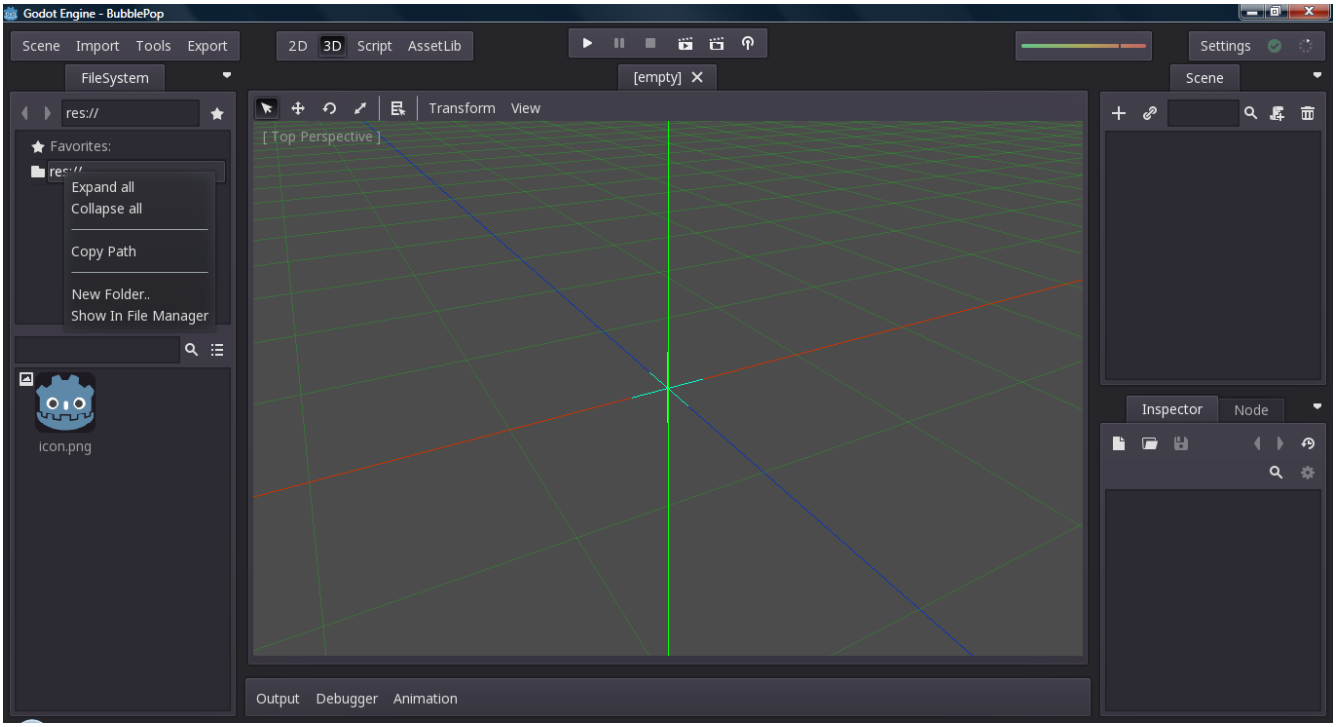
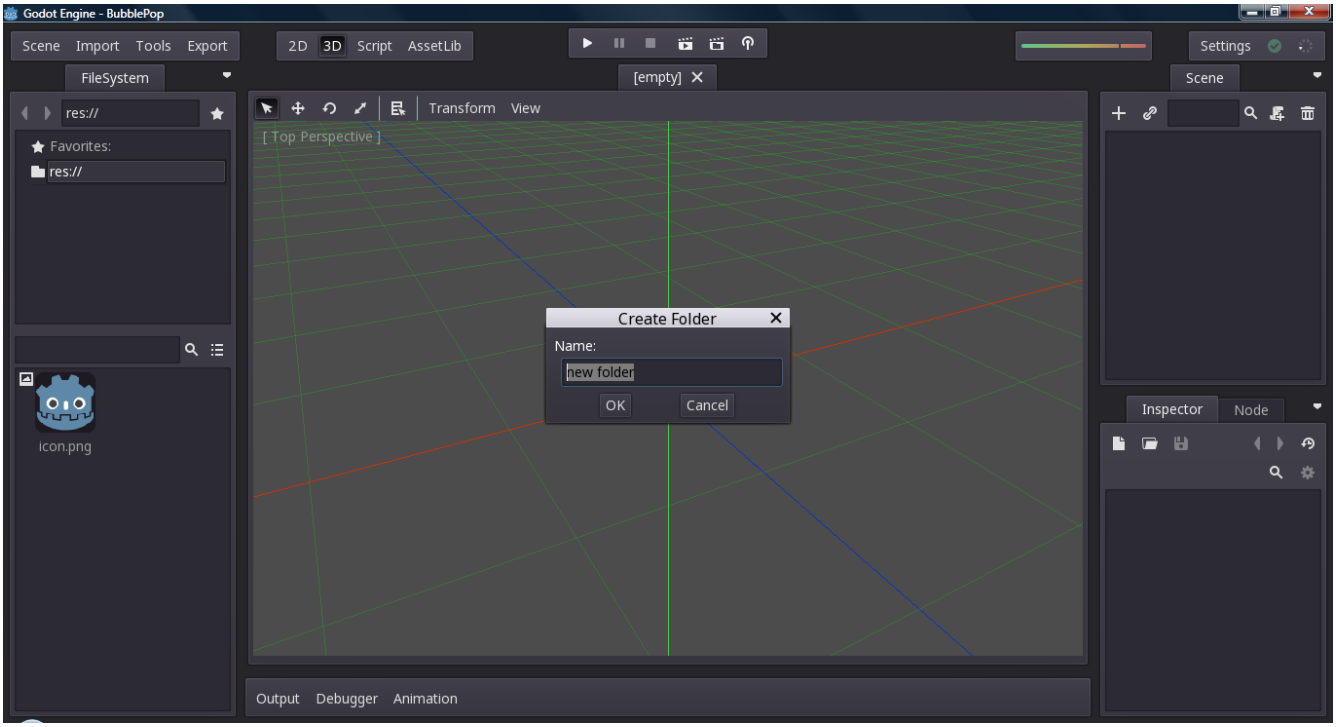
Godot 2D Game
Lesson 2: Sprites

In this lesson, we begin designing the sprites for our game. A sprite is a 2D object represented by an image such as these:

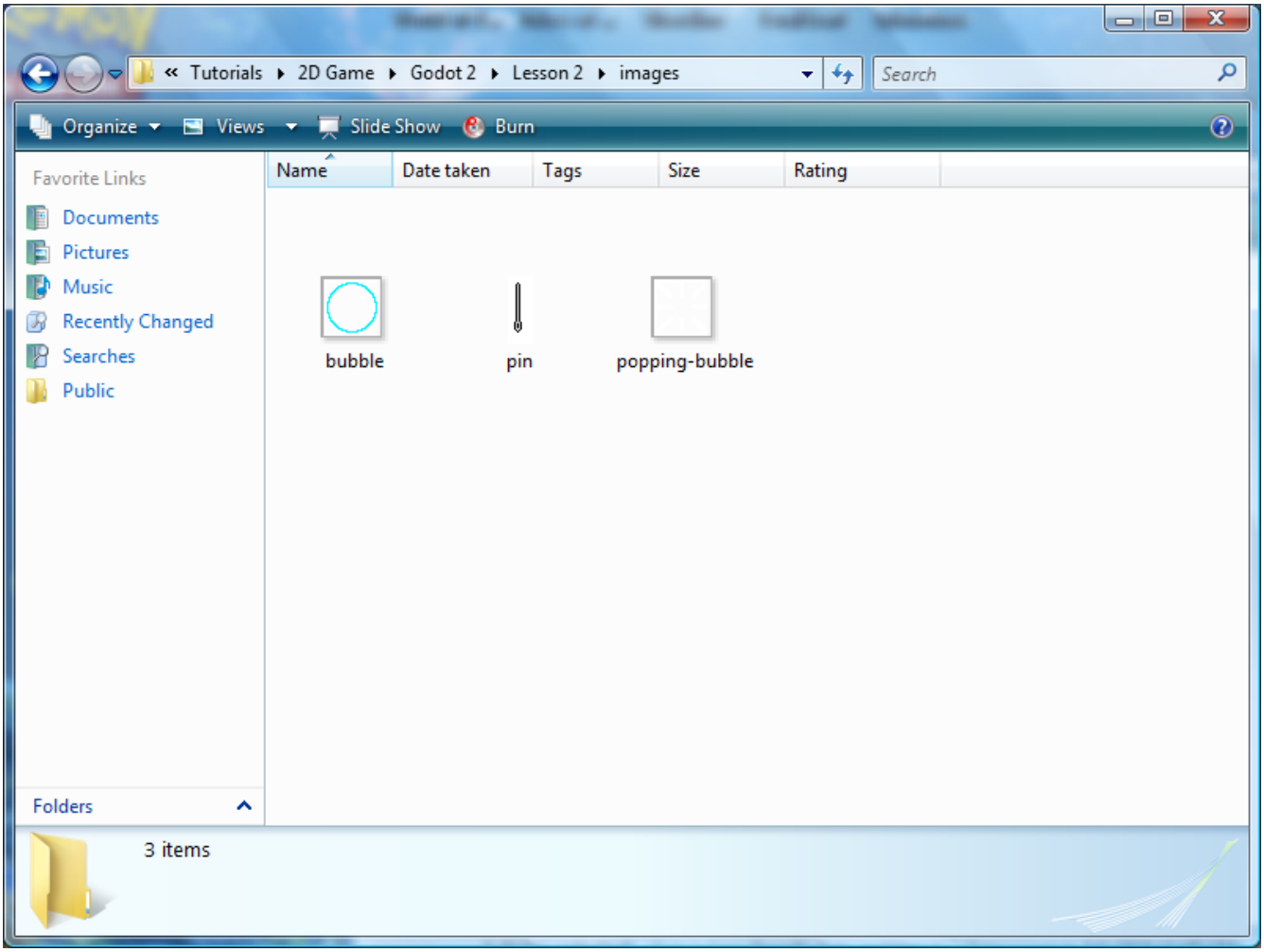
