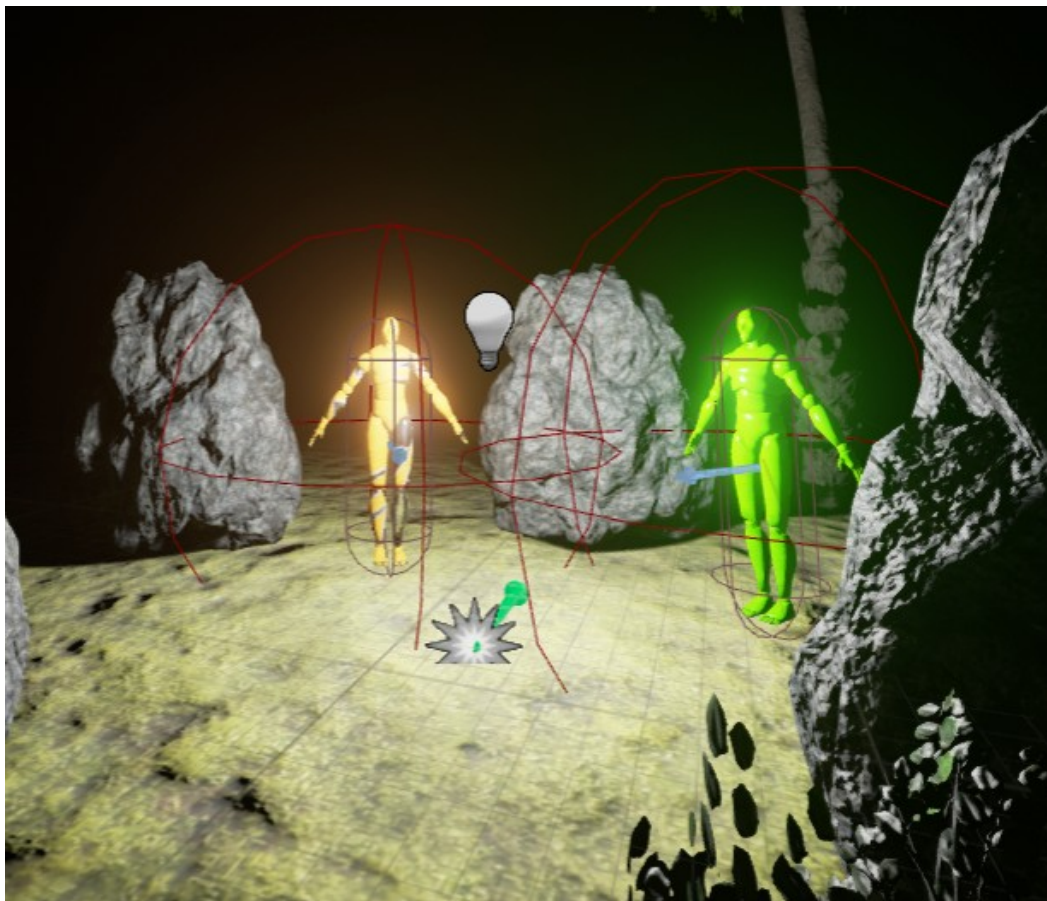
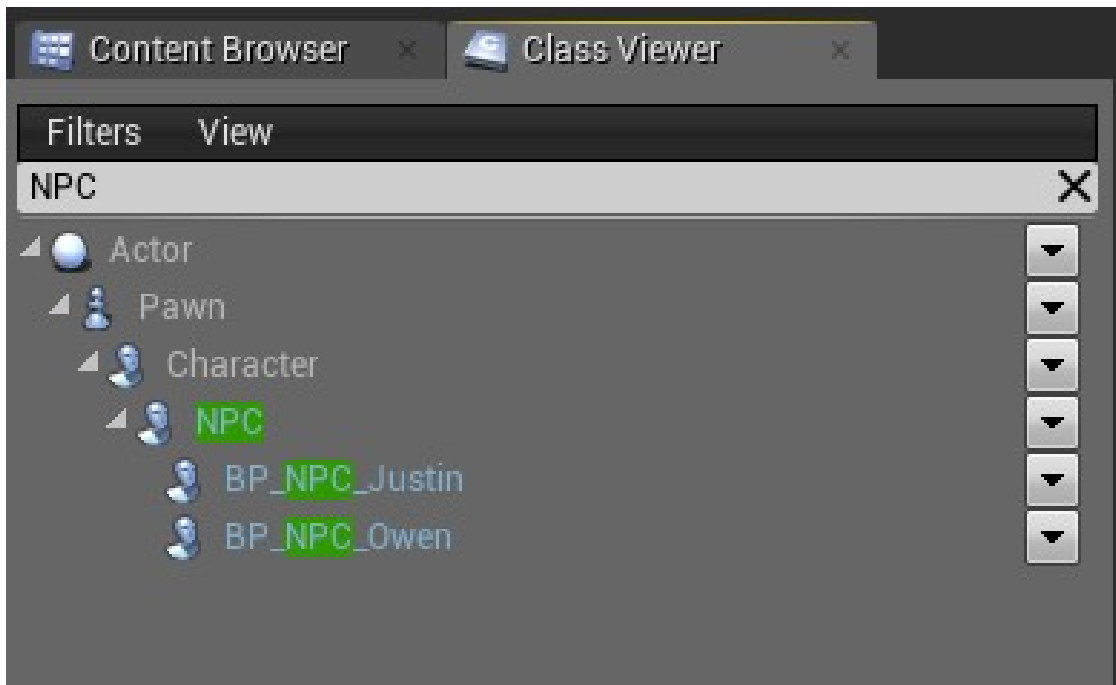




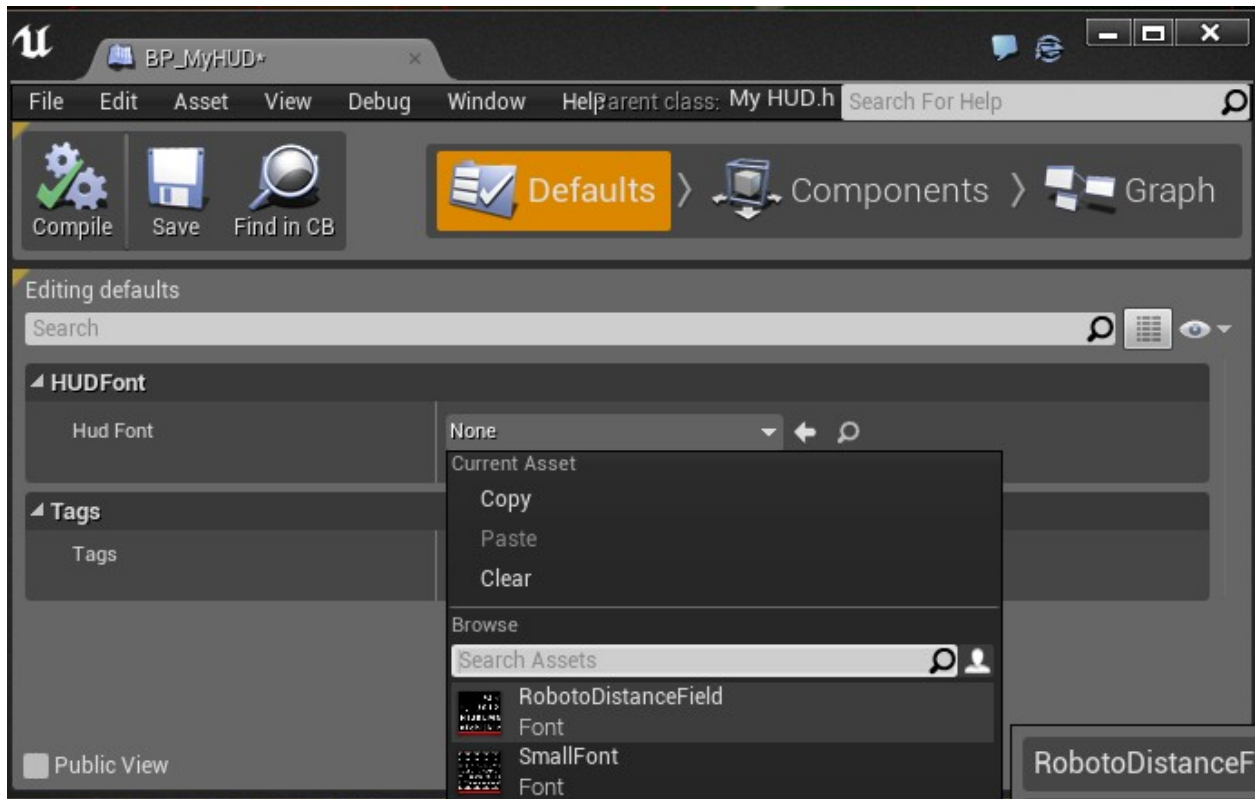
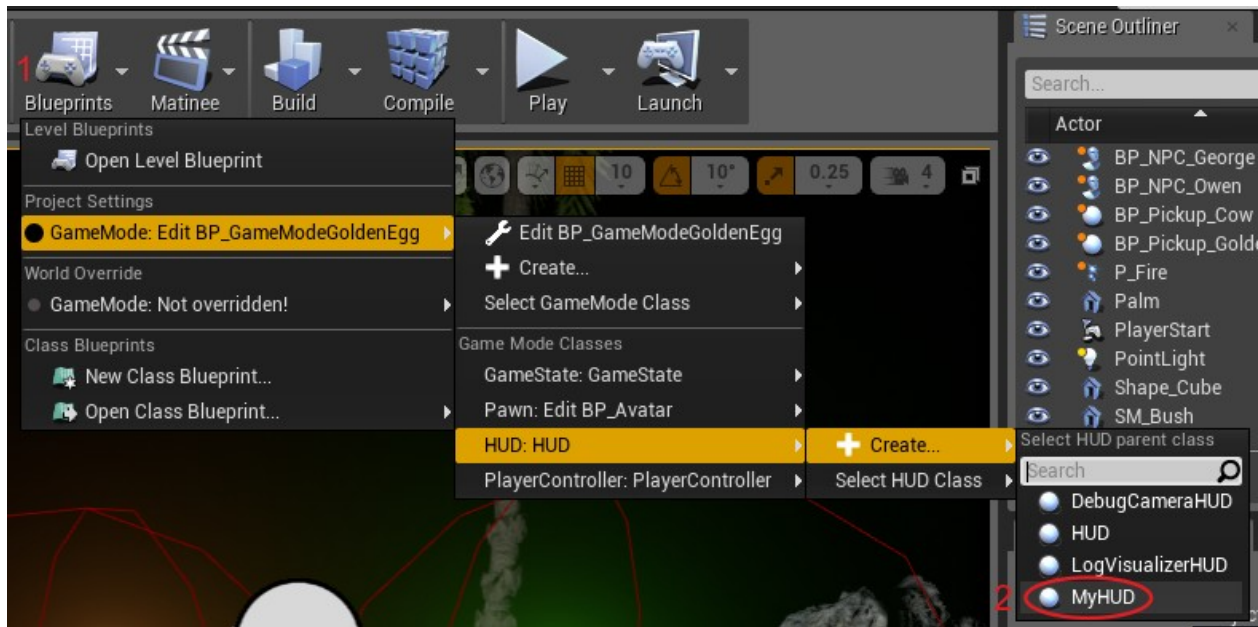


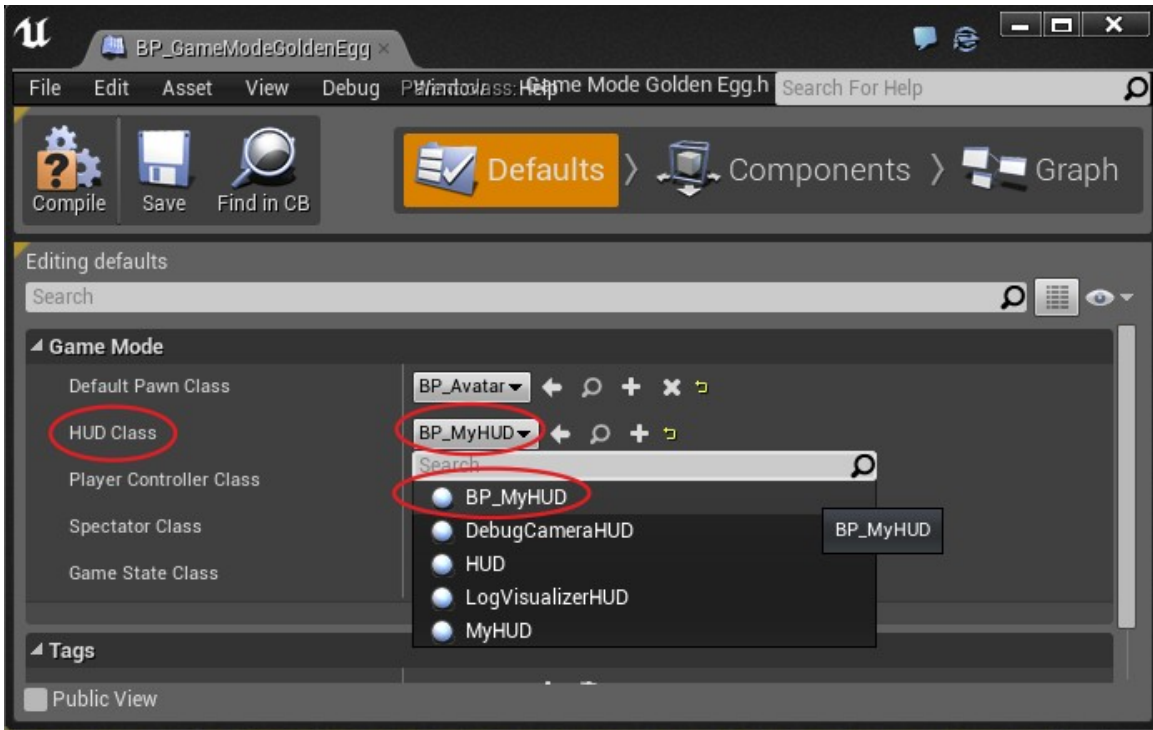




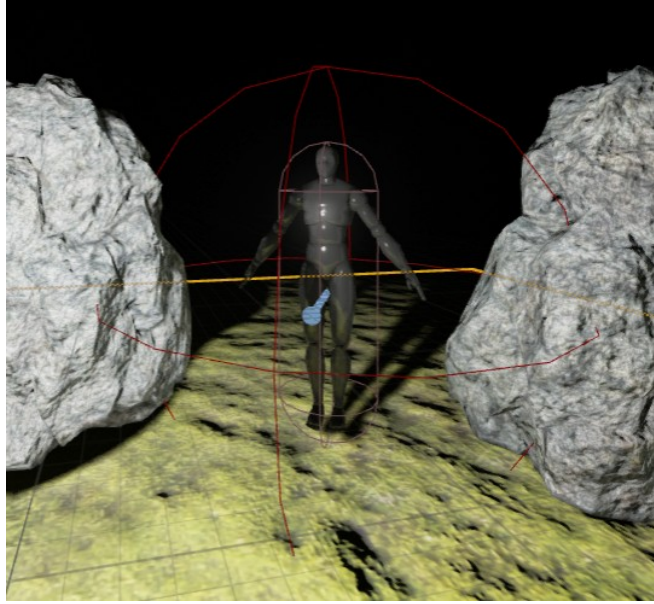




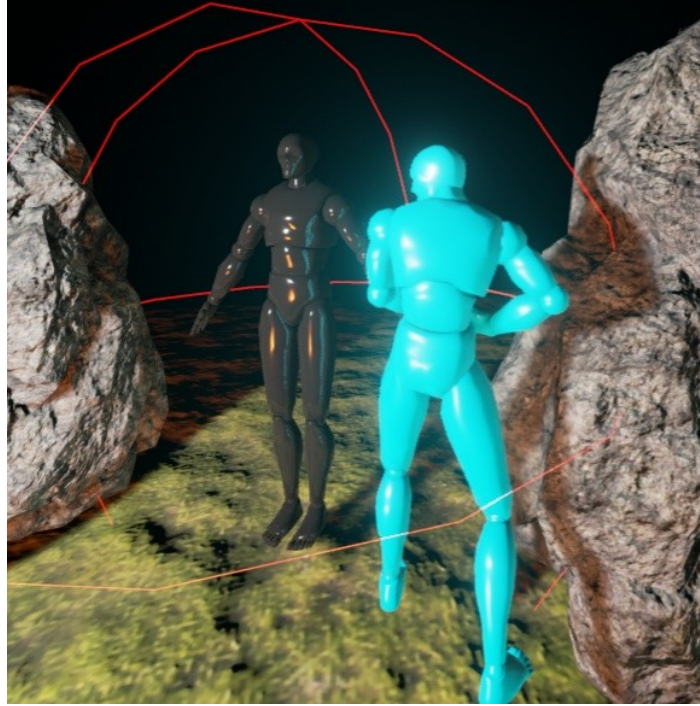








Hi, I'm Owen



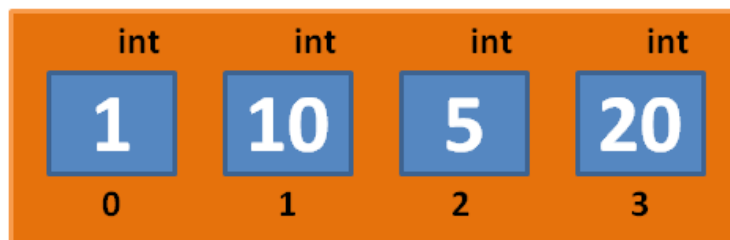
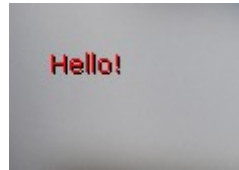


Andrew: Ah, how're you doing

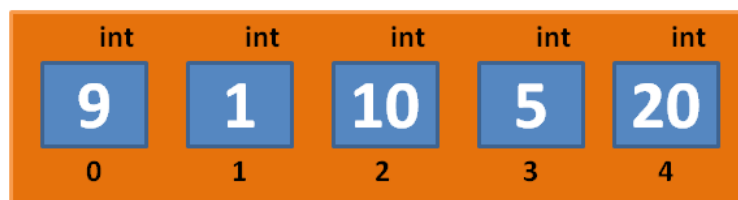
Owen: Hi, I'm Owen



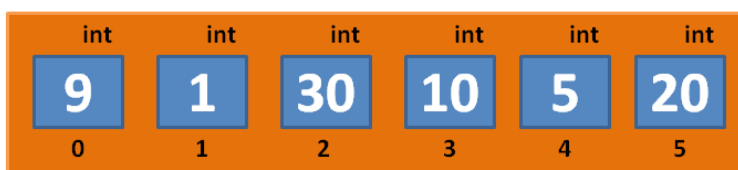
## Chapter 9. Templates and Commonly Used Containers



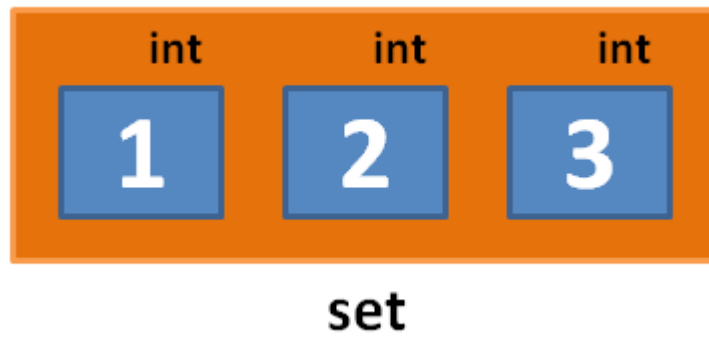
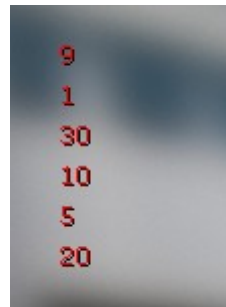
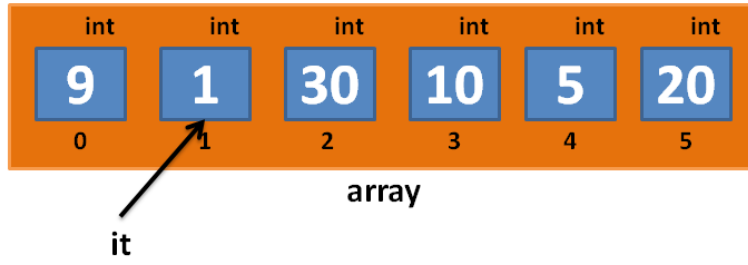
array