We will start by creating a new folder called “images” inside our project folder. Right click the “res://” folder in the upper left pane in the project editor:



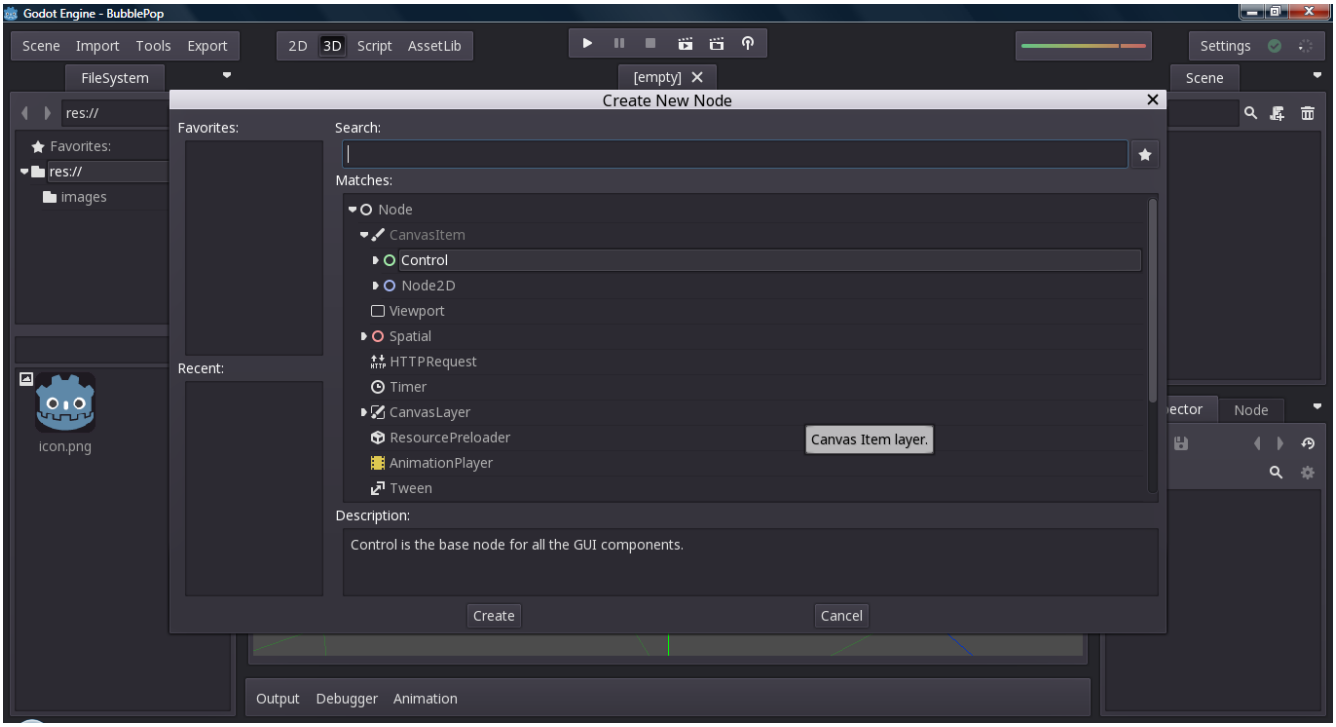
Now choose “New Folder...”:



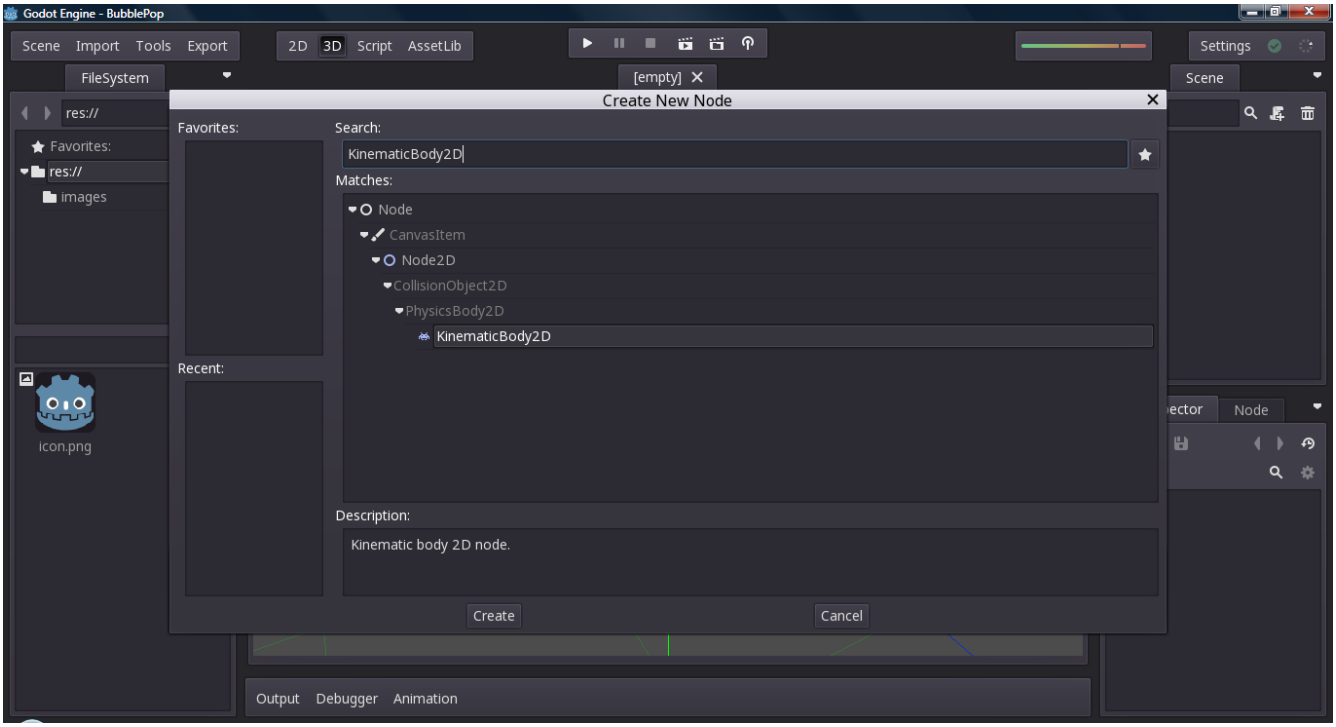
Type “images” in the box and click “OK”. Now save the 3 images at the beginning of the tutorial inside your new “images” folder:



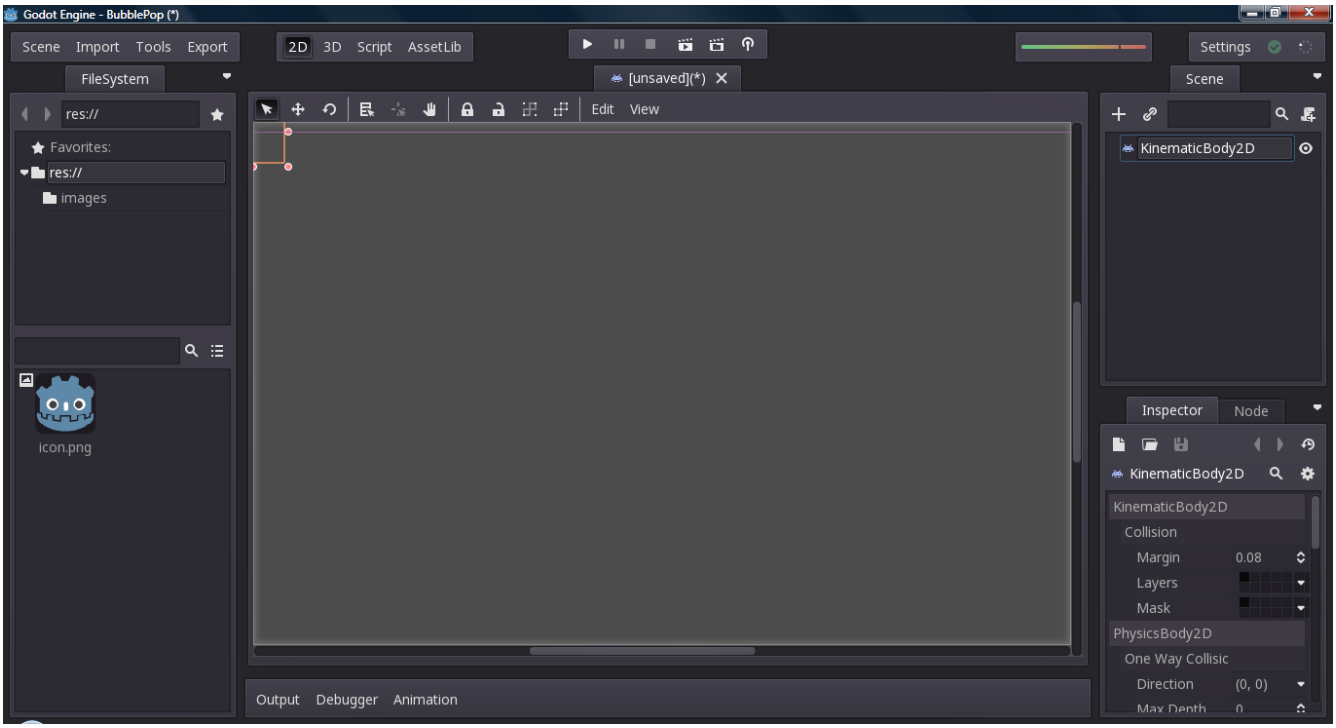
Next, go back to the project editor and click the plus sign button on the left side of the upper right pane:



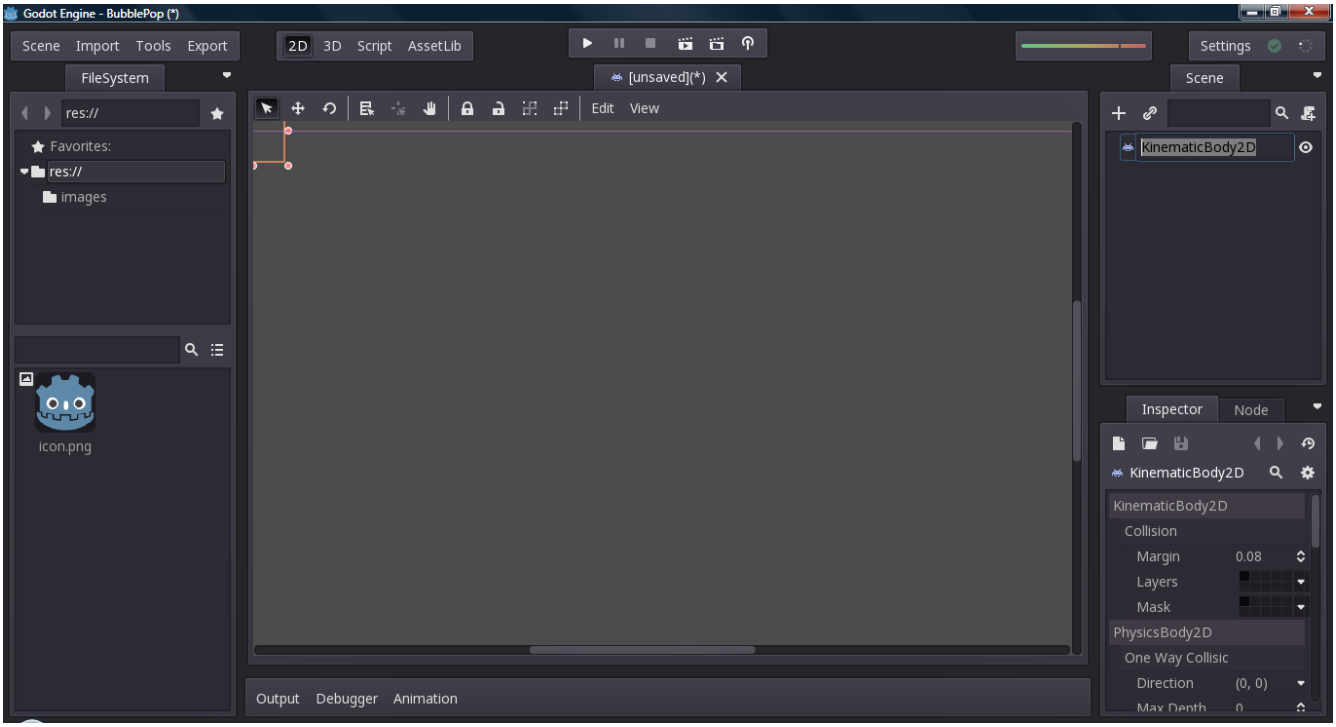
This dialog is used to choose what type of scene node you want to create. Every scene is structured like a tree. The first node in the scene is called the root node and every other node is a child