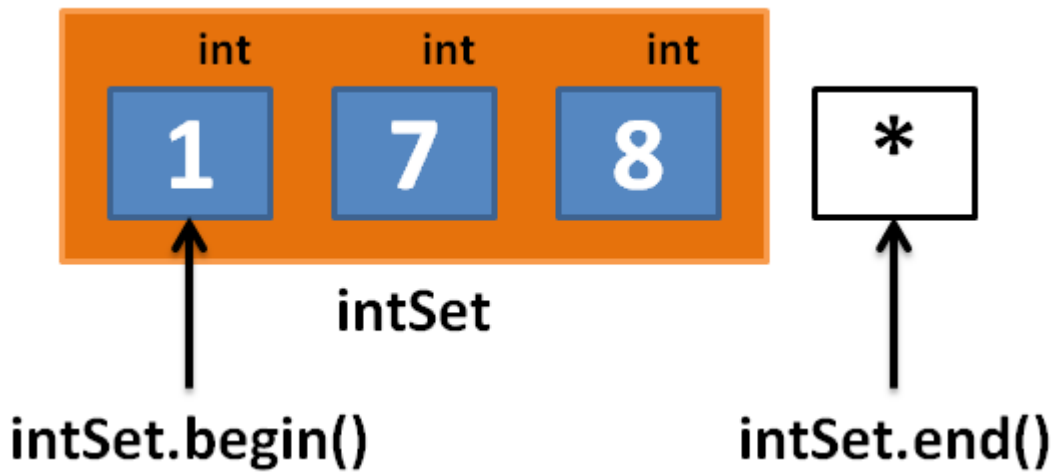
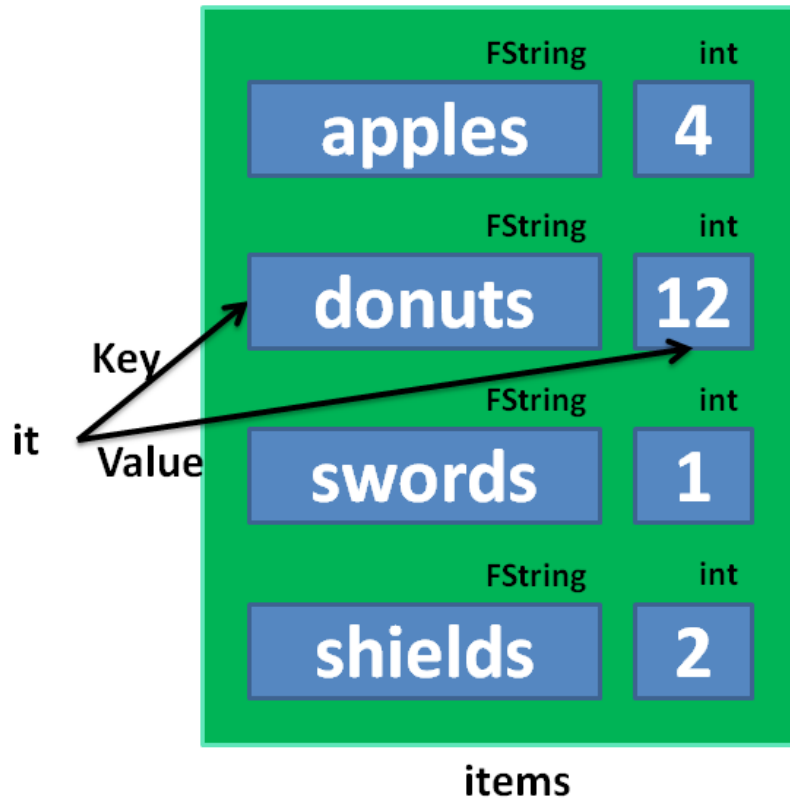


array

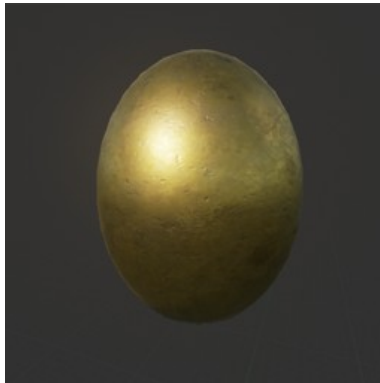


array



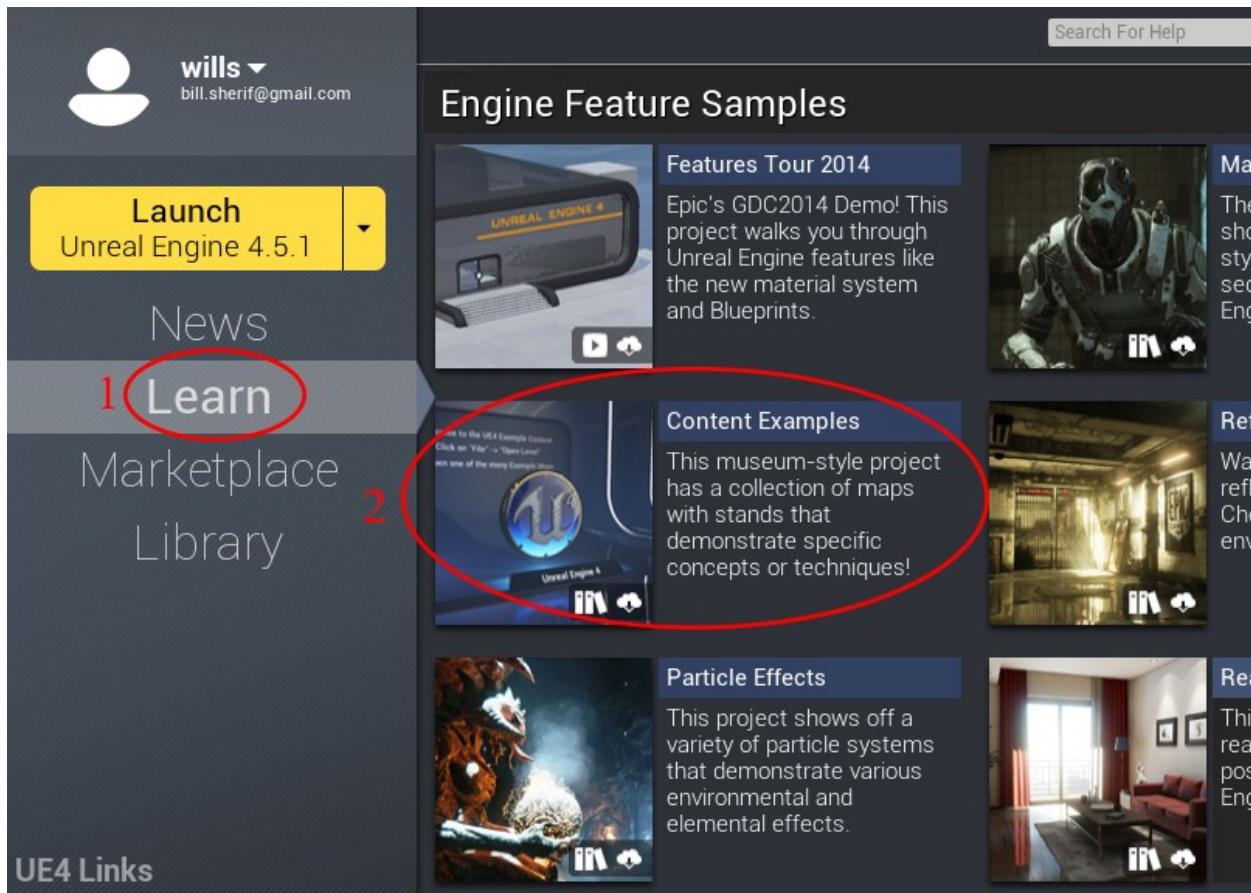


## **Chapter 10. Inventory System and Pickup Items**









## Choose Project Name and Location

Name:

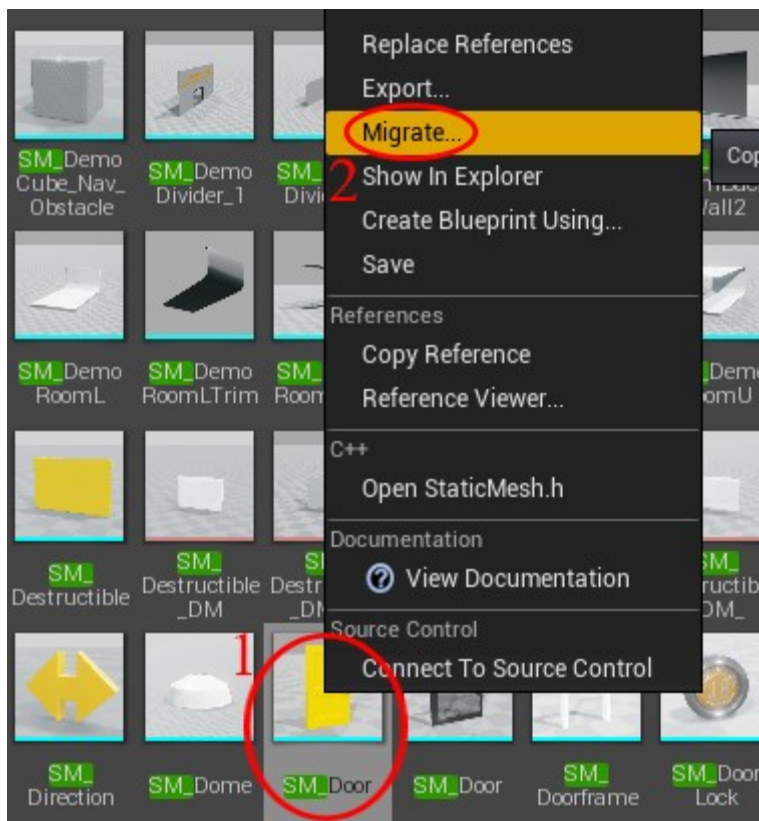
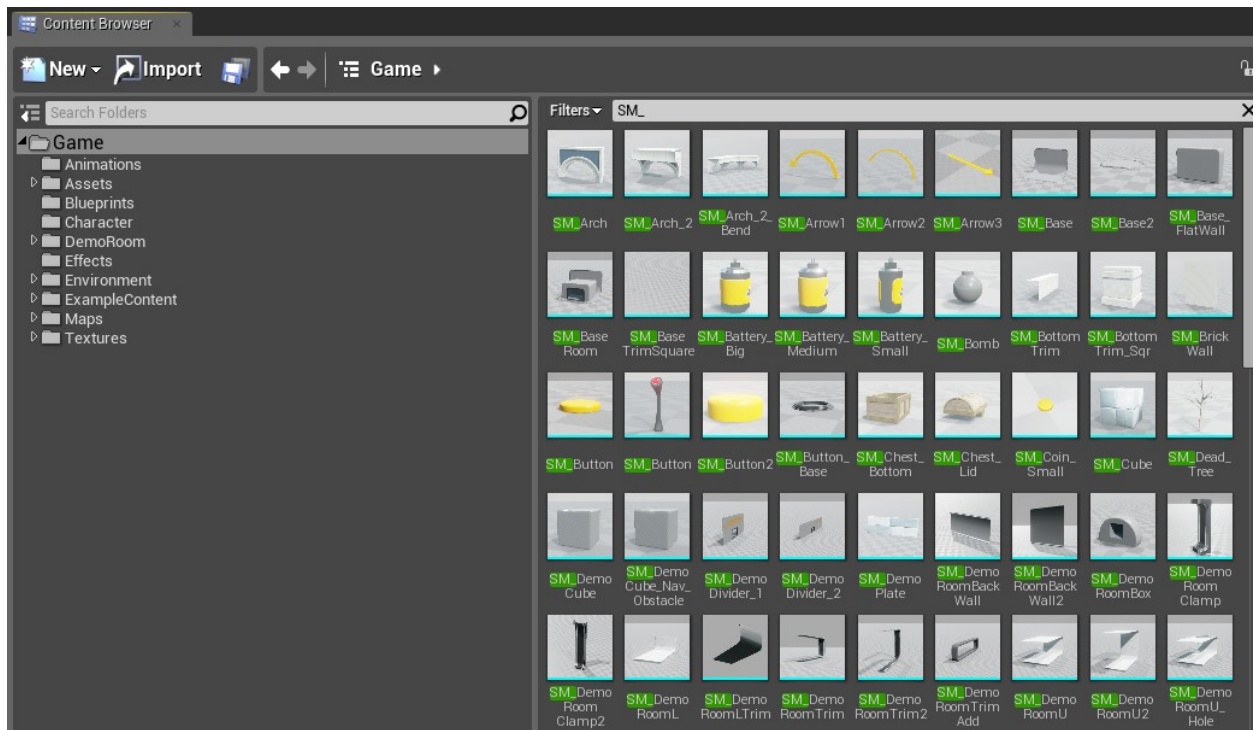
Folder:

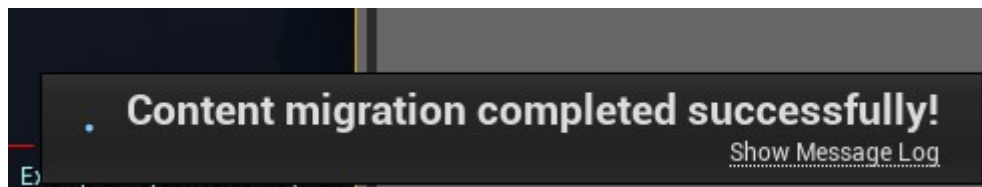
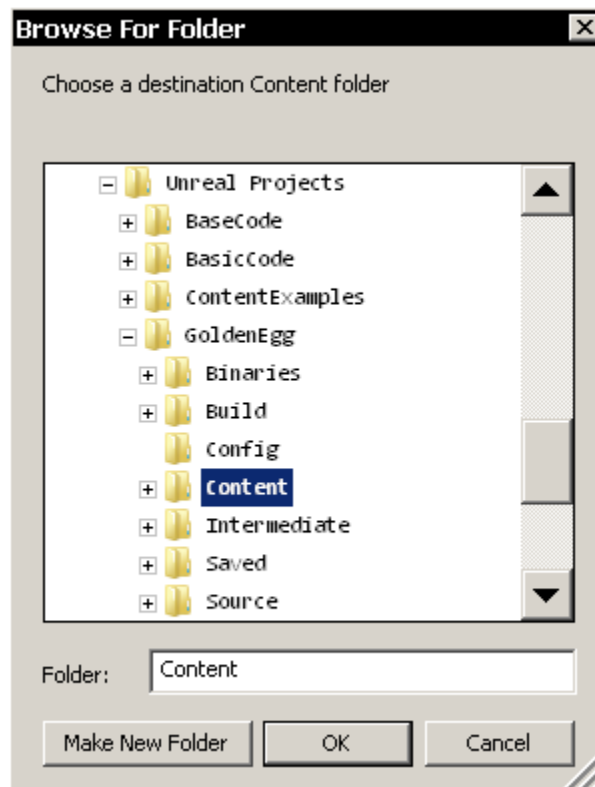
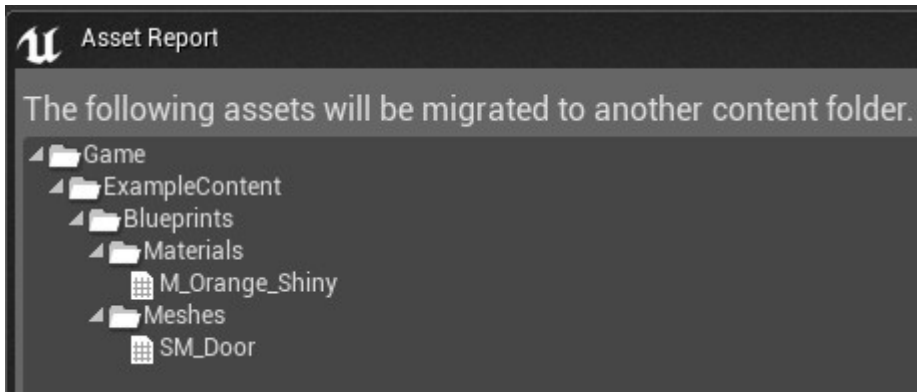
**Browse**

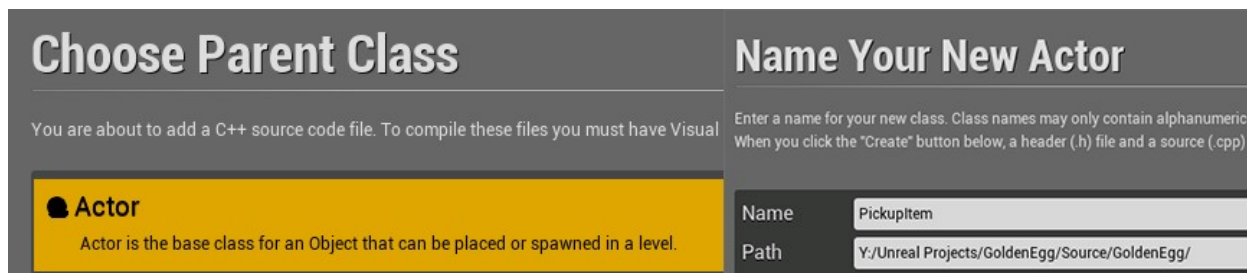
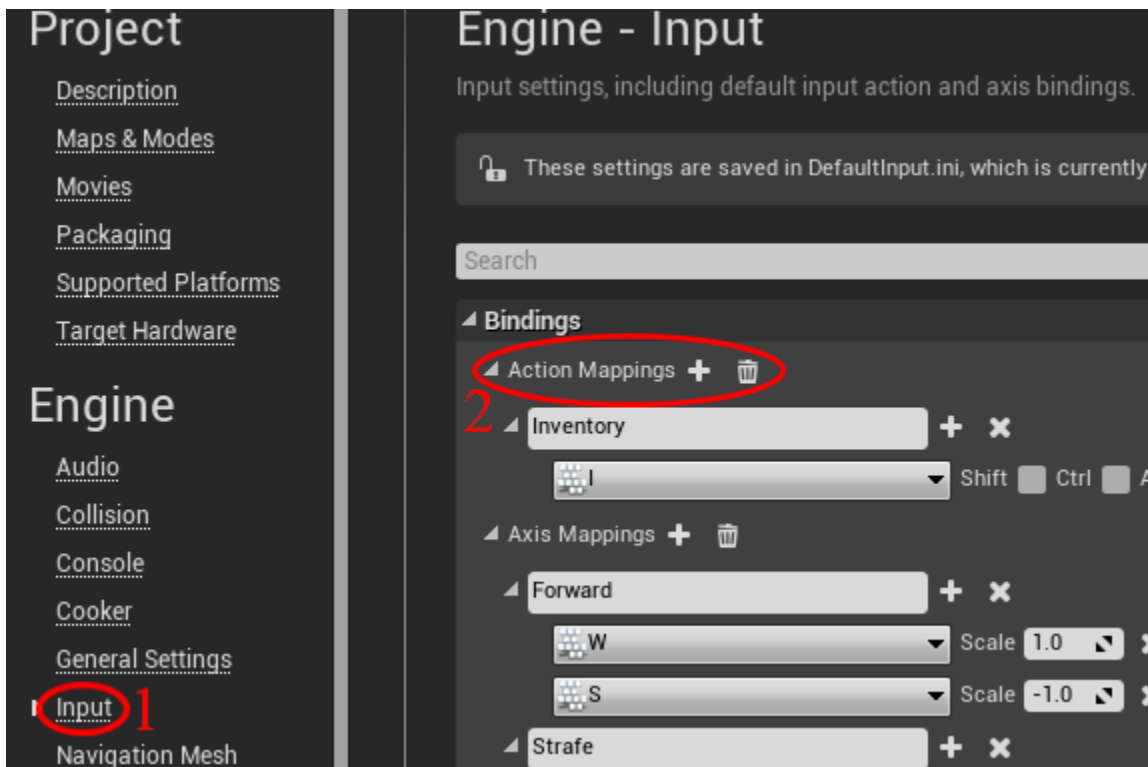
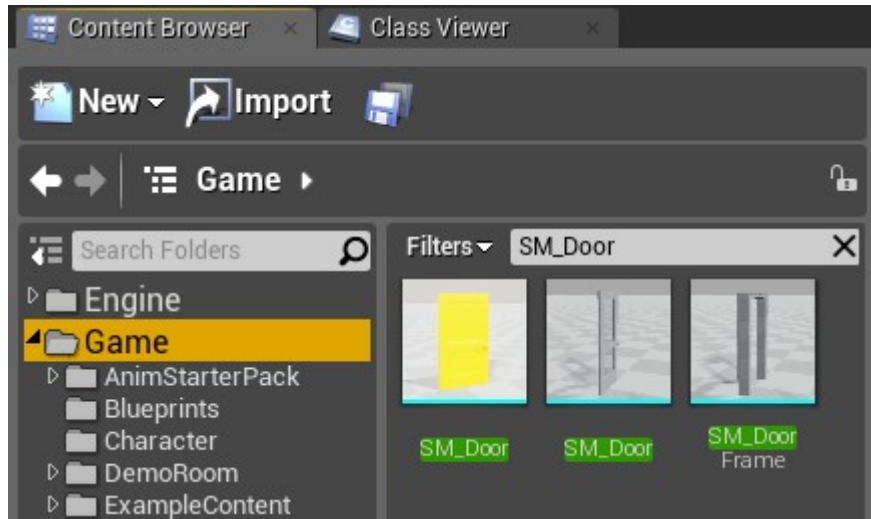
Y:/Unreal Projects/ContentExamples/ContentExamples.uproject

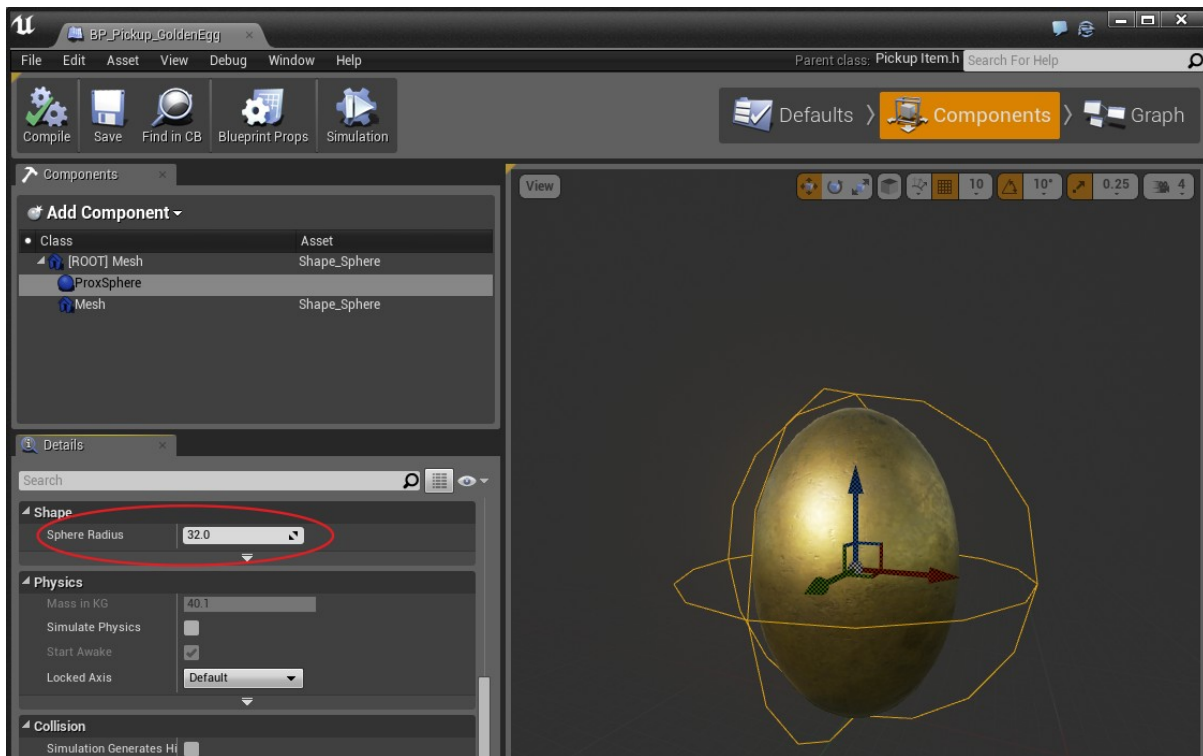
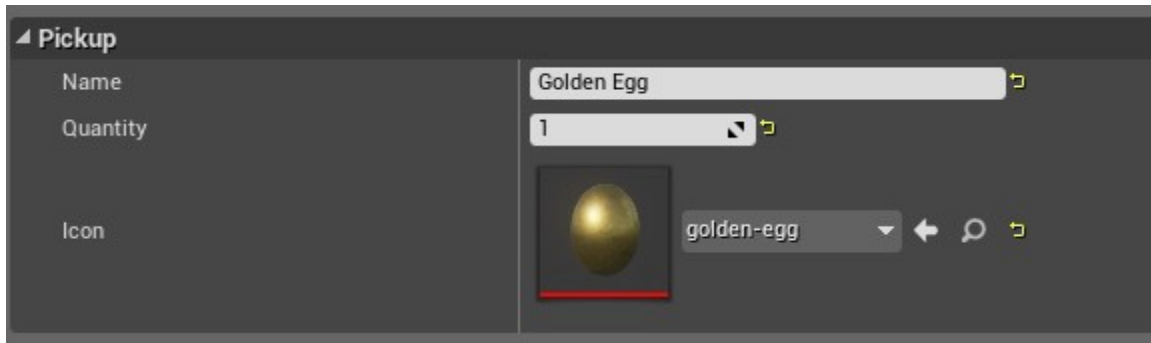
**2** **Create**

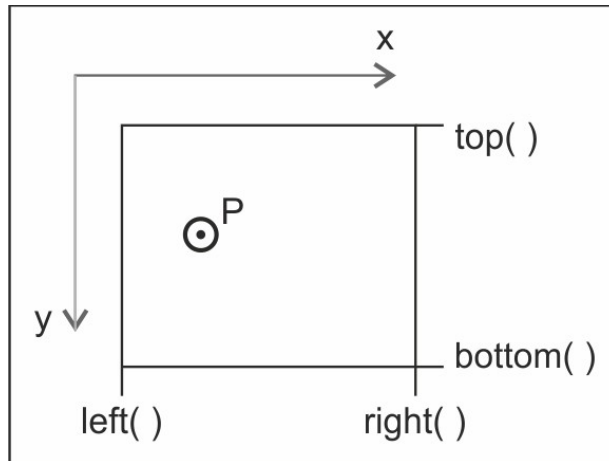
**Don't Create**







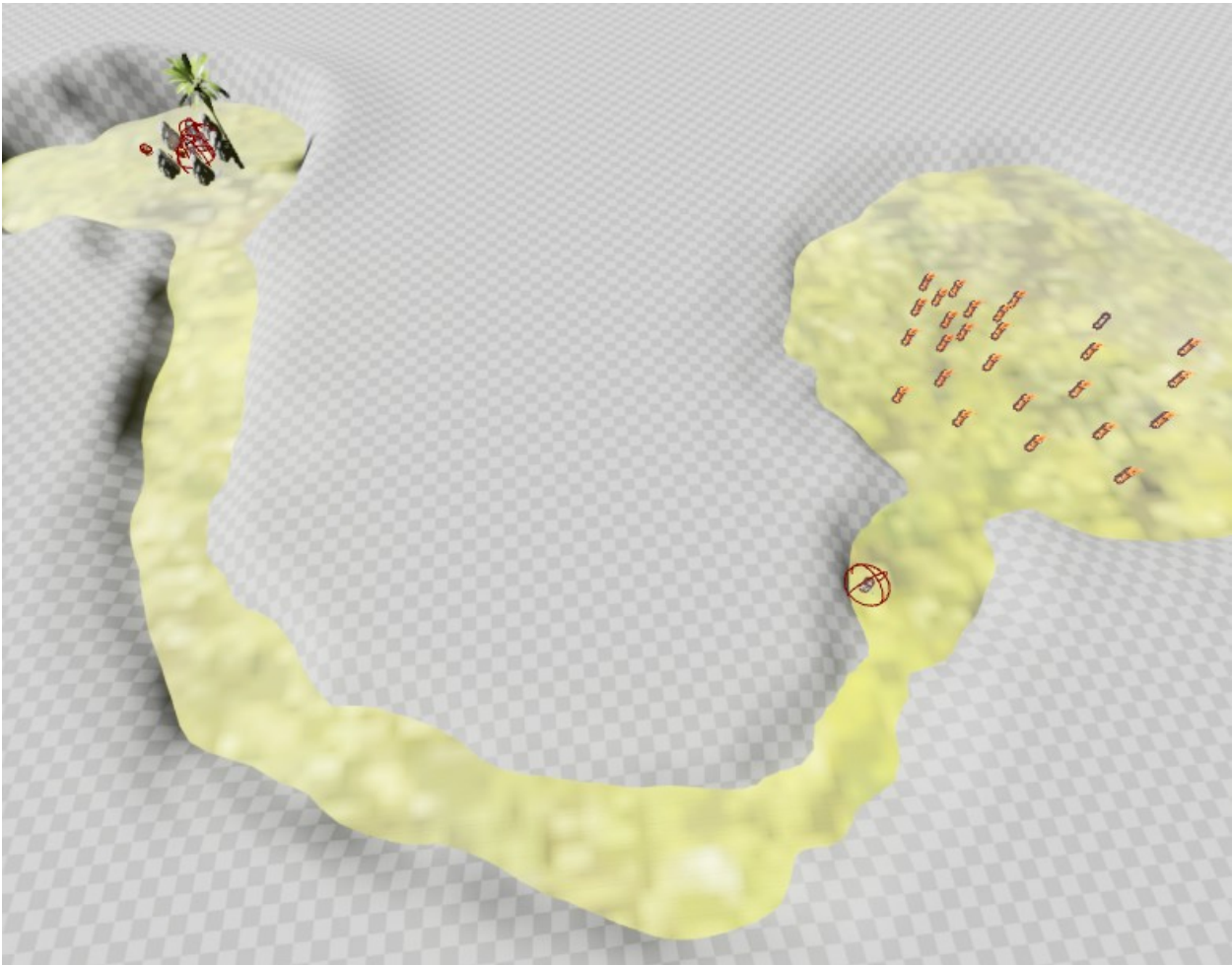


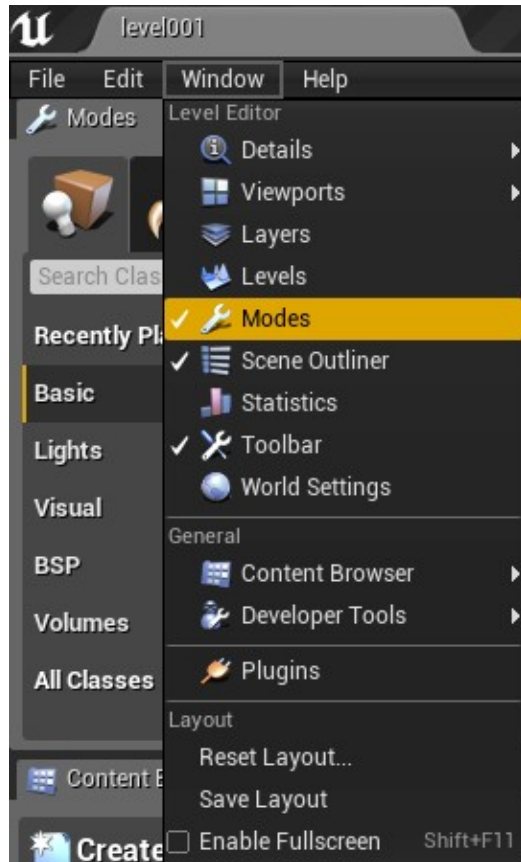


The screenshot shows the Unity Engine's 'Input' settings panel. On the left is a sidebar with various system categories, and 'Input' is selected and circled in red. The main panel is titled 'Engine - Input' and contains a search bar and a 'Bindings' section. The 'Bindings' section is expanded to show 'Action Mappings'. Two mappings are visible: 'Inventory' and 'MouseClickedLMB'. The 'MouseClickedLMB' mapping is circled in red and is currently bound to the 'Left Mouse Button'. To the right of each mapping are checkboxes for modifier keys: Shift, Ctrl, Alt, and Cmd.

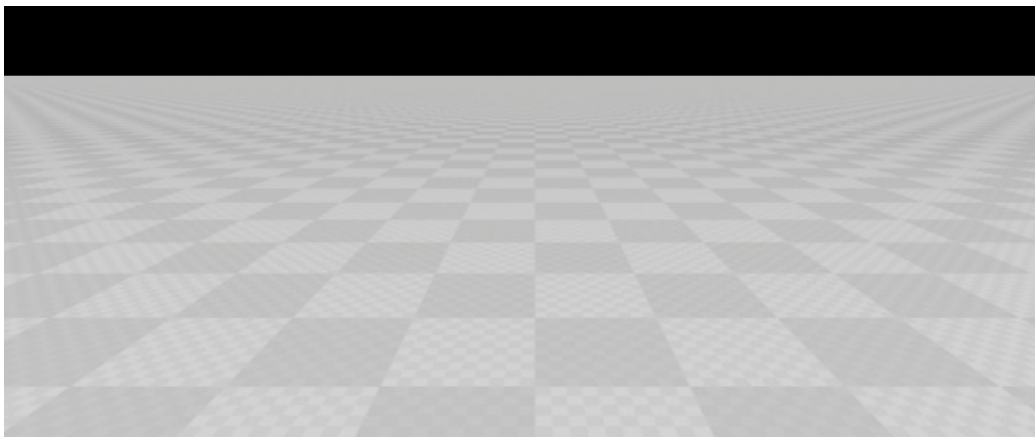
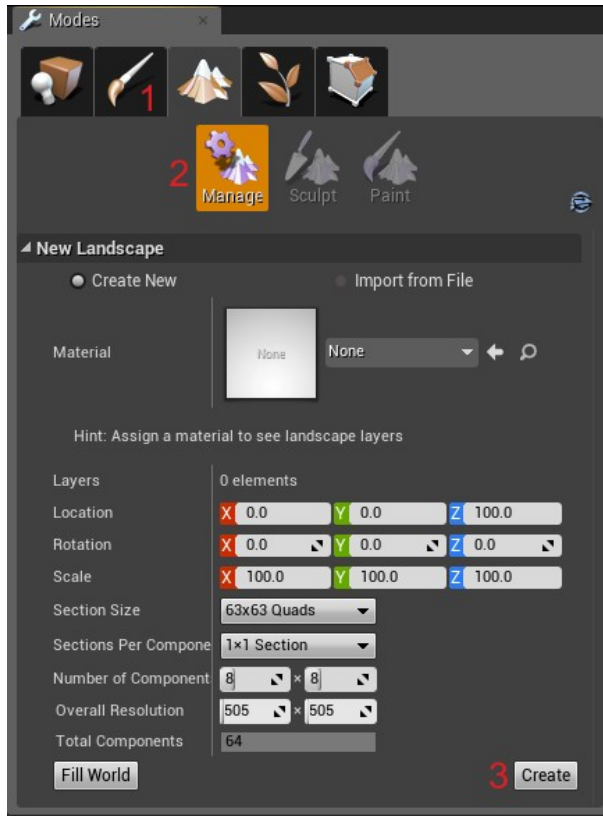


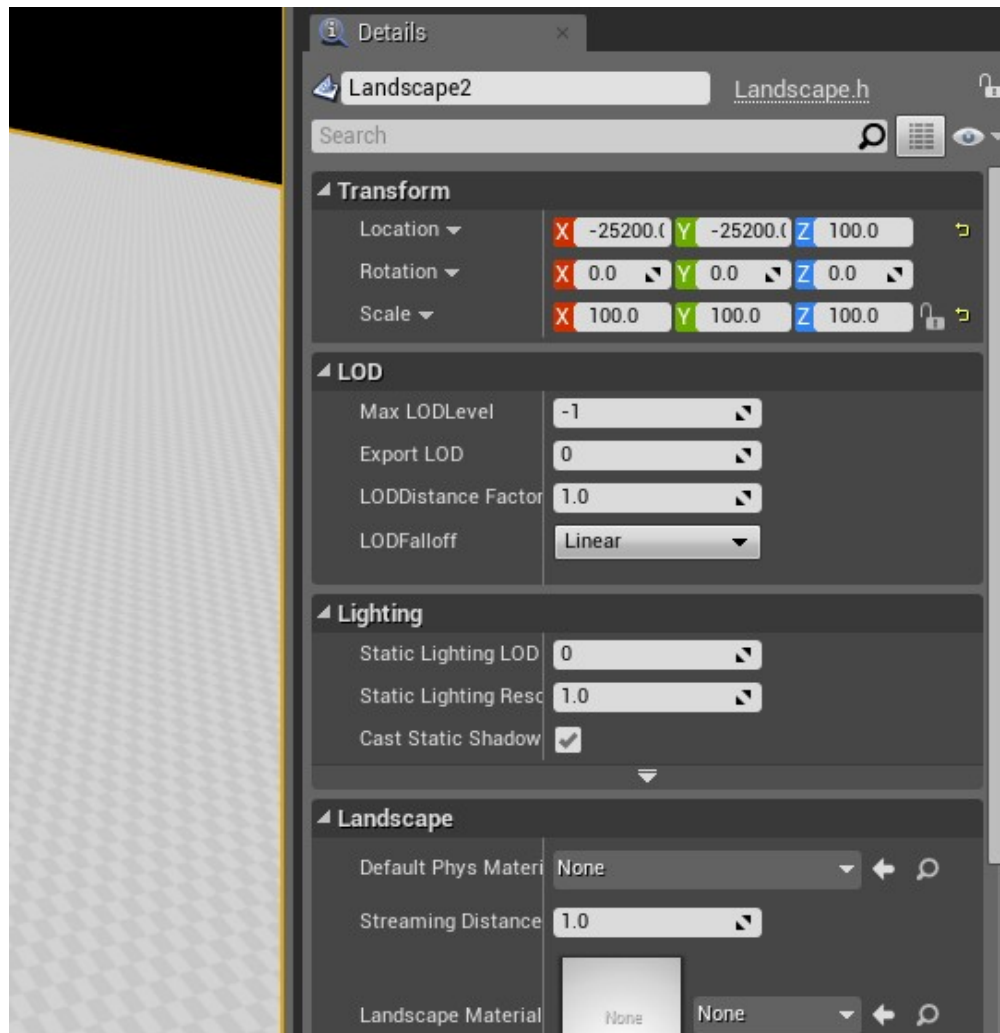
**Chapter 11. Monsters**

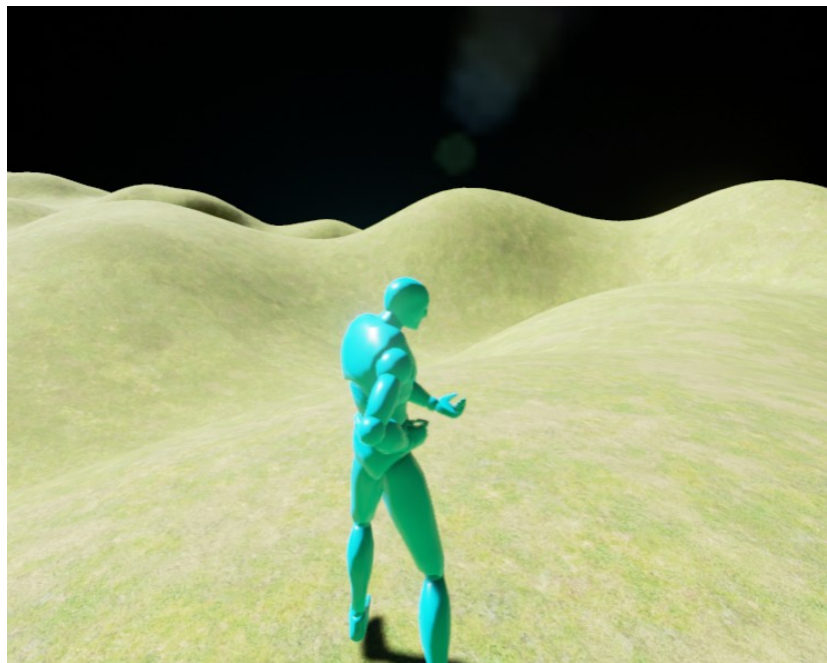
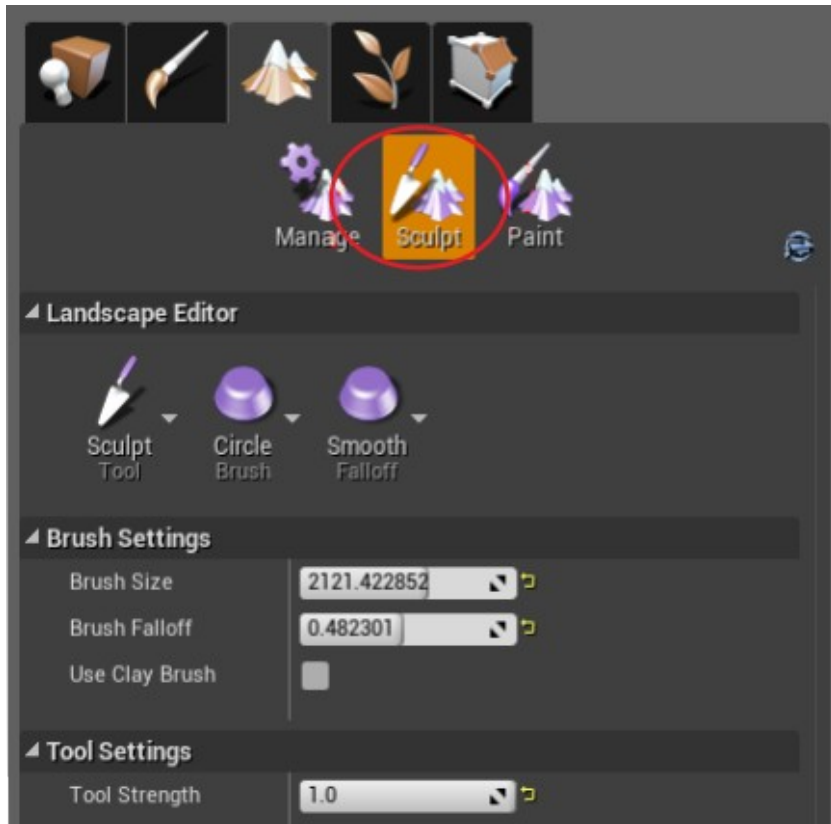


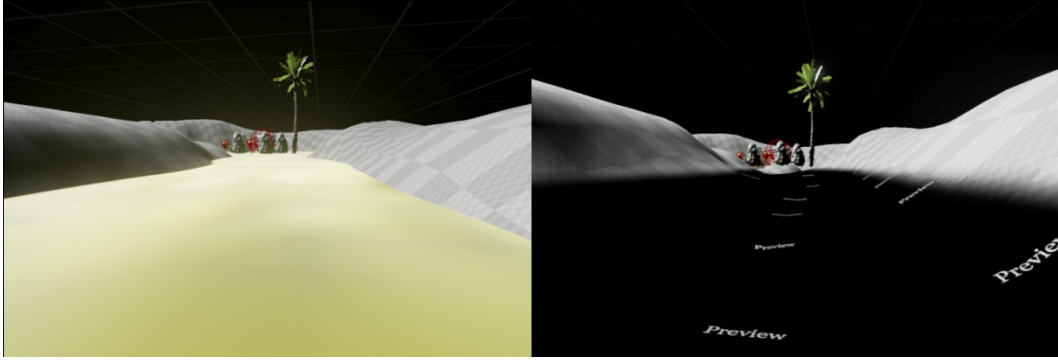














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Animation


Animation Mode Use Animation Blueprint

Anim Blueprint Generated Class MixamoAnir

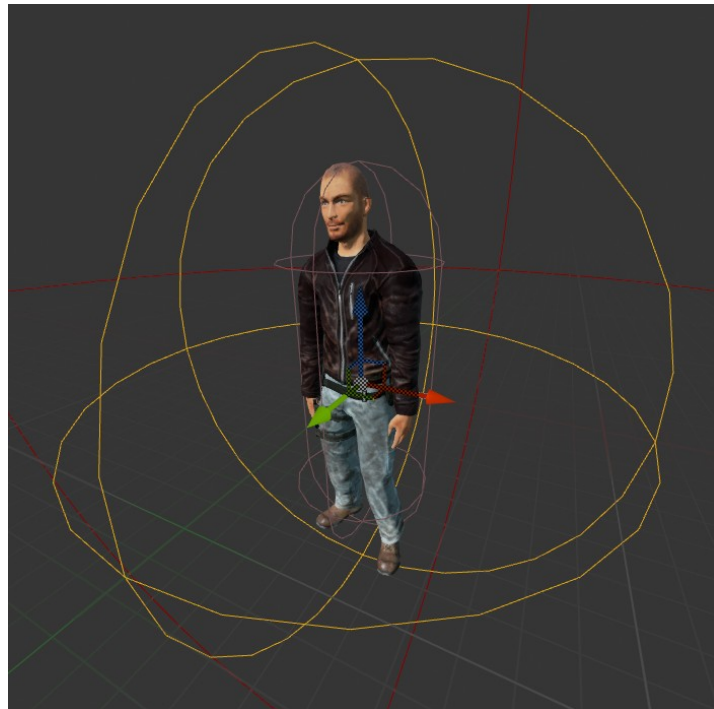
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Mesh

Skeletal Mesh

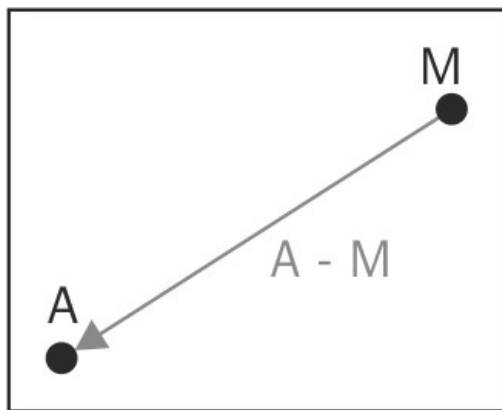
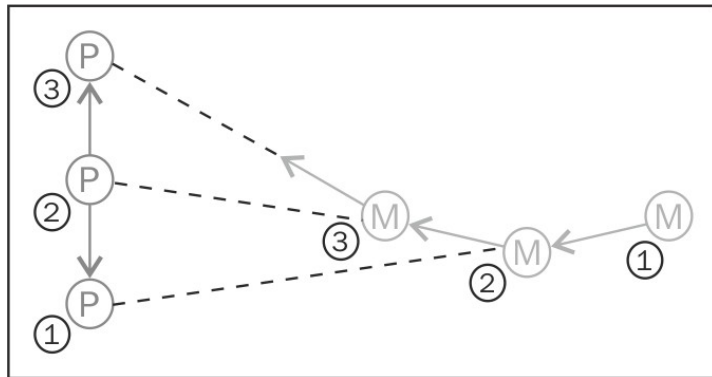


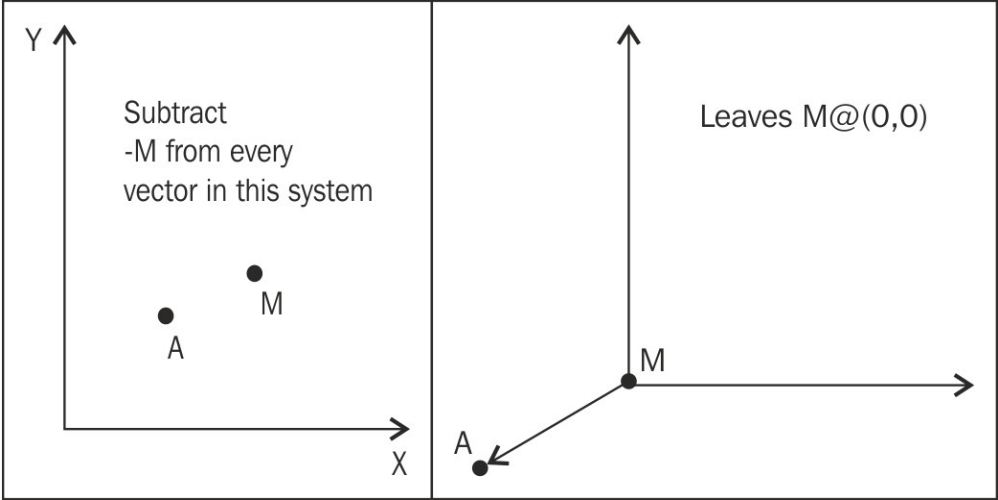
Maximo\_Adam



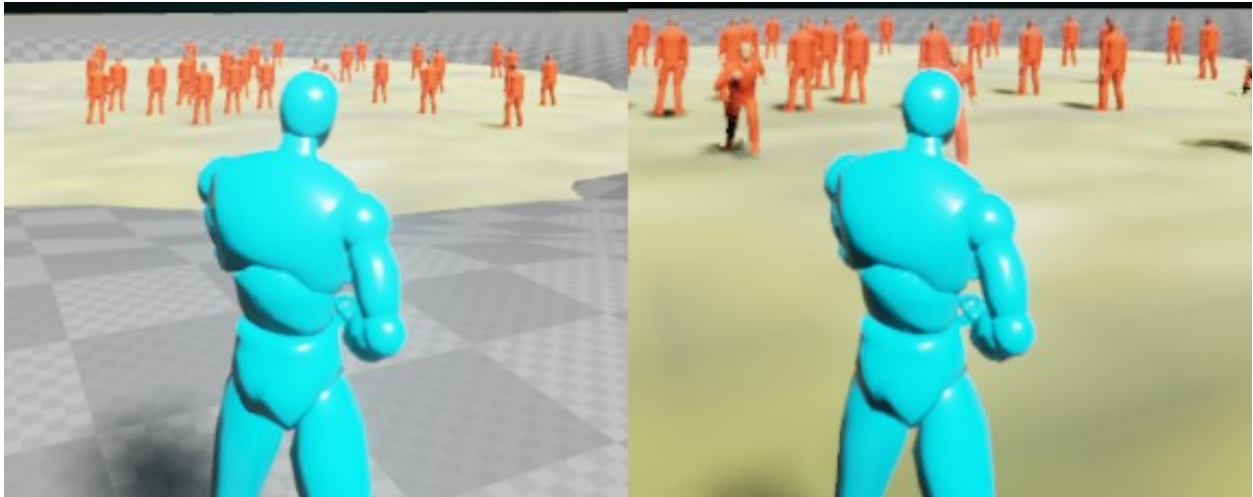
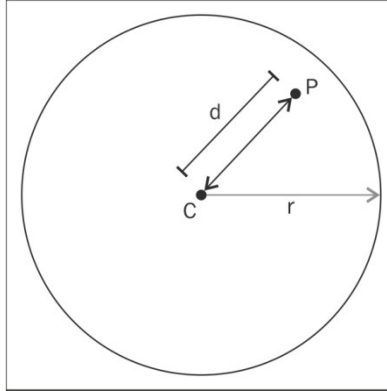
AI

AIController Class AIController









**TURBOSQUID** sword x

Compatibility ▾ Formats ▾ Price ▾

Quality Level ▾ 3D Models ▾

Showing results for 3D model category sword. See everything tagged with sword

Price filter dropdown:

- \$300+ (4)
- \$200 to \$300 (4)
- \$100 to \$200 (42)
- \$1 to \$100 (1740)

Enter custom price range

0 - 0

Apply

\$39 max obj fbx	\$75 3ds dxf obj X c-4d fbx	\$45 max obj

**TURBOSQUID** sword x

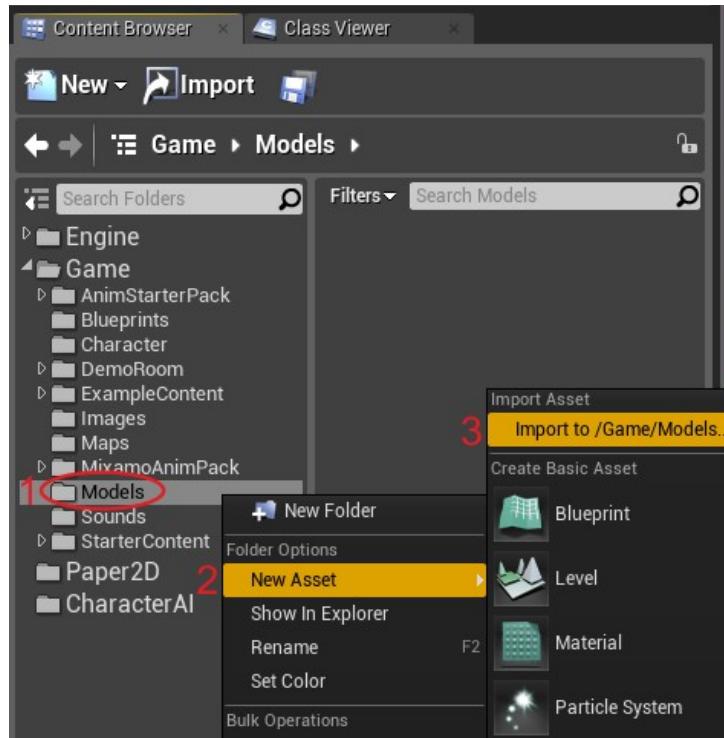
Compatibility ▾ Formats ▾ Free ▾

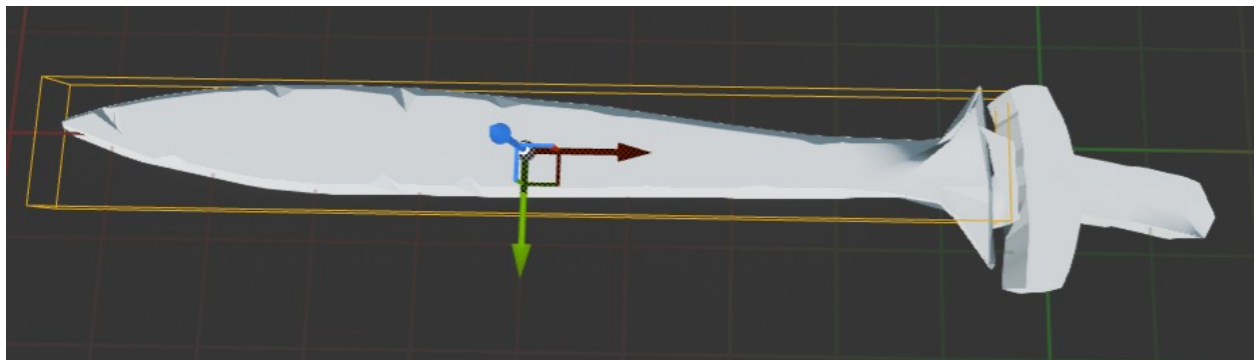
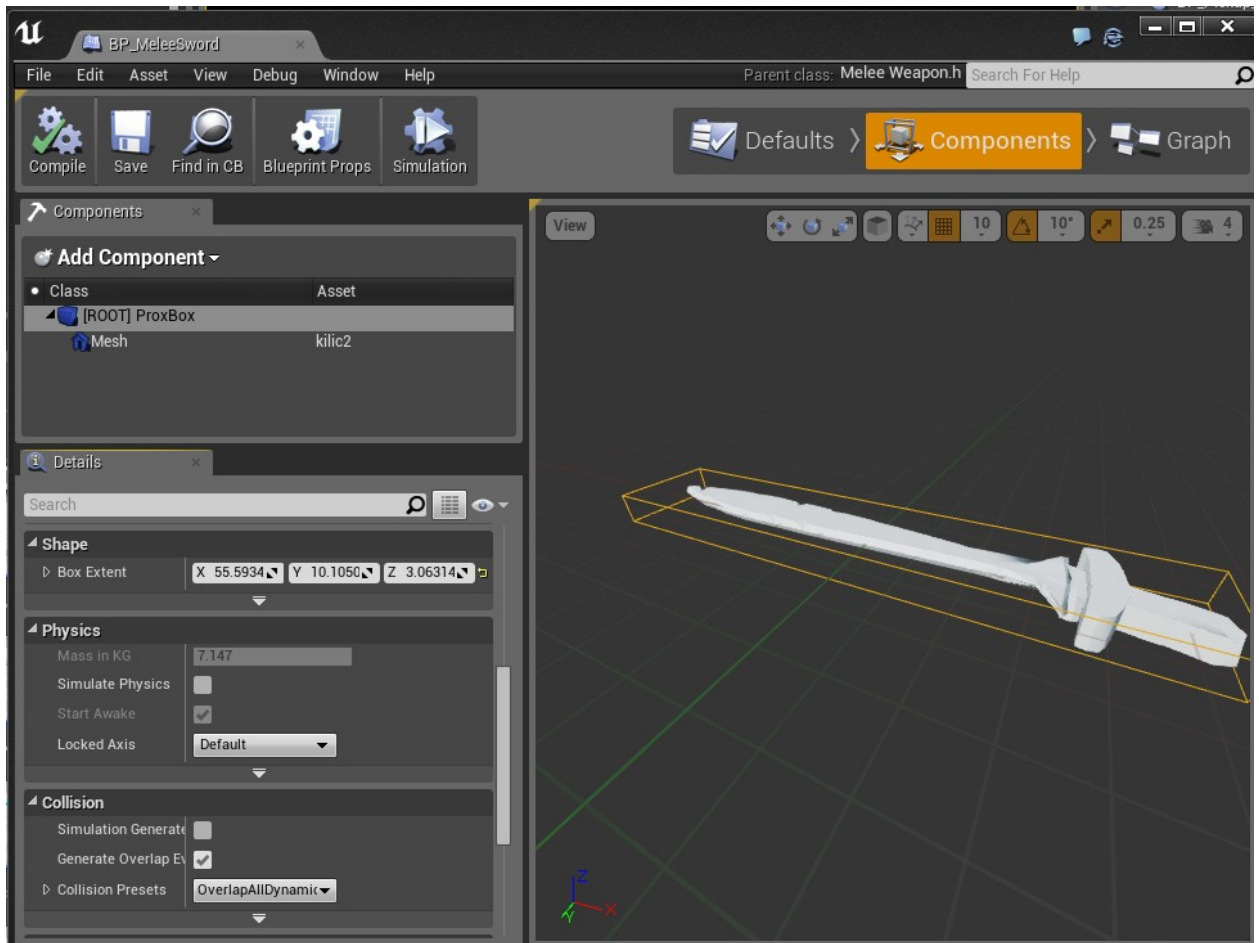
3D Models ▾ More ▾

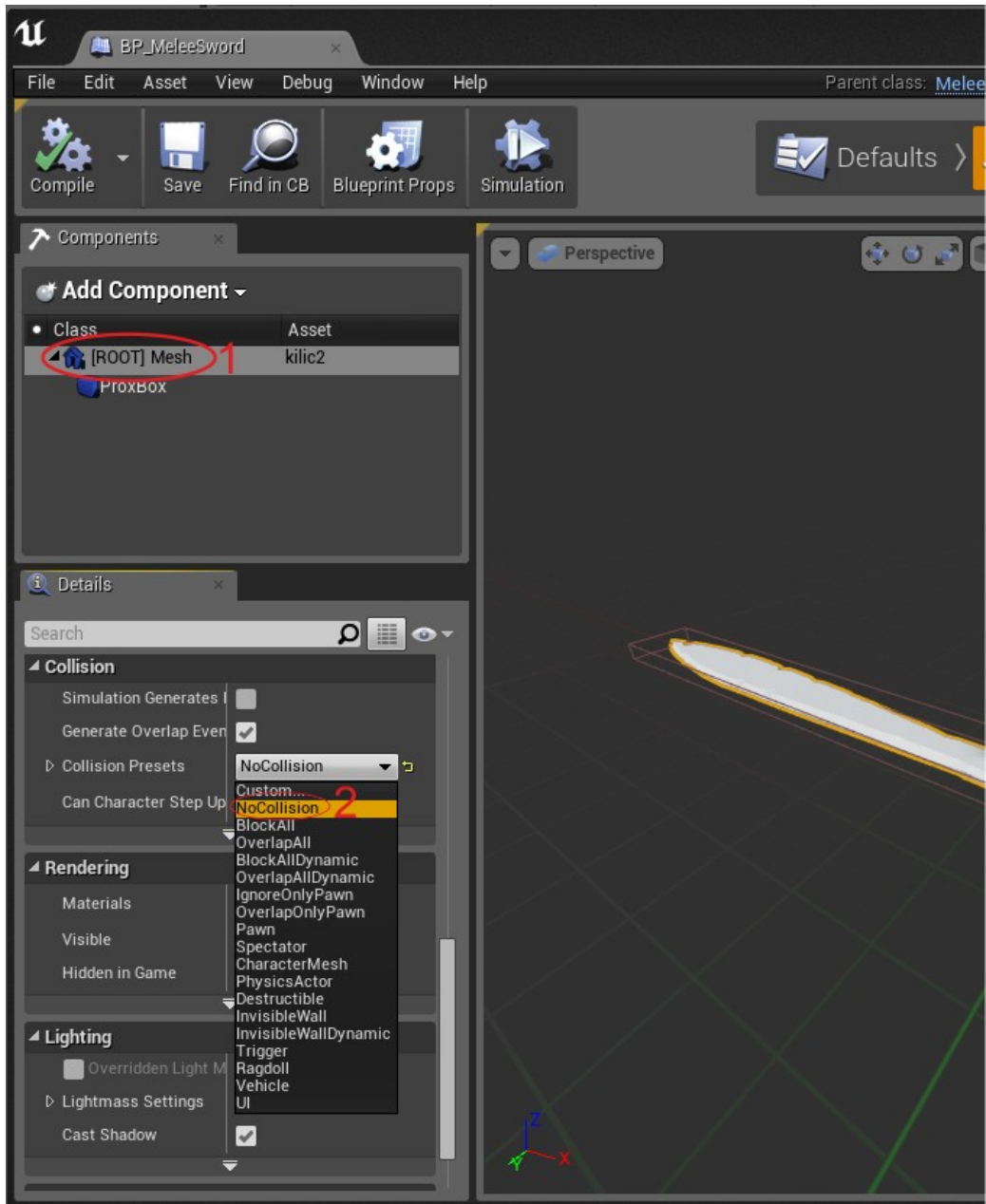
Showing results for 3D model category sword. See everything tagged with sword

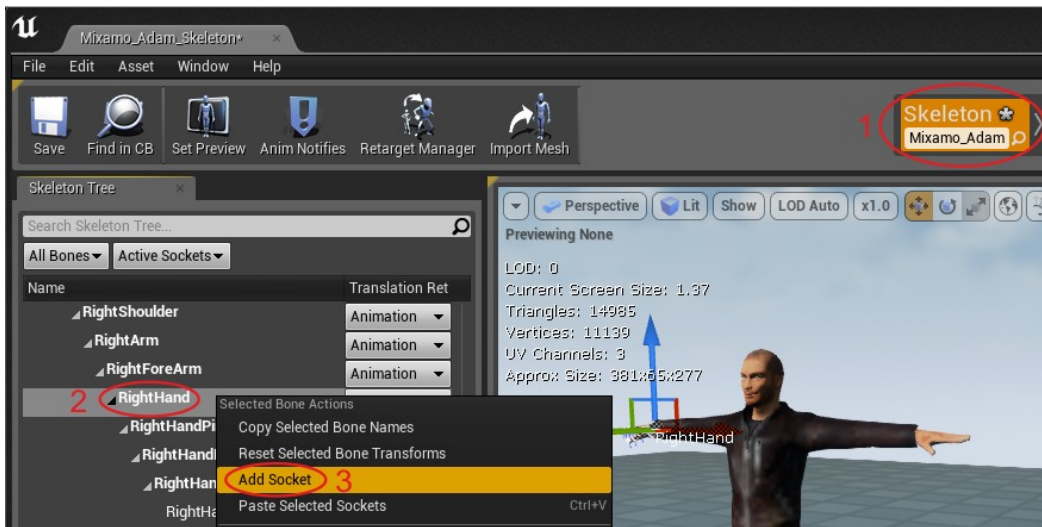
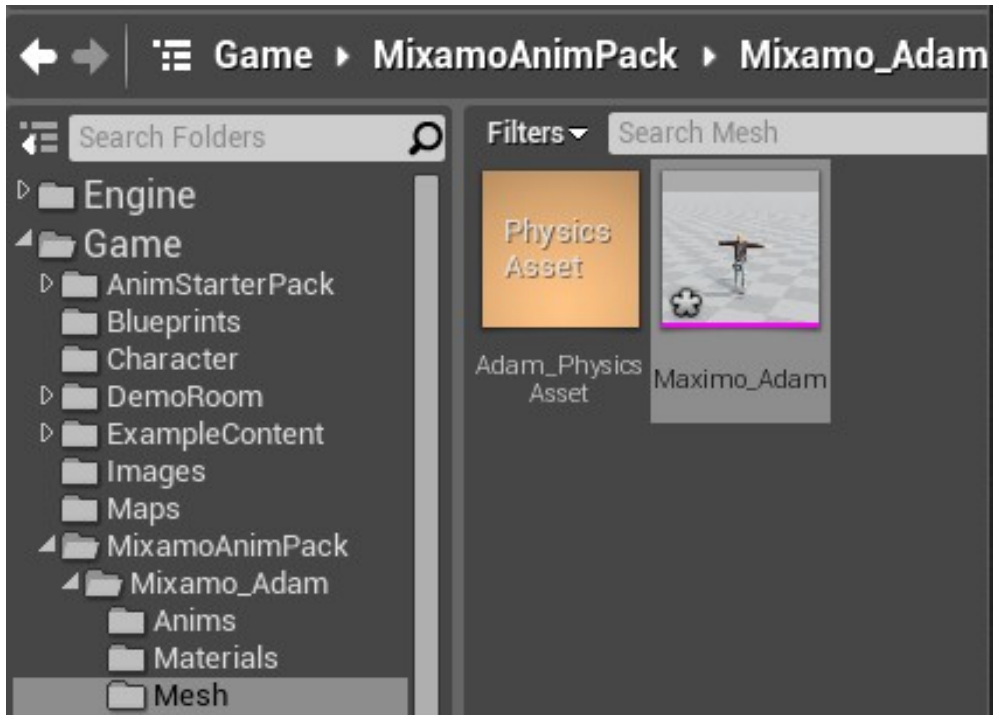
Free 3ds dxf obj 3dm	Free 3ds max obj	Free max

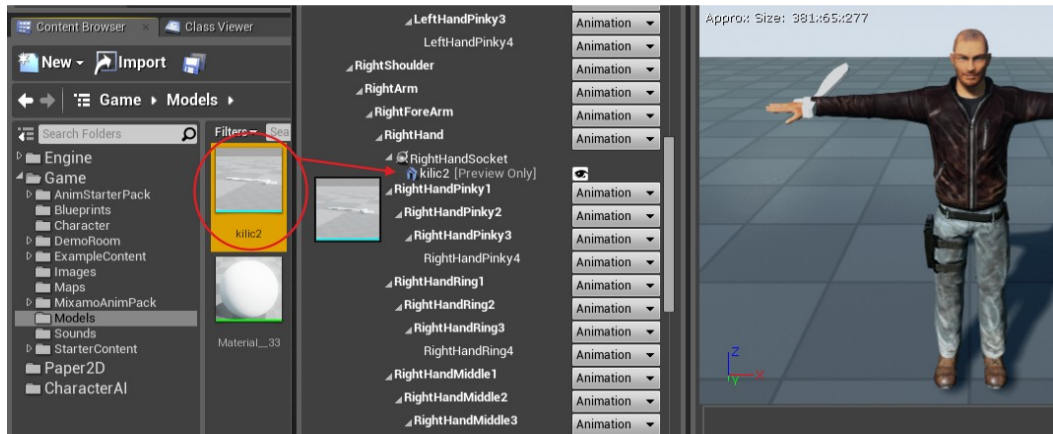


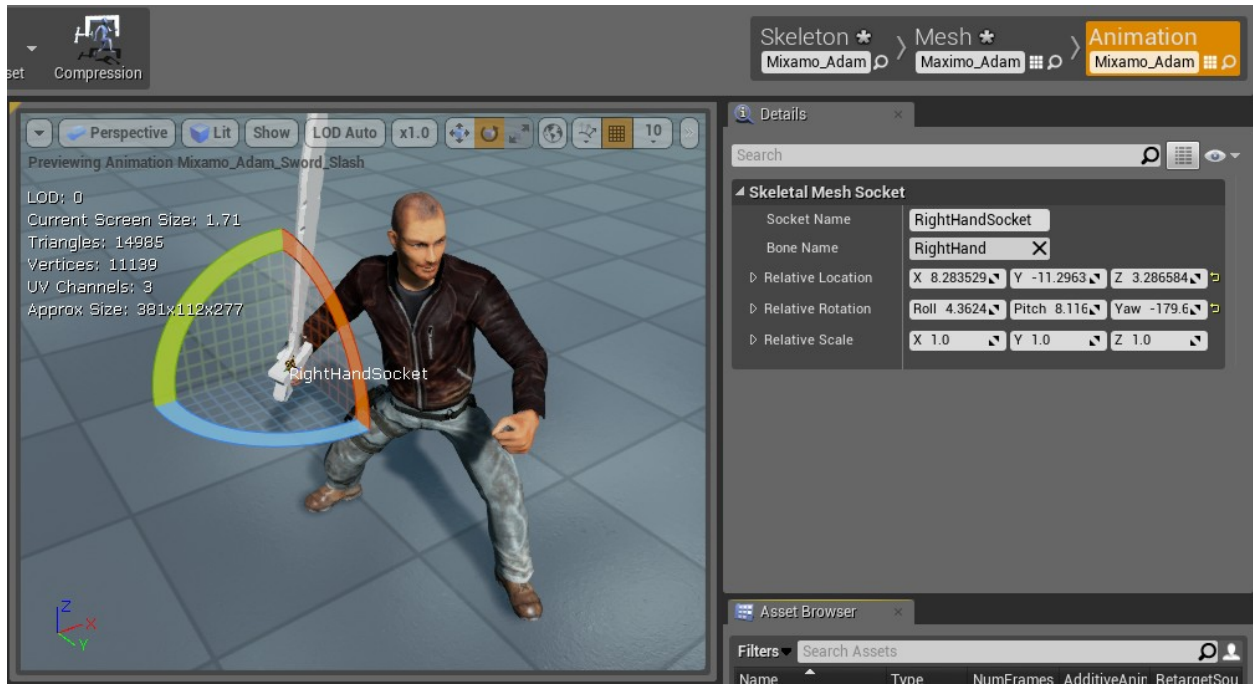




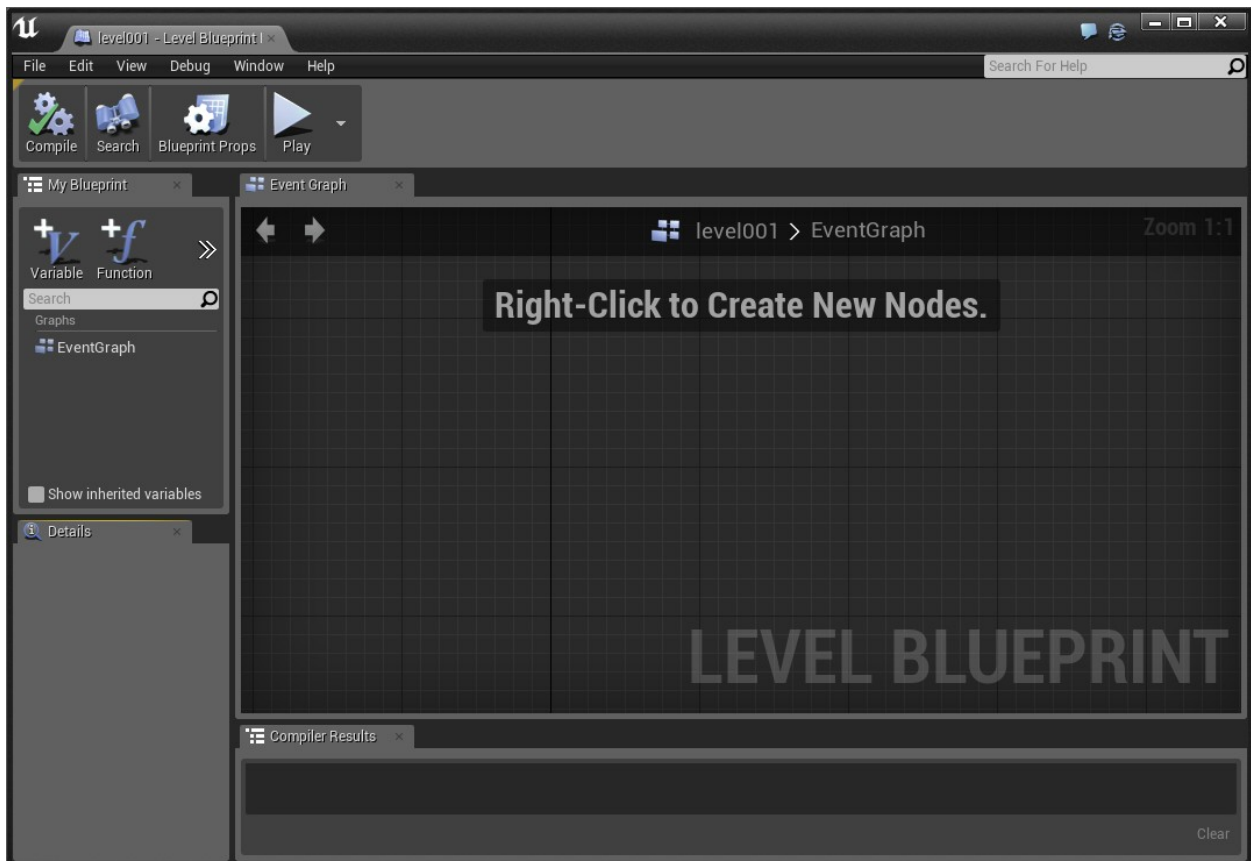
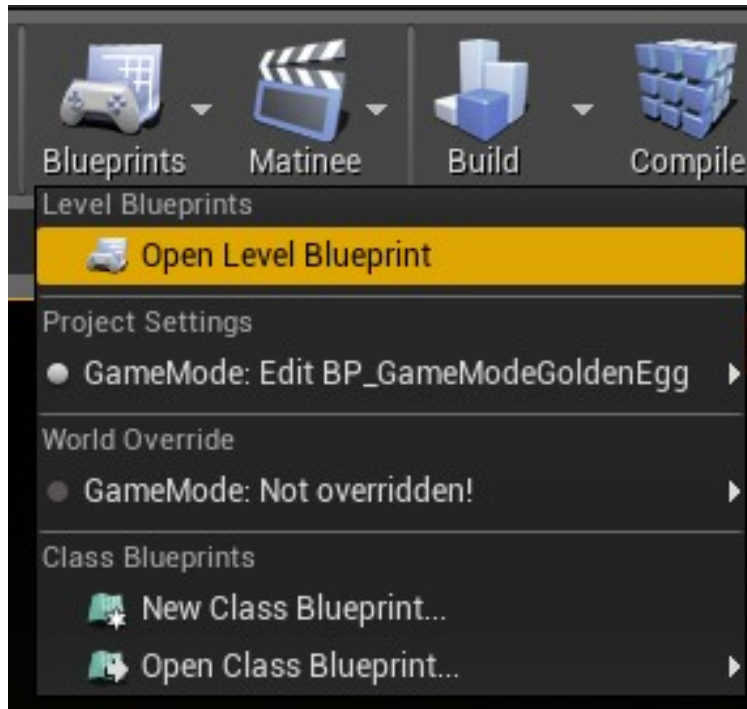


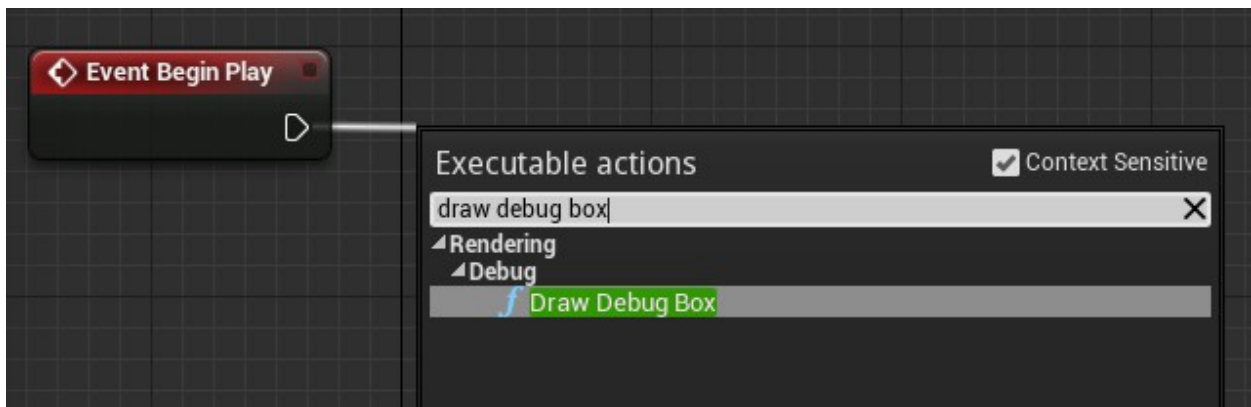
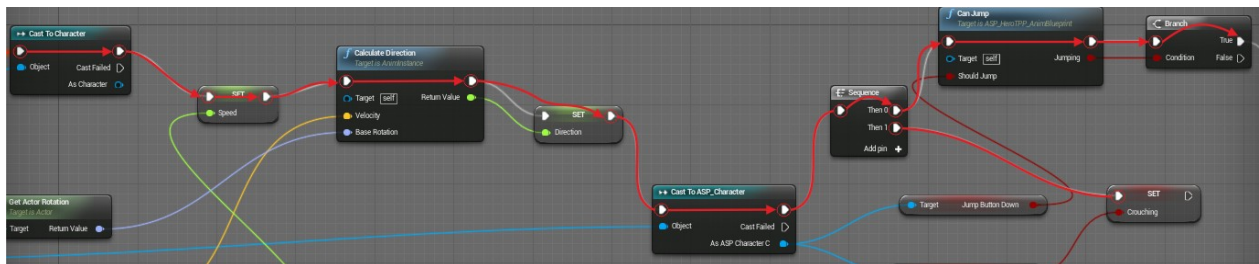
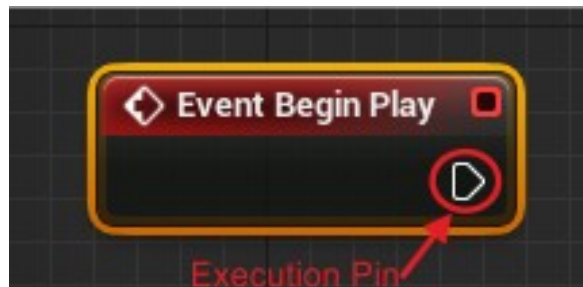
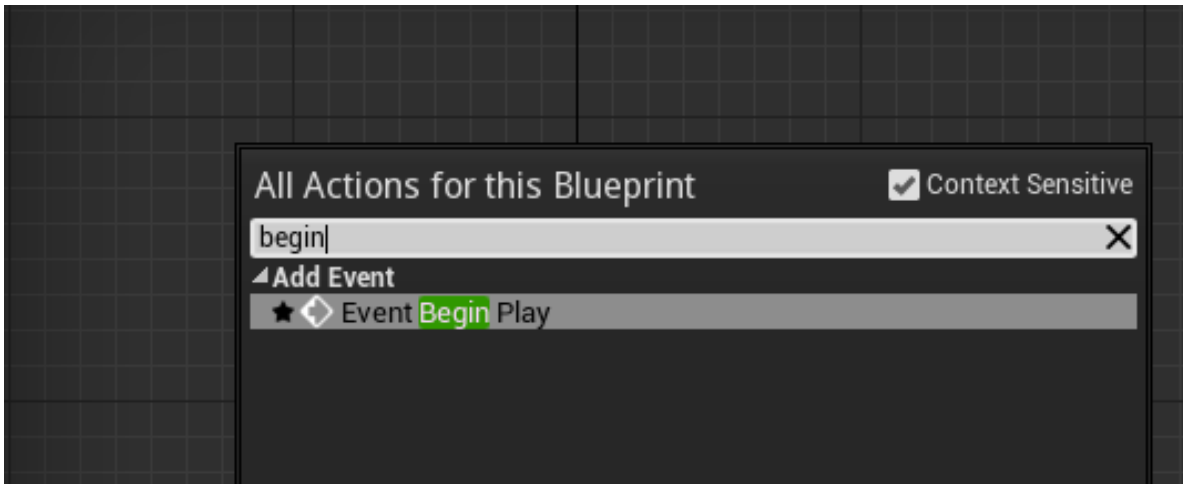




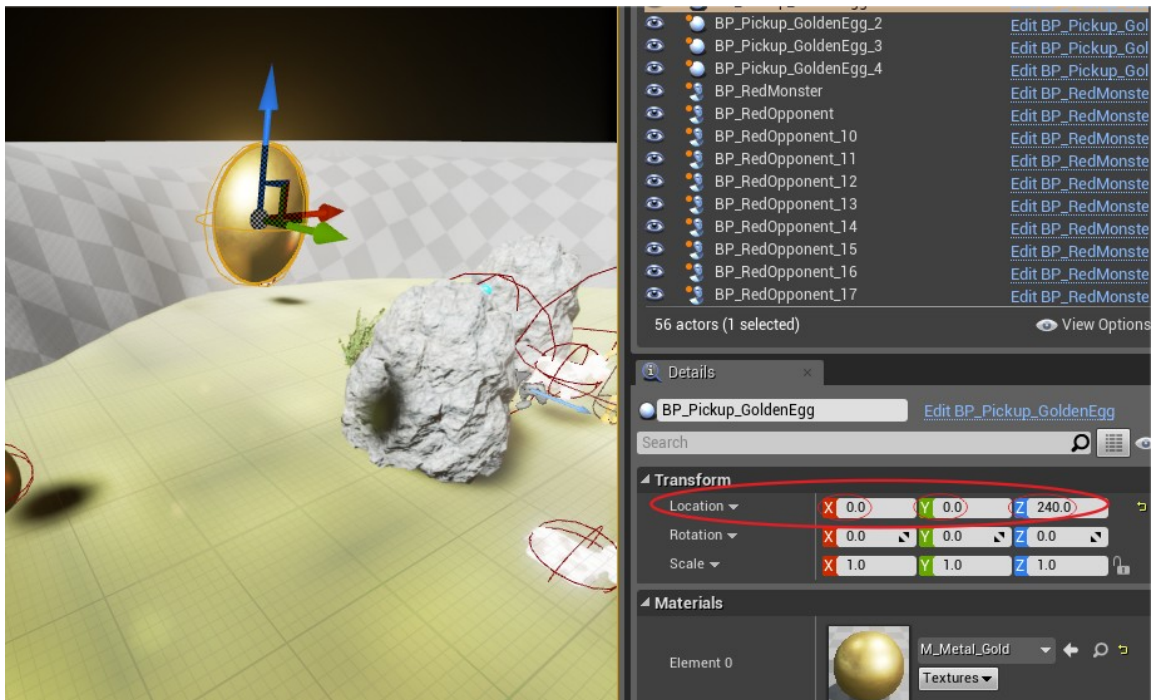
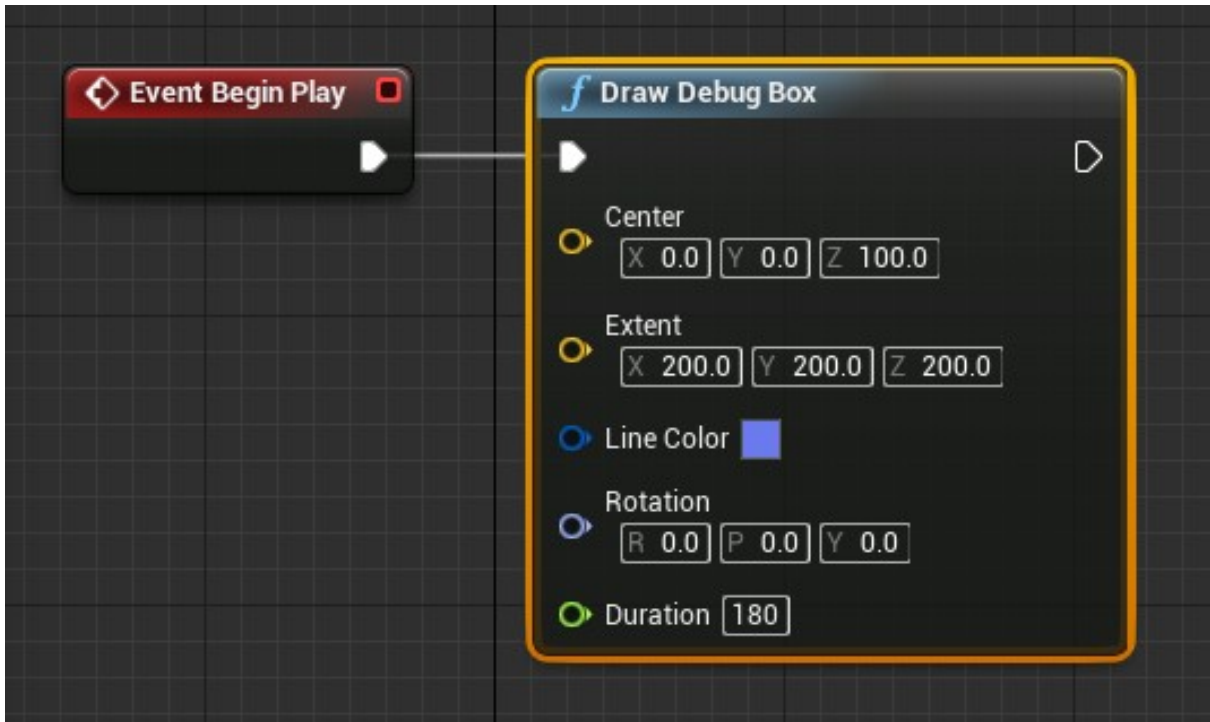


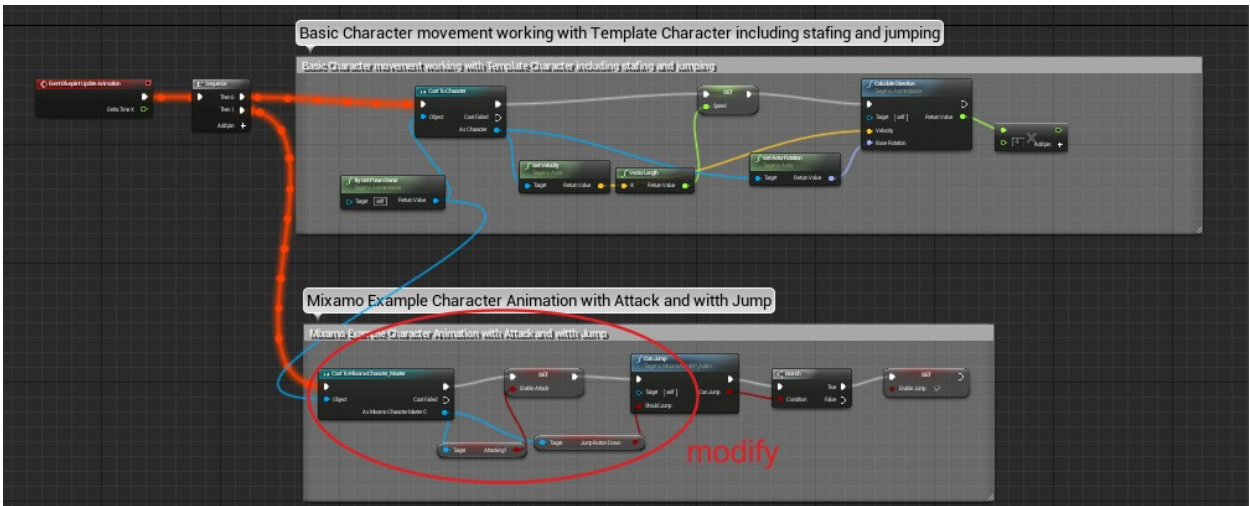
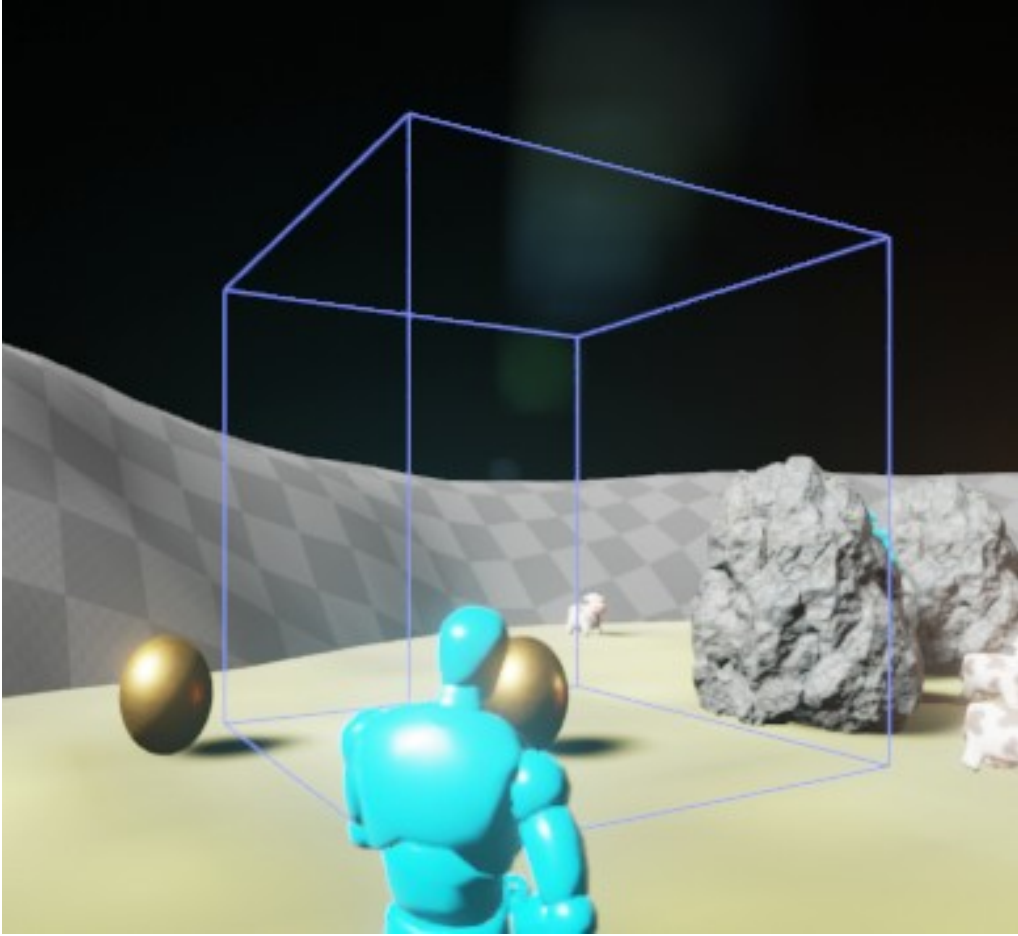


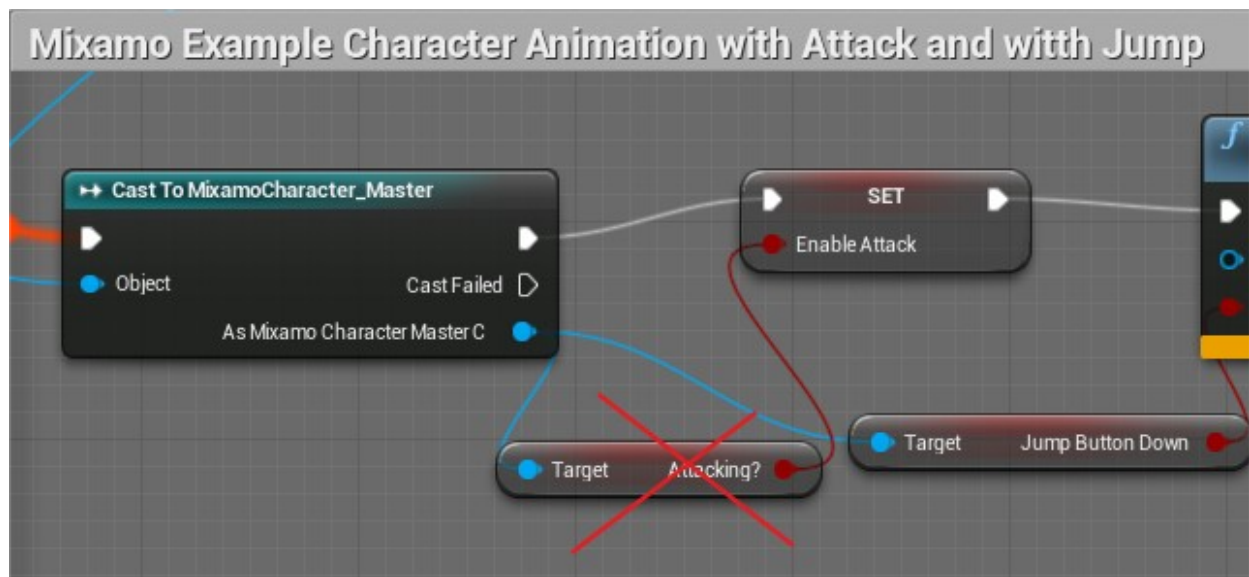
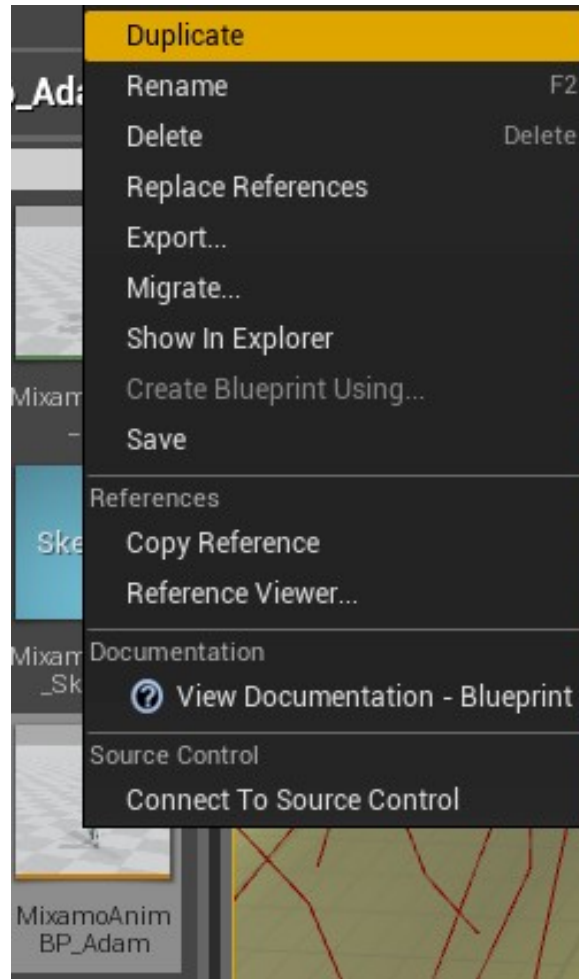




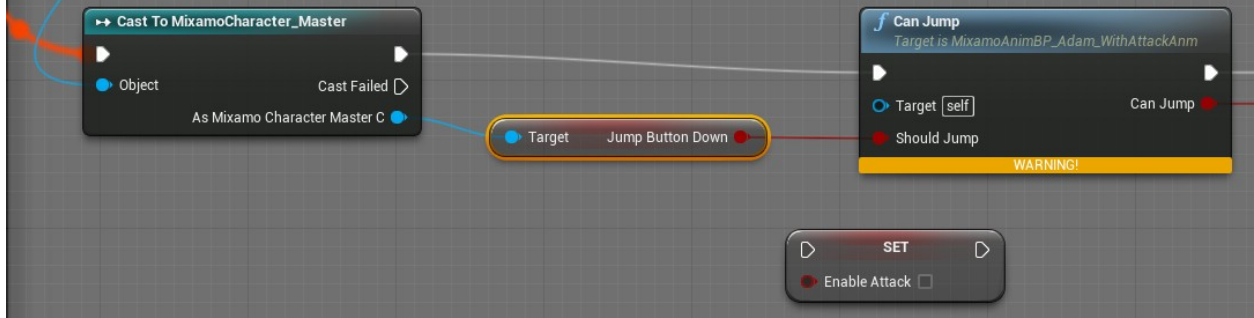


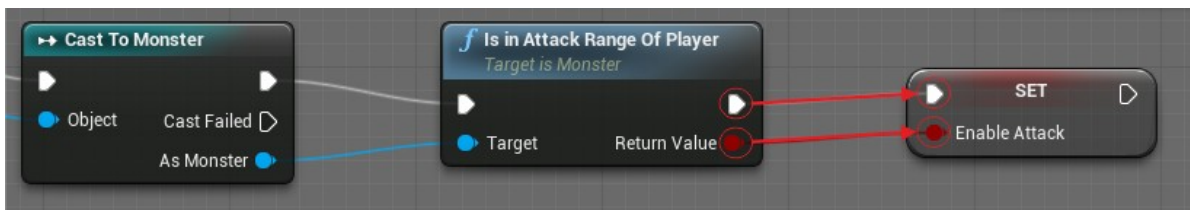
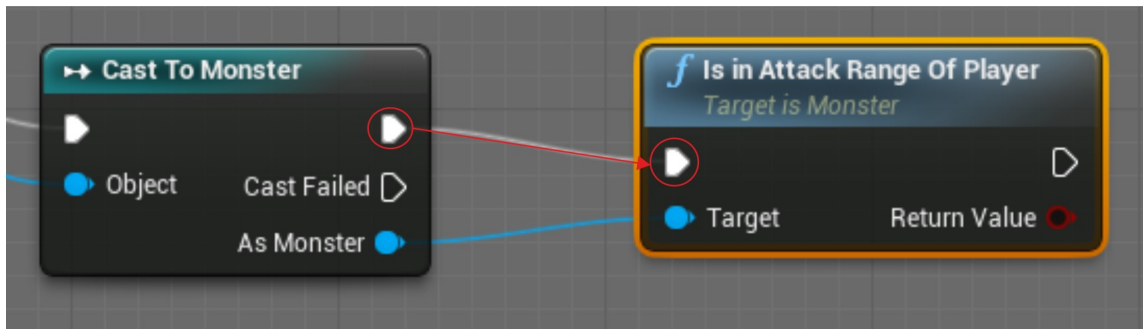
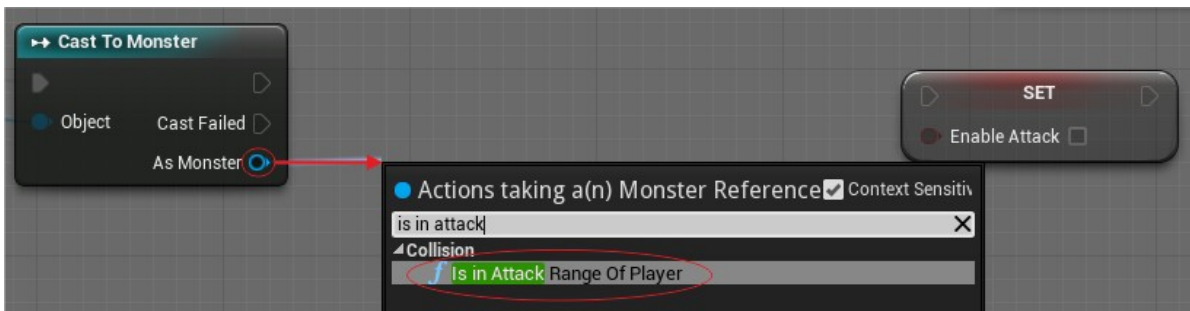
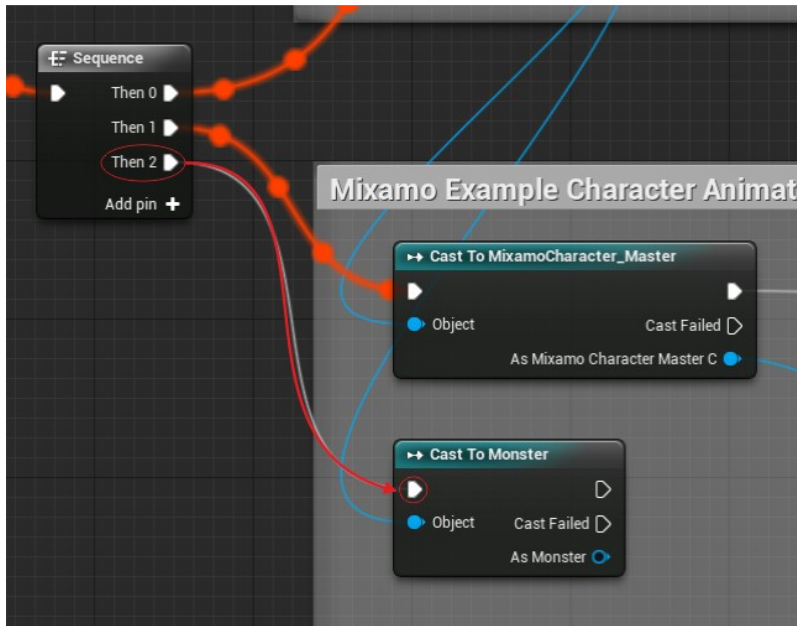




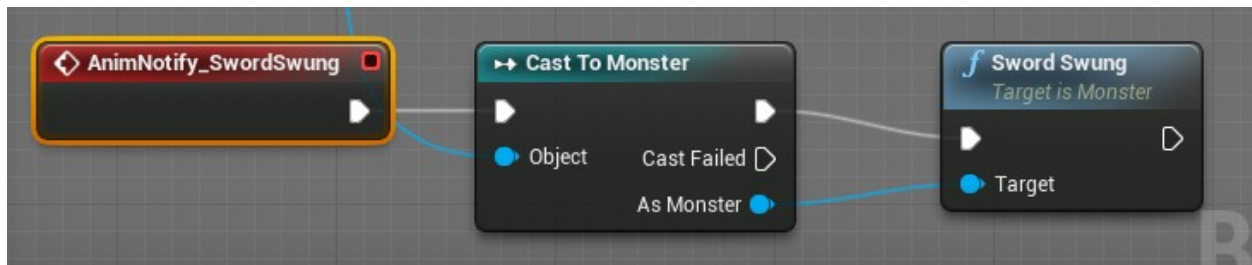
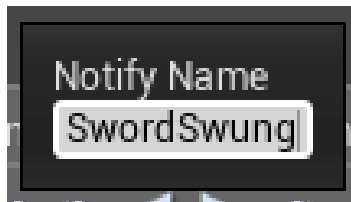


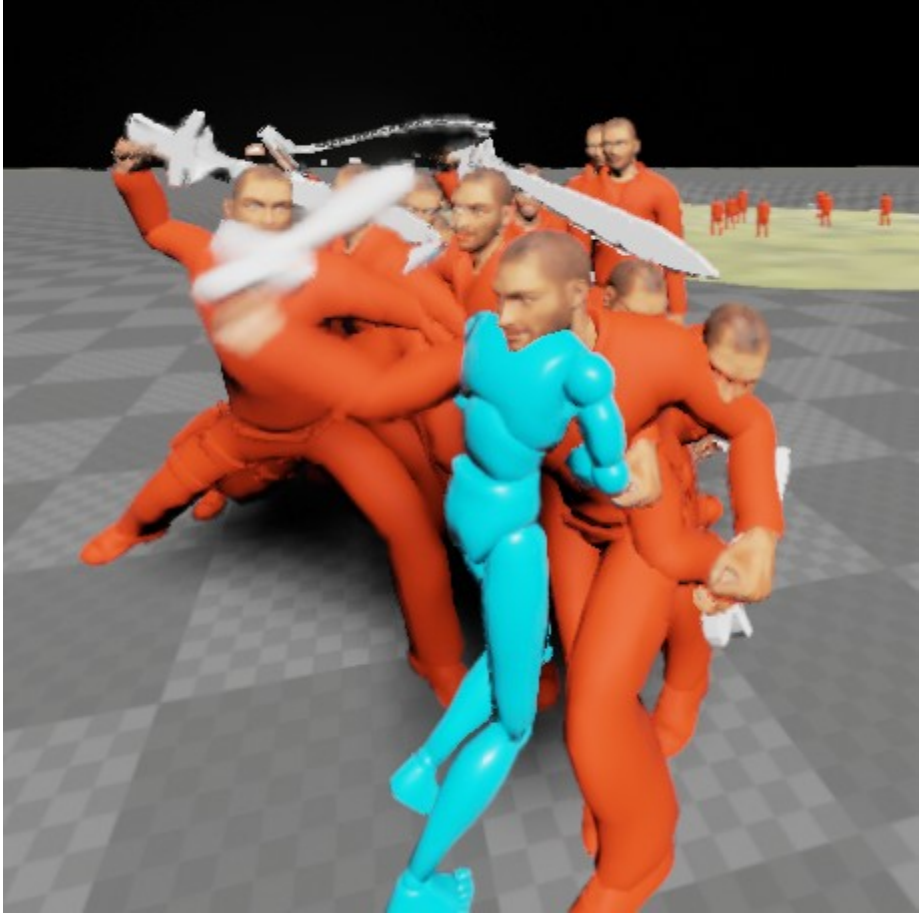
# Mixamo Example Character Animation with Attack and with Jump

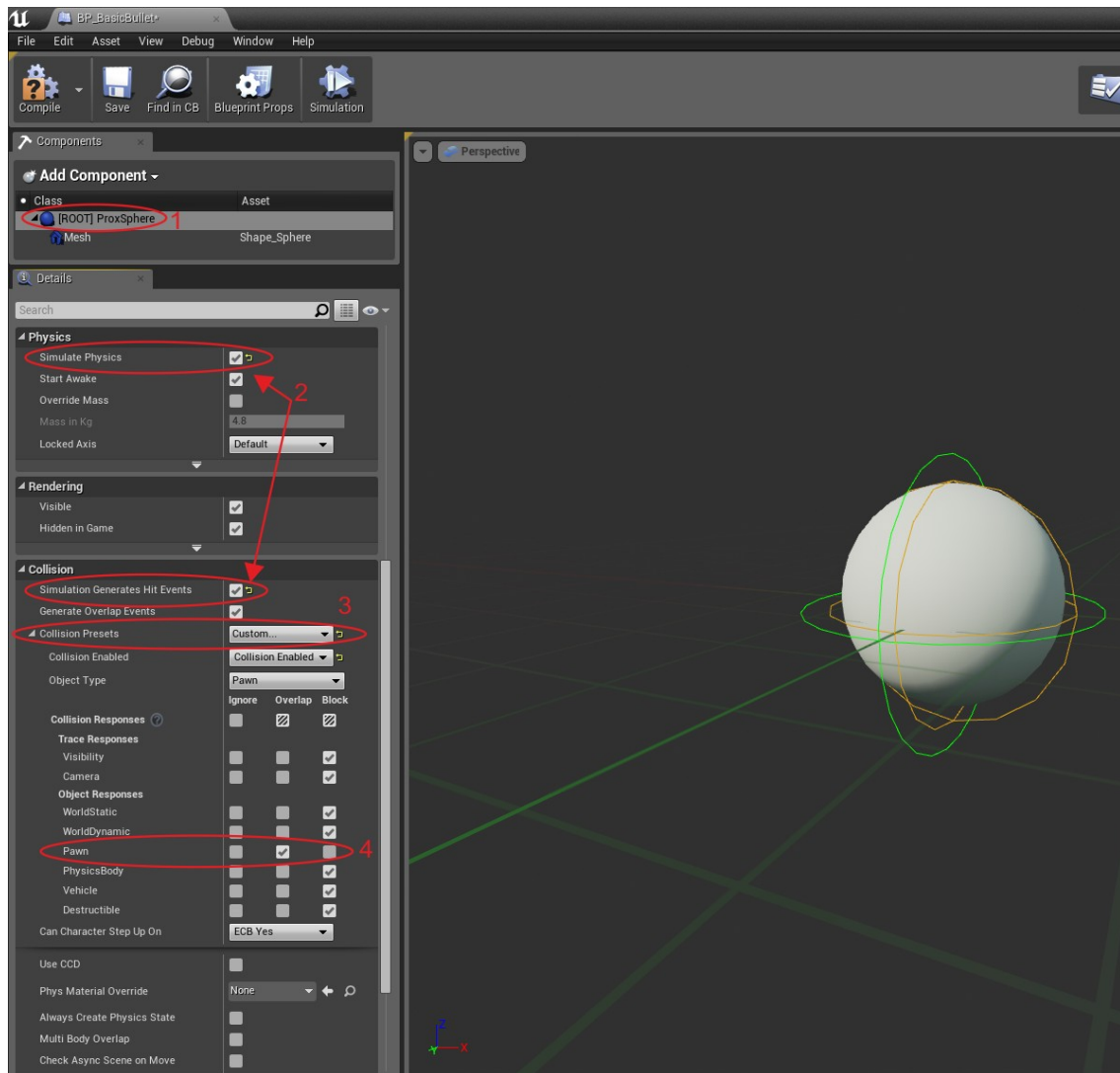




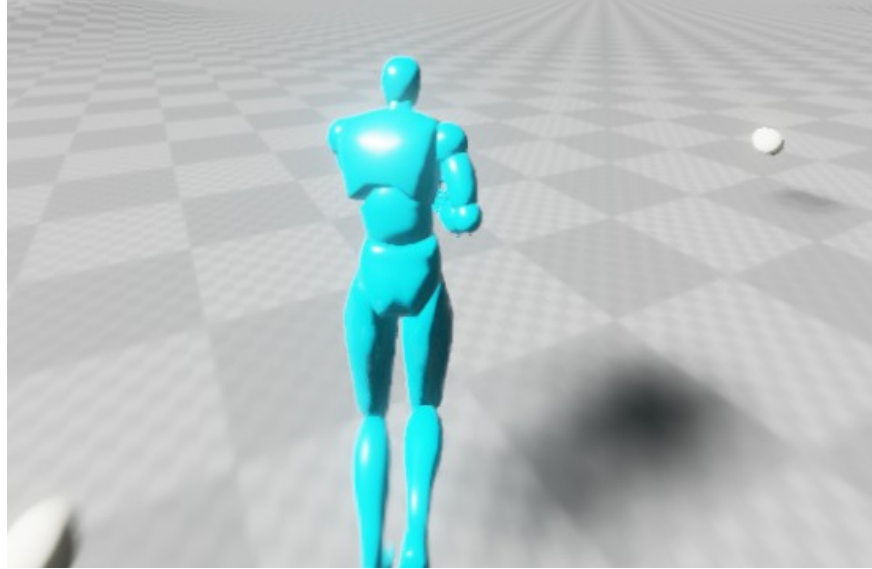












Attack Damage	5.0
Attack Timeout	4.0
BPBullet	BP_BasicBullet

The screenshot shows a 3D software interface with a character model in the center. The character is wearing a brown jacket and grey pants. A red circle highlights the 'Skeleton' button in the top toolbar. The 'Skeleton Tree' panel on the left lists various bones, with 'LeftHand' highlighted and a red circle around it. The 'Previewing' panel on the right shows the current view settings and statistics.

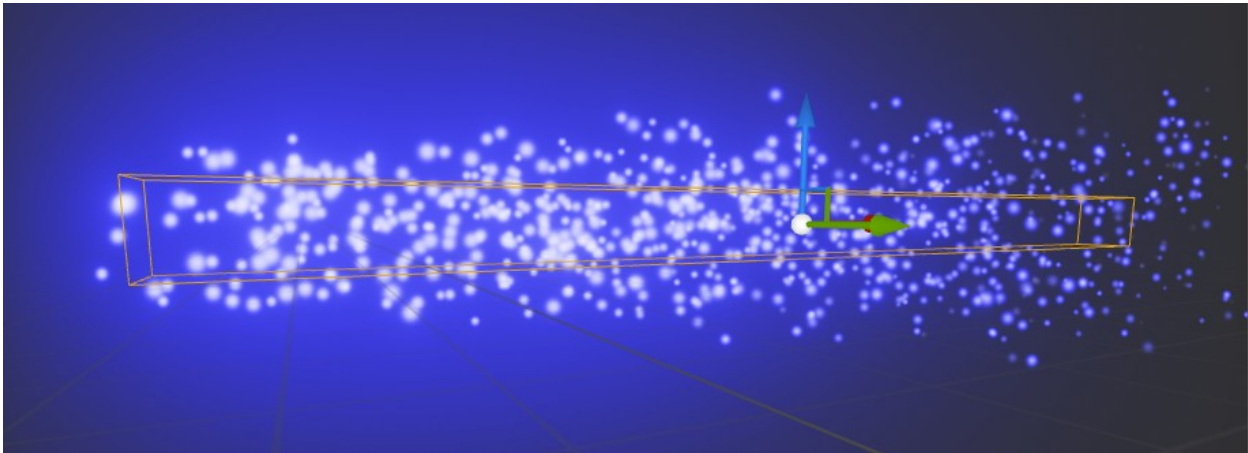
**Skeleton Tree**

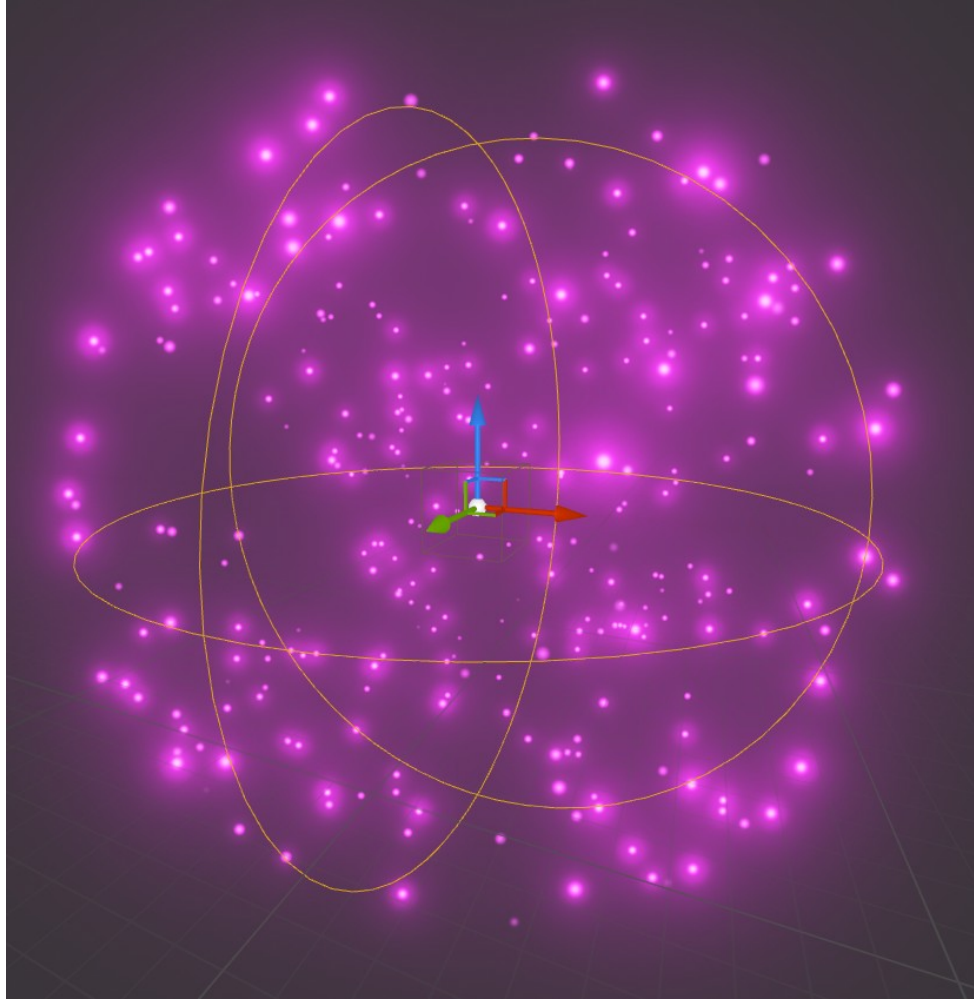
Name	Translatic
Hips	Anima
Spine	Anima
Spine 1	Anima
Spine 2	Anima
Neck	Anima
Head	Anima
HeadTop_End	Anima
LeftShoulder	Anima
LeftArm	Anima
LeftForeArm	Anima
<b>LeftHand</b>	Anima
LeftHandThum	Anima
LeftHandThu	Anima
LeftHandTI	Anima
LeftHand	Anima
LeftHandIndex	Anima
LeftHandInde	Anima
LeftHandIn	Anima

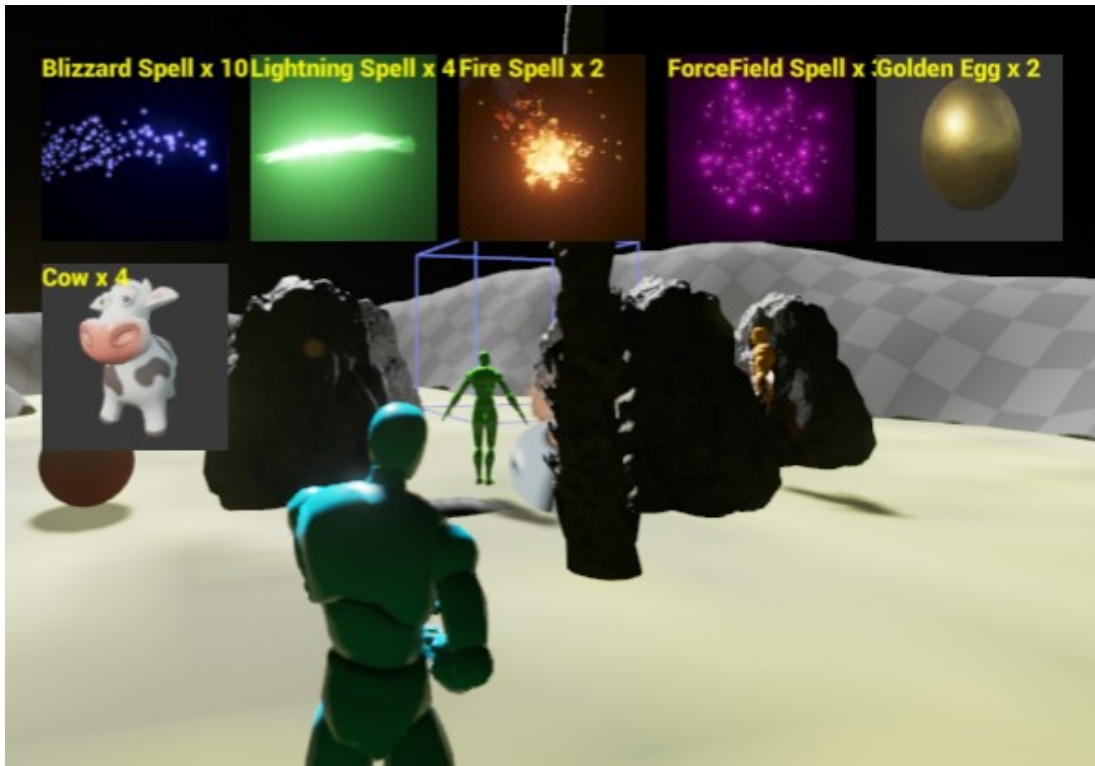
**Previewing None**

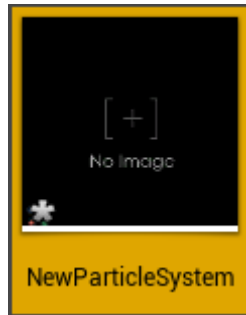
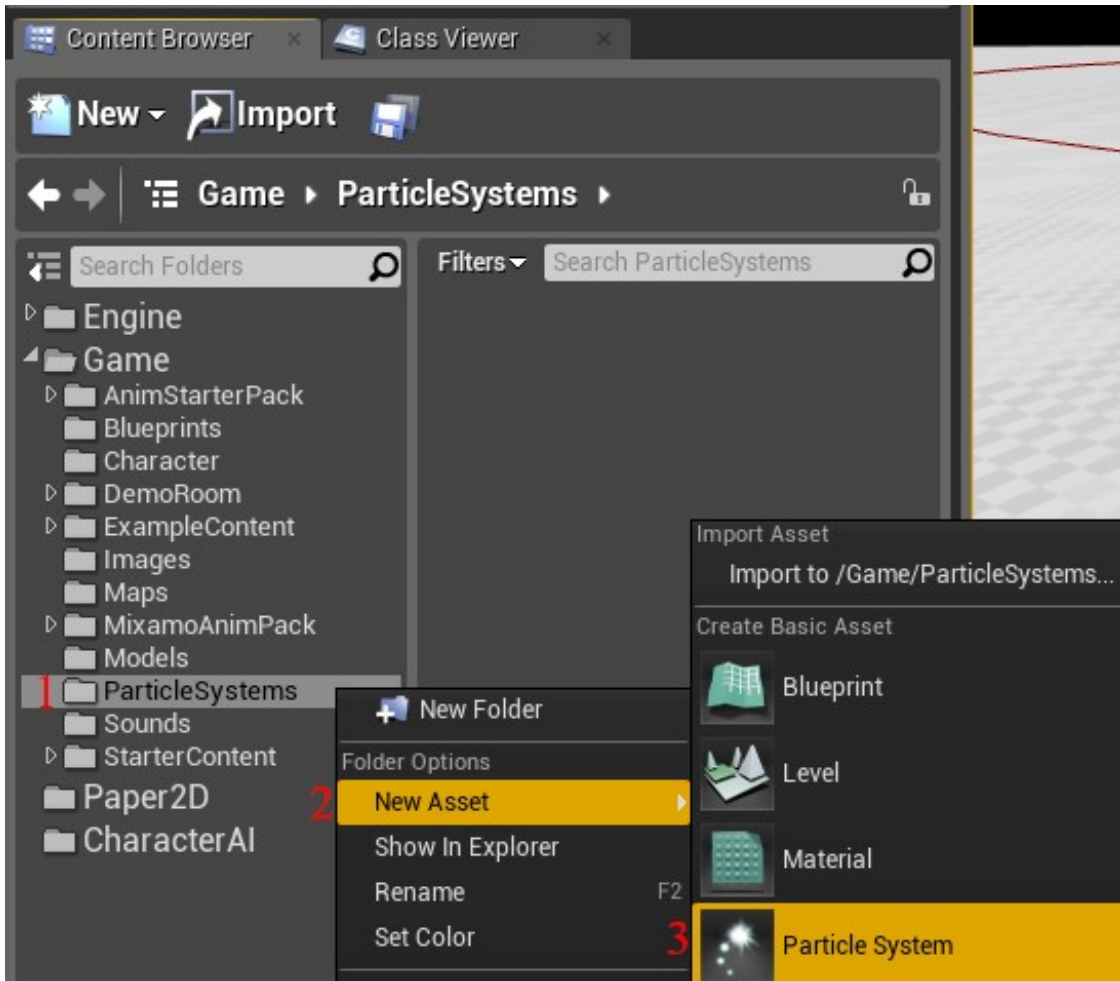
LOD: 0  
Current Screen Size: 1.40  
Triangles: 14935  
Vertices: 11139  
UV Channels: 3  
Approx. Size: 381x65x277

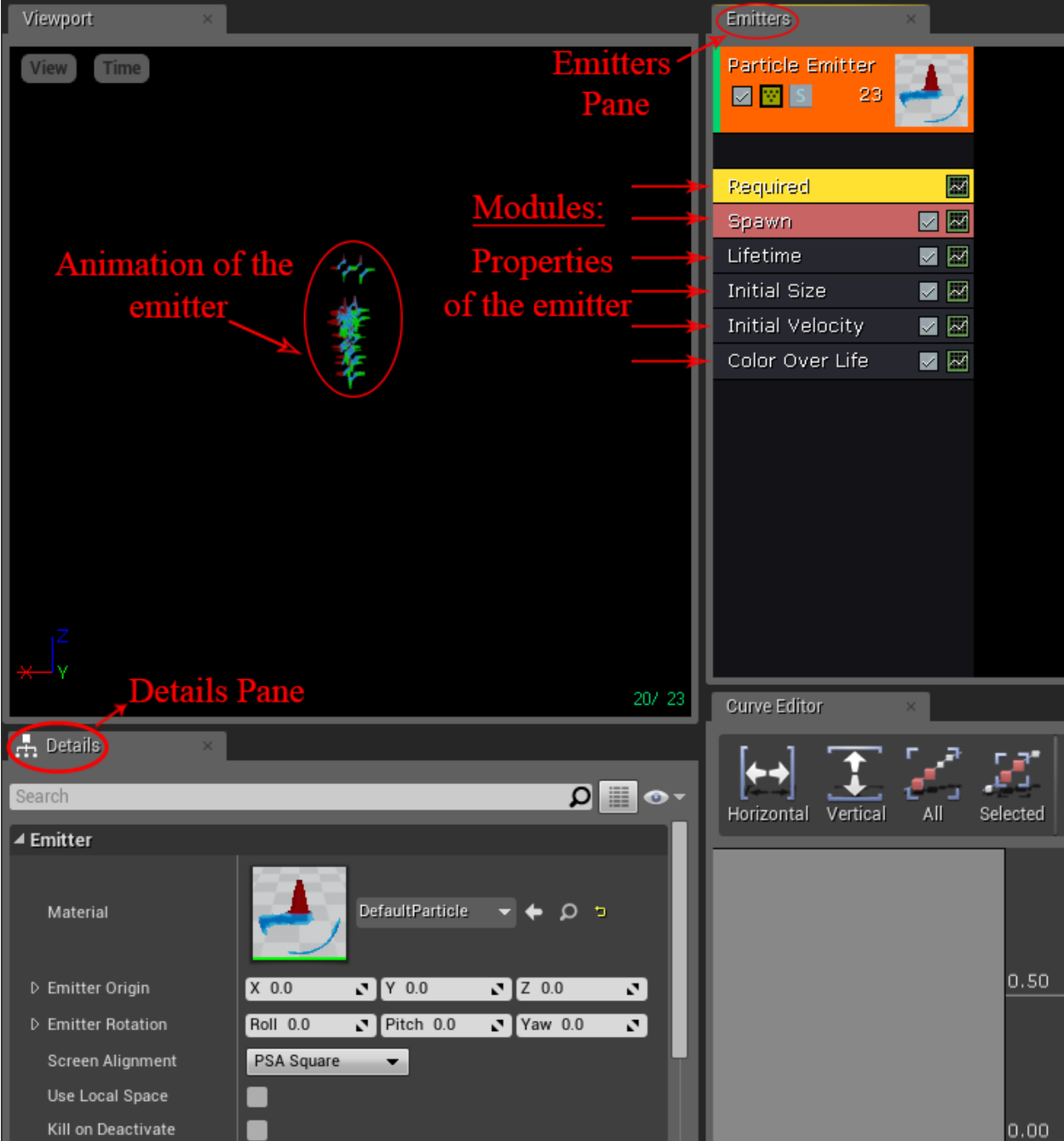
**Chapter 12. Spell Book**

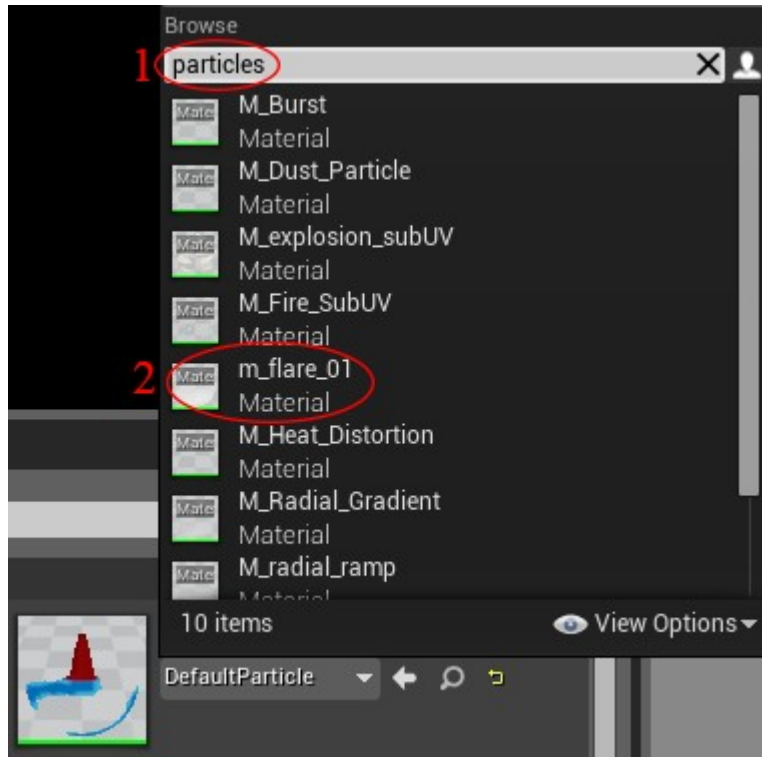




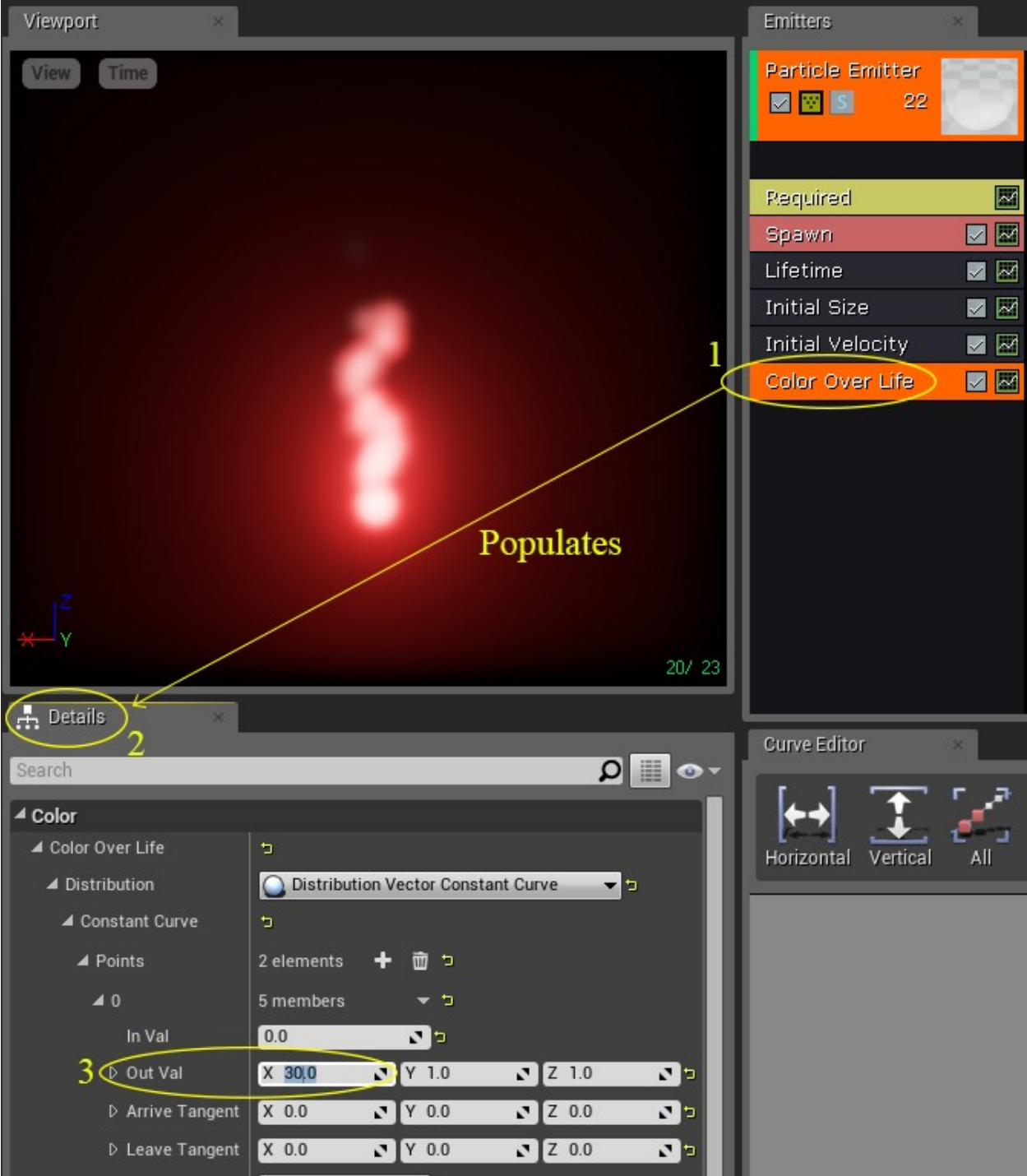


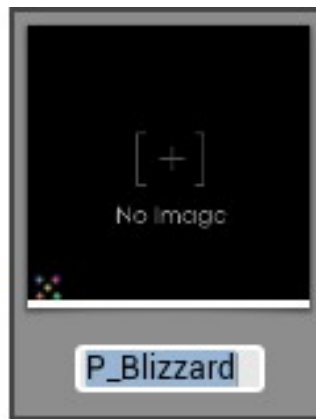
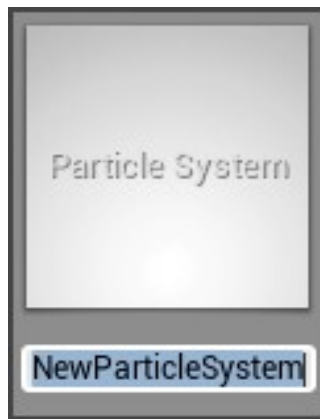
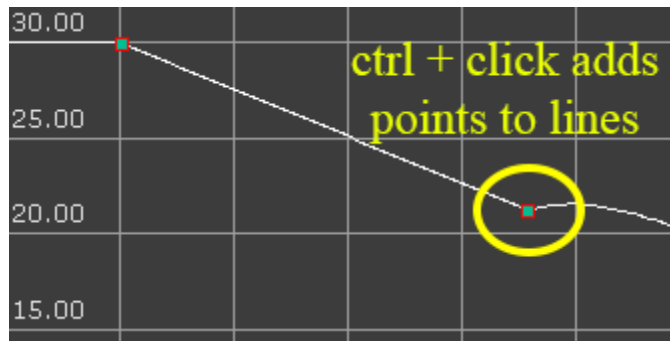
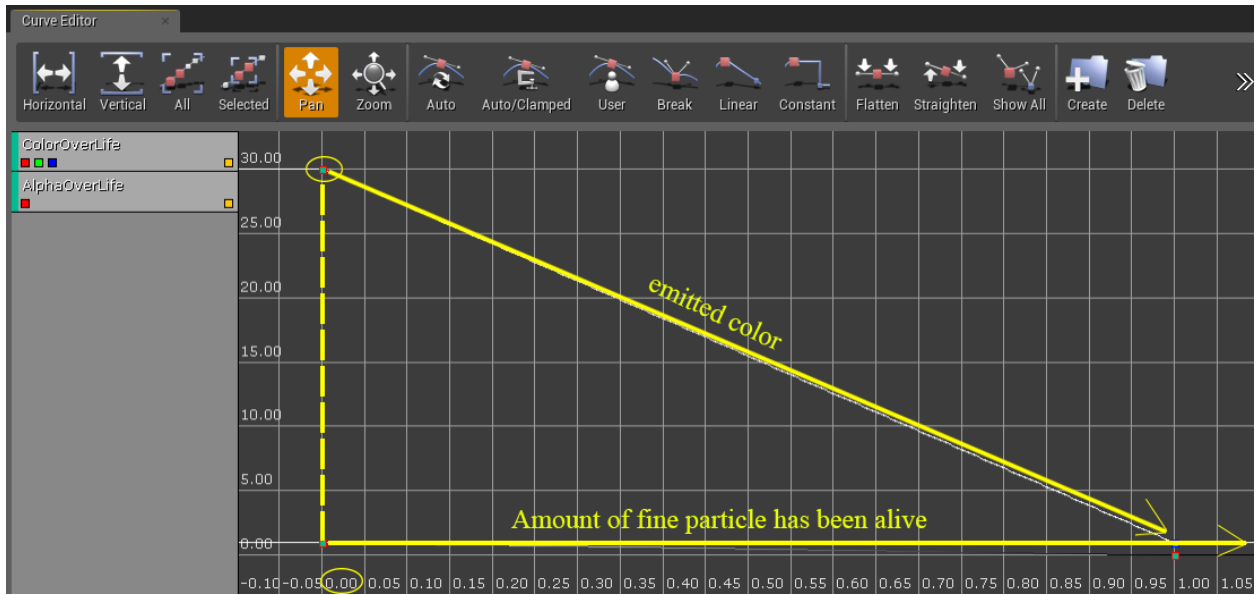


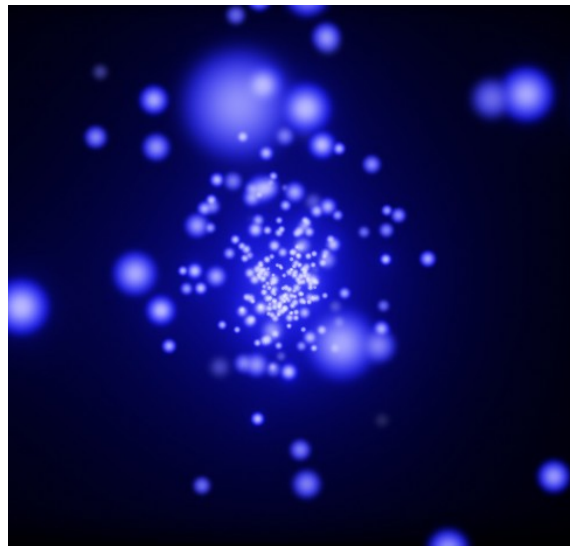












Particle Emitter

S 407

Required

Spawn

Lifetime

Initial Size

Initial Velocity

Color Over Life

Emitter

Material m\_flare\_01

Particle Emitter 407

- Required
- Spawn
- Lifetime
- Initial Size
- Initial Velocity
- Color Over Life

Spawn

- Rate
- Distribution
  - Constant: 200.0

The image shows a Unity Particle Emitter in a 3D environment. The emitter is positioned vertically, creating a trail of white, semi-transparent particles that appear to be falling or moving downwards. The background is dark, making the white particles stand out.

The Particle Emitter inspector panel is visible on the right side of the screen. It includes the following settings:

- Particle Emitter**: 407 particles, with a yellow 'S' icon.
- Required**: Checked.
- Spawn**: Checked.
- Lifetime**: Checked (highlighted in orange).
- Initial Size**: Checked.
- Initial Velocity**: Checked.
- Color Over Life**: Checked.

The **Lifetime** settings are expanded, showing the following configuration:

- Lifetime**: Expanded.
- Distribution**: Expanded.
- Min**: 1.0
- Max**: 2.0
- Distribution**: Float Uniform

Particle Emitter 407

- Required
- Spawn
- Lifetime
- Initial Size**
- Initial Velocity
- Color Over Life

**Size**

- Start Size
  - Distribution: Distribution Vector Uniform
    - Max: X 25.0, Y 25.0, Z 25.0
    - Min: X 12.5, Y 12.5, Z 12.5

Particle Emitter 407

- Required
- Spawn
- Lifetime
- Initial Size
- Initial Velocity**
- Color Over Life

**Velocity**

- Start Velocity
  - Distribution: Distribution Vector Uniform
    - Max: X 1000.0, Y 100.0, Z 100.0
    - Min: X 500.0, Y -100.0, Z -100.0

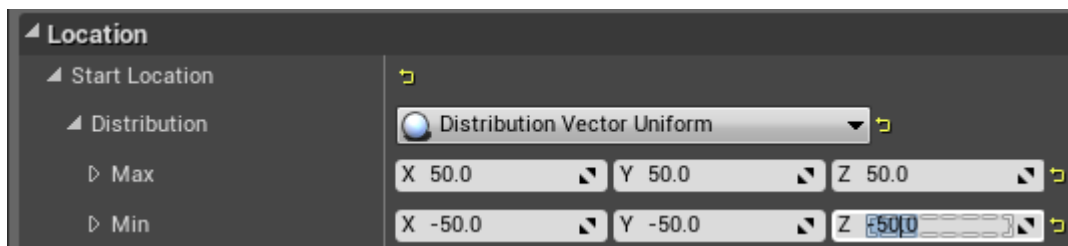
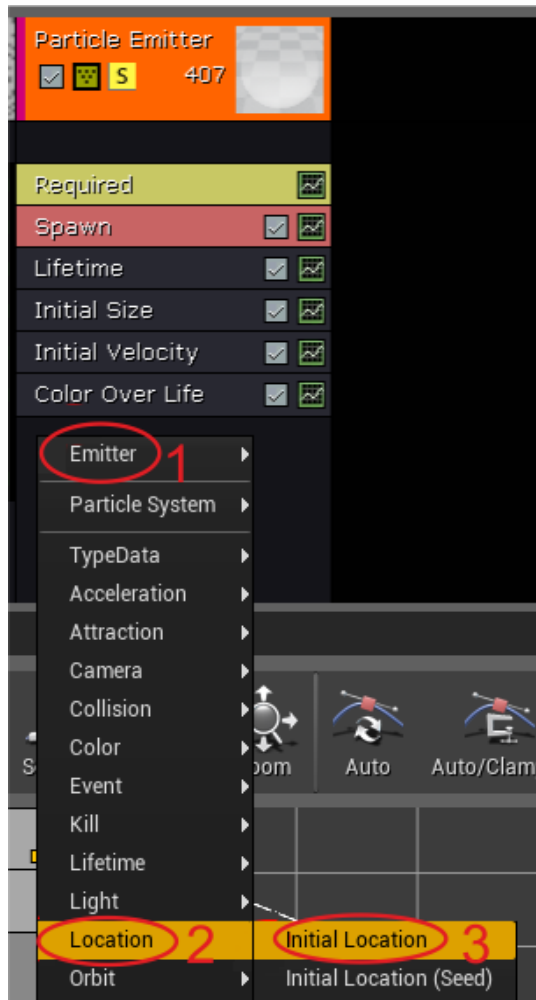
The image shows a software interface for configuring a particle emitter. At the top left, a dark blue background displays a horizontal trail of bright blue particles. To the right of this view is a vertical sidebar with several settings, each with a checkbox and a graph icon:

- Particle Emitter**: Includes a checked checkbox, a yellow 'S' icon, and the number '407'.
- Required**: A yellow bar with a checked checkbox and a graph icon.
- Spawn**: A red bar with a checked checkbox and a graph icon.
- Lifetime**: A dark grey bar with a checked checkbox and a graph icon.
- Initial Size**: A dark grey bar with a checked checkbox and a graph icon.
- Initial Velocity**: A dark grey bar with a checked checkbox and a graph icon.
- Color Over Life**: An orange bar with a checked checkbox and a graph icon.

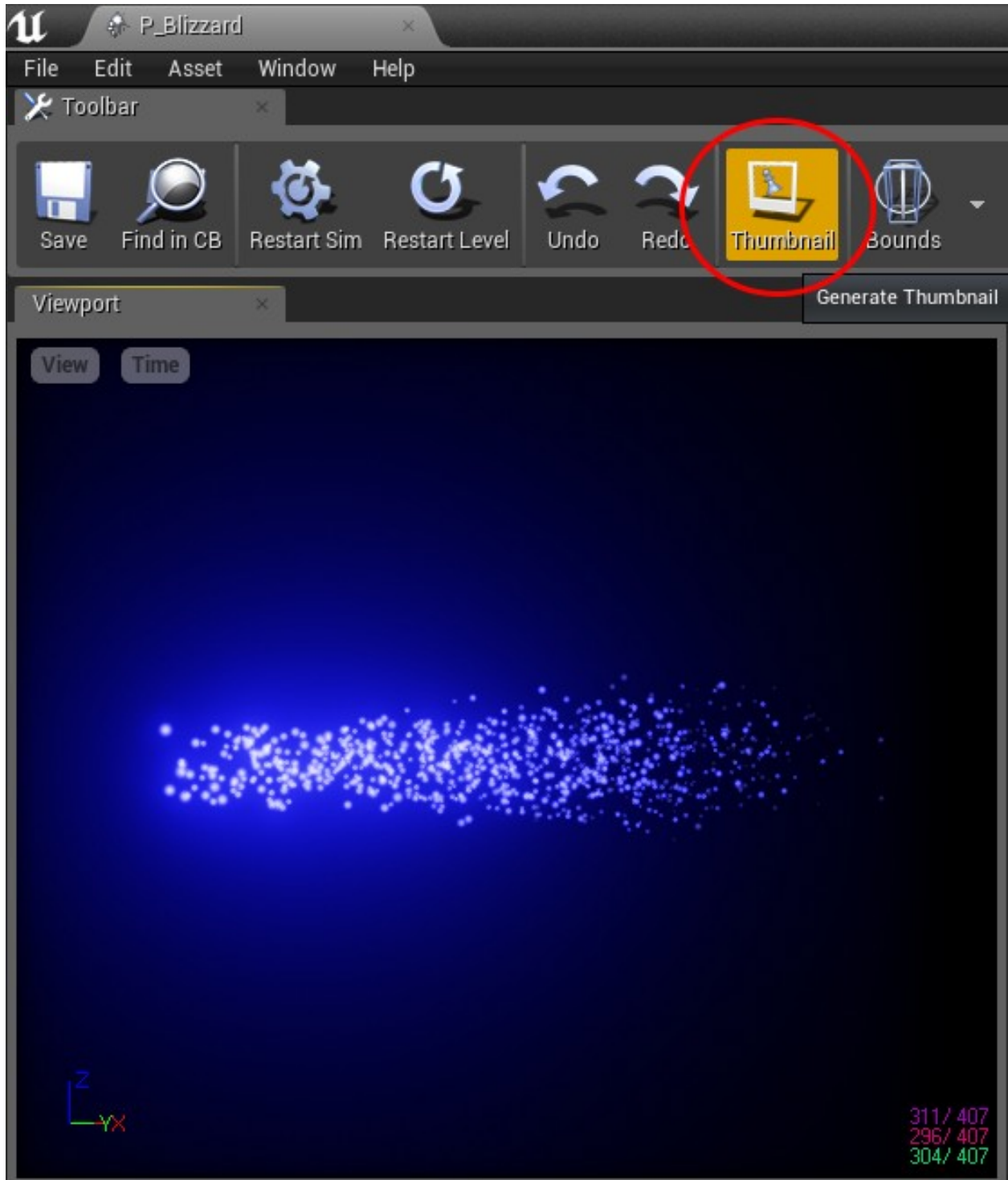
Below the particle view is a detailed configuration panel for the 'Color Over Life' property:

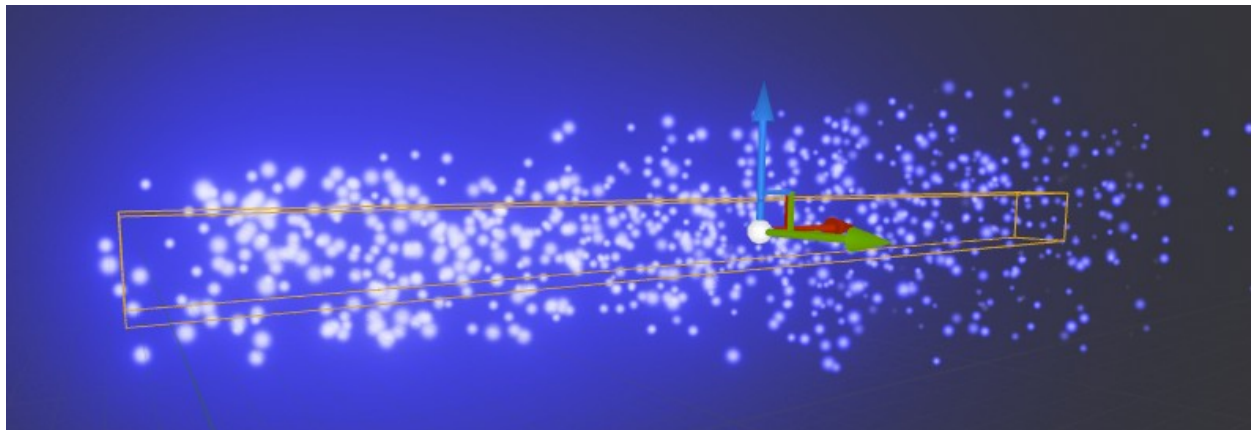
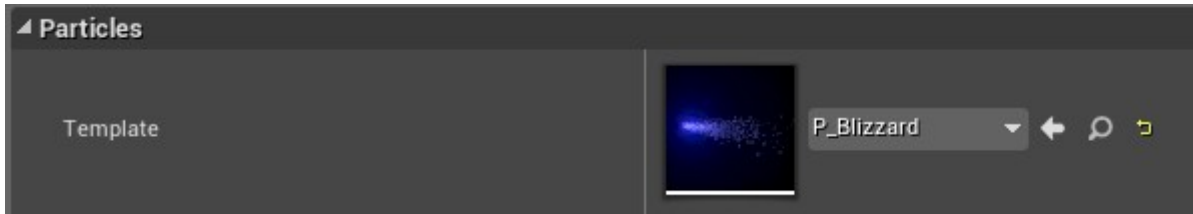
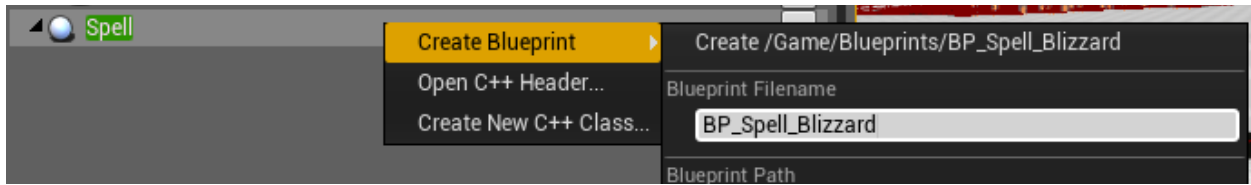
- Color Over Life**: The main section header.
- Distribution**: A dropdown menu set to 'Distribution Vector Constant Curve'.
- Constant Curve**: A sub-section header.
- Points**: A sub-section header.
- 0**: A sub-section header for the first point.
- In Val**: A text input field containing '0.0'.
- Out Val**: Three coordinate input fields: X 1.0, Y 1.0, and Z 100.0.
- Arrive Tangent**: Three coordinate input fields: X 0.0, Y 0.0, and Z 0.0.
- Leave Tangent**: Three coordinate input fields: X 0.0, Y 0.0, and Z 0.0.

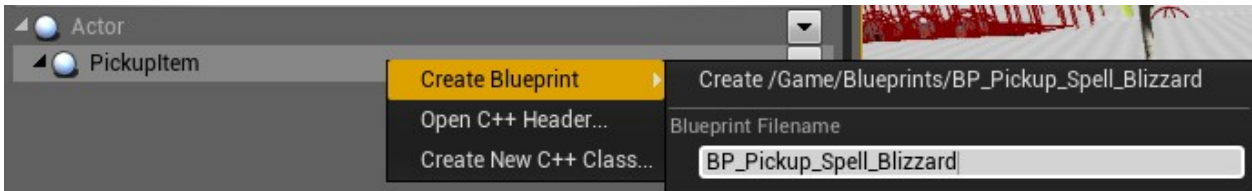
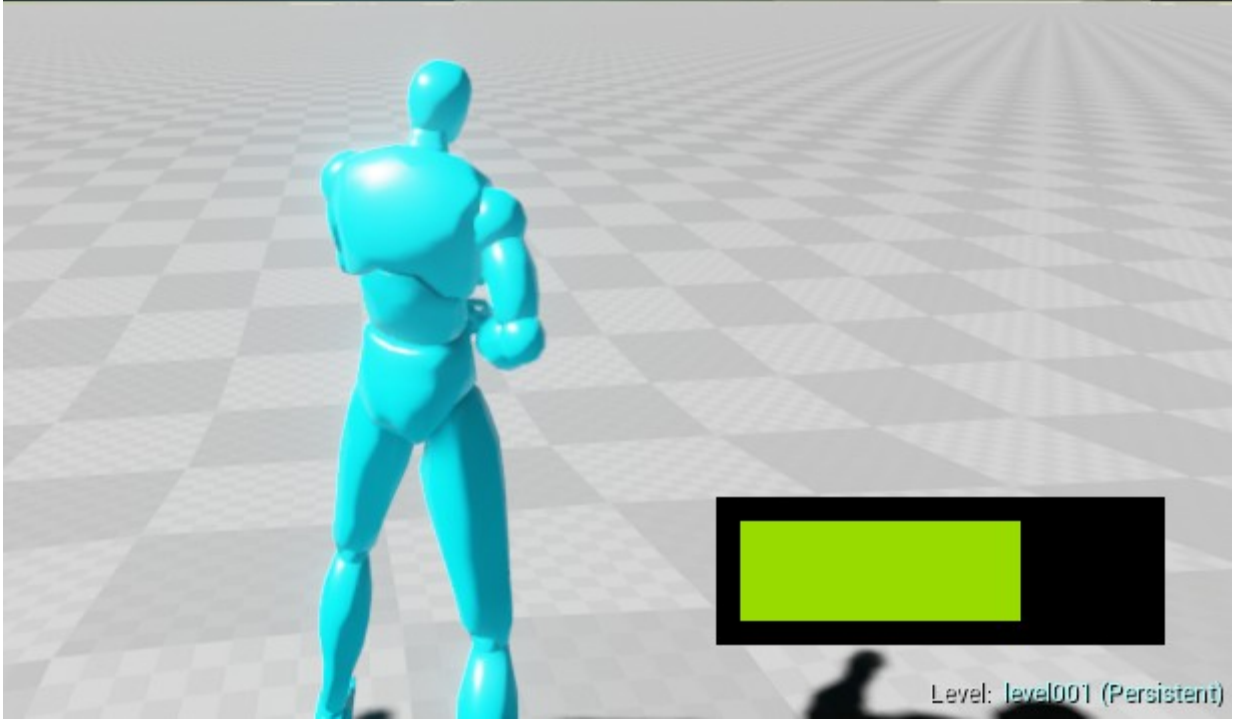


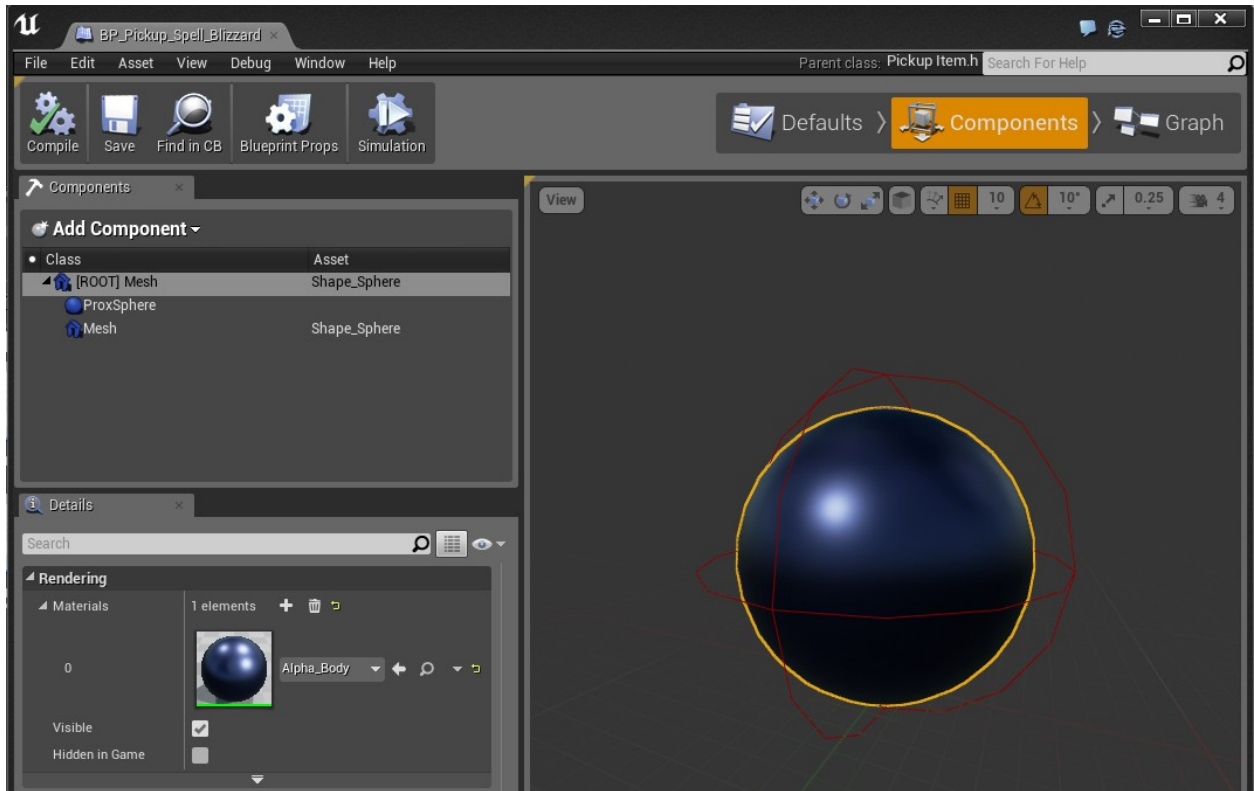
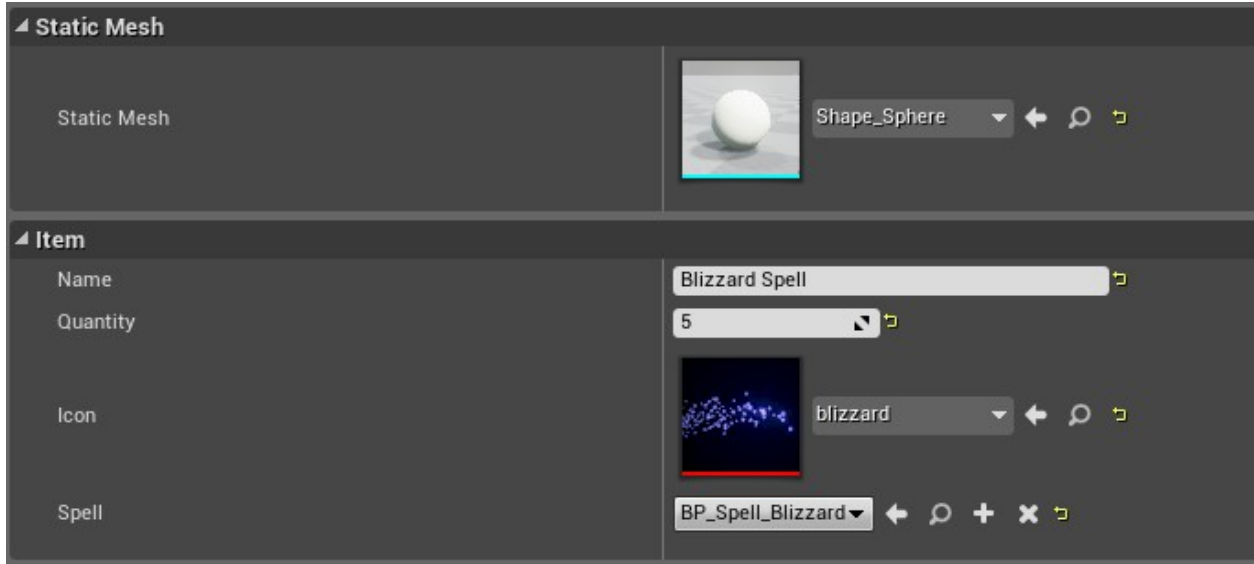






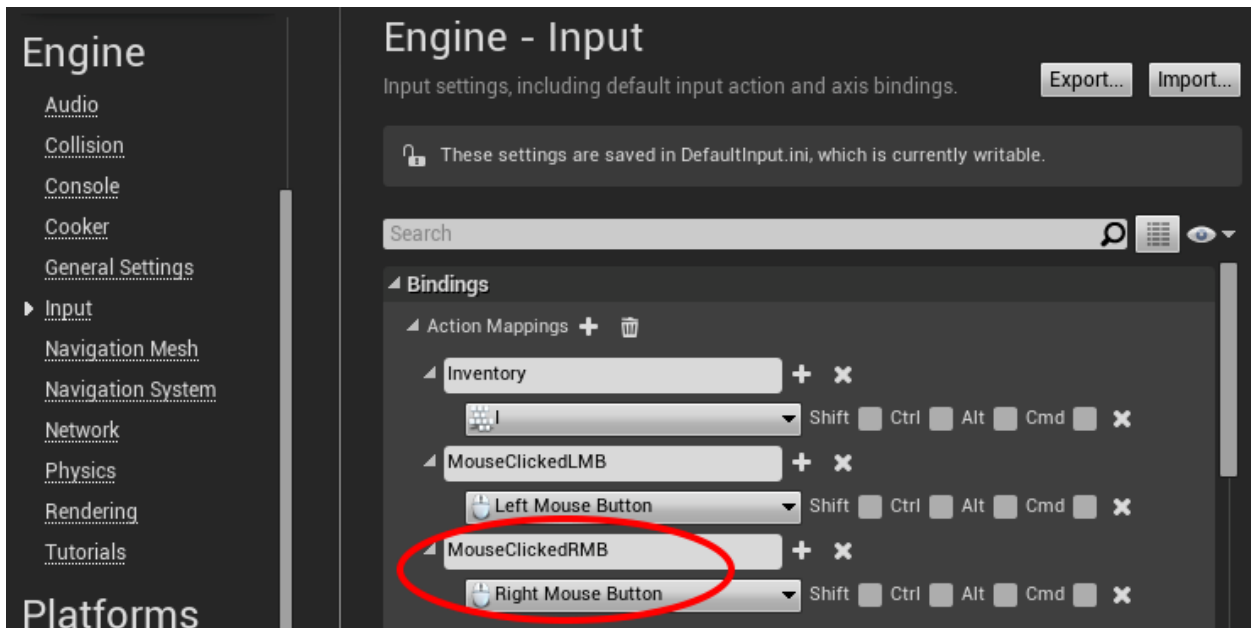








Person right clicks → AAvatar::MouseRightClicked()  
 → AMyHUD::MouseRightClicked()  
 → AAvatar::CastSpell()





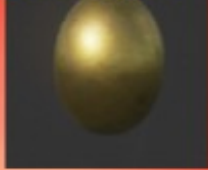
Lightning Spell x 4



ForceField Spell x 3



Golden Egg x 1



Fire Spell x 6



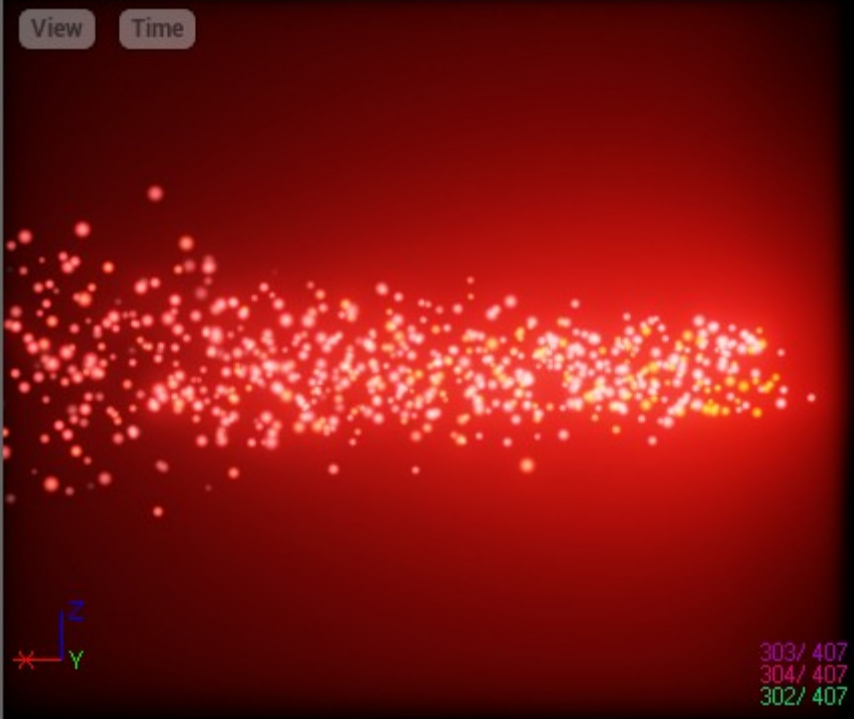
Blizzard Spell x 5





Viewport

View Time



303/ 407  
304/ 407  
302/ 407

Details

Search

Color

- Color Over Life
  - Distribution
    - Constant Curve
      - Points
        - 0
          - In Val: 0.0
          - Out Val: X 100.0, Y 1.0, Z 1.0
          - Arrive Tange: X 0.0, Y 0.0, Z 0.0
          - Leave Tange: X 0.0, Y 0.0, Z 0.0