of it. Each scene can represent a single object or game component. Typically we start by creating the smallest parts of our game first such as sprites and then put the smaller pieces together to form larger parts of the game. We will start by creating a bubble sprite. However, we need to be able to detect when our bubbles collide with each other or the pin sprite. We also need control over the movement of our bubbles and some simple physics. Therefore, the root node for our bubble will be a KinematicBody2D:



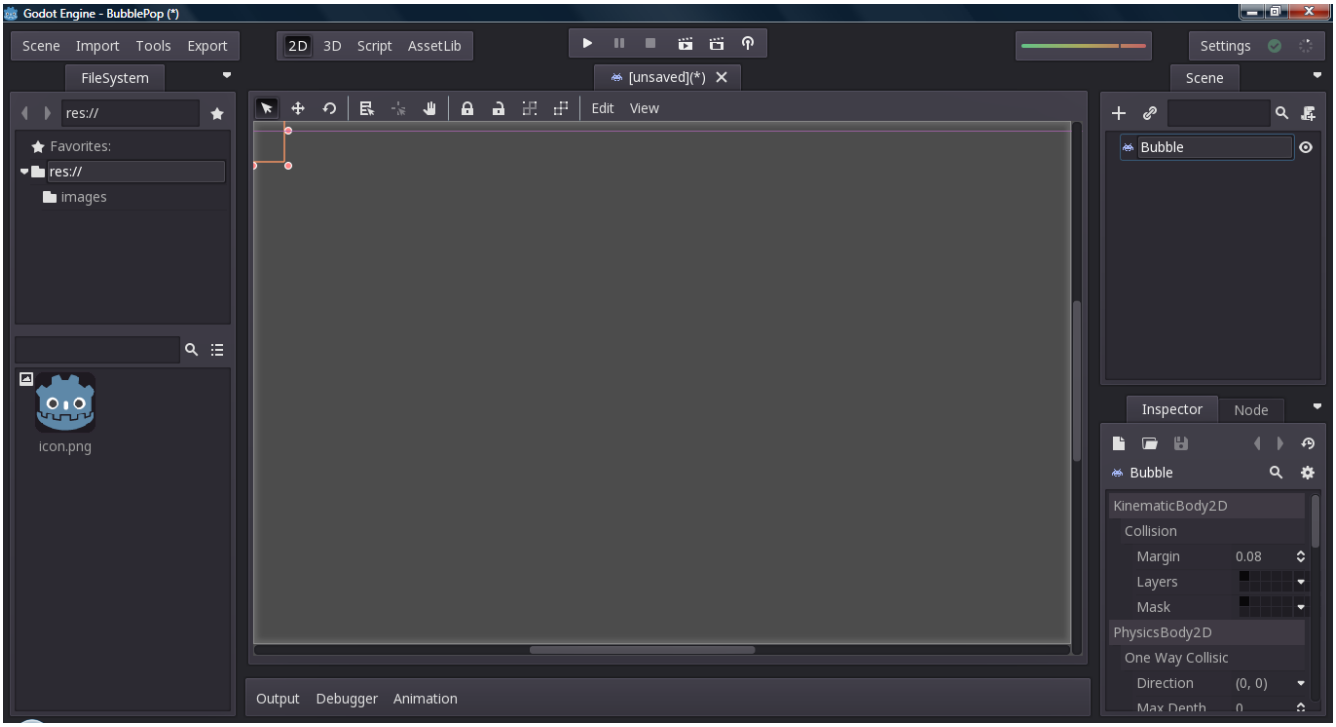
After you click “Create”, you will see our new KinematicBody2D in the scene tree:



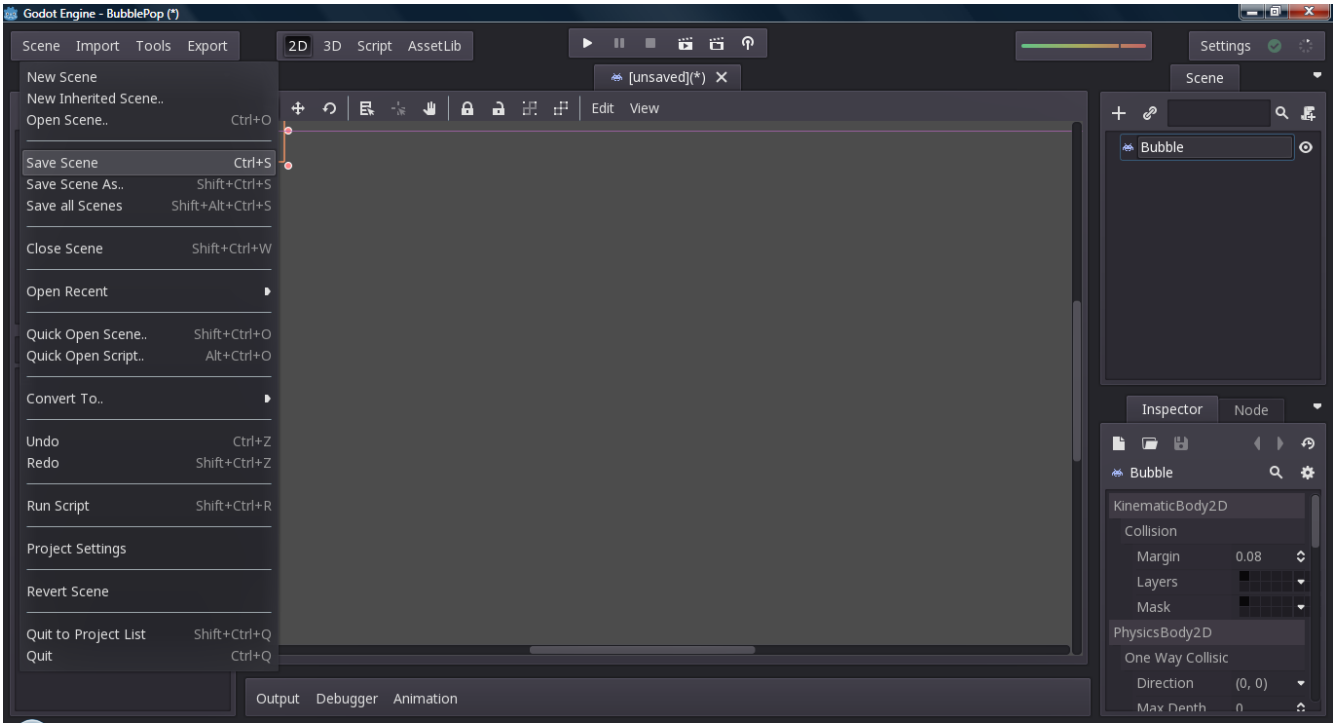
Next we need to set the name of our root node. With the node selected, click its name in the upper right pane one time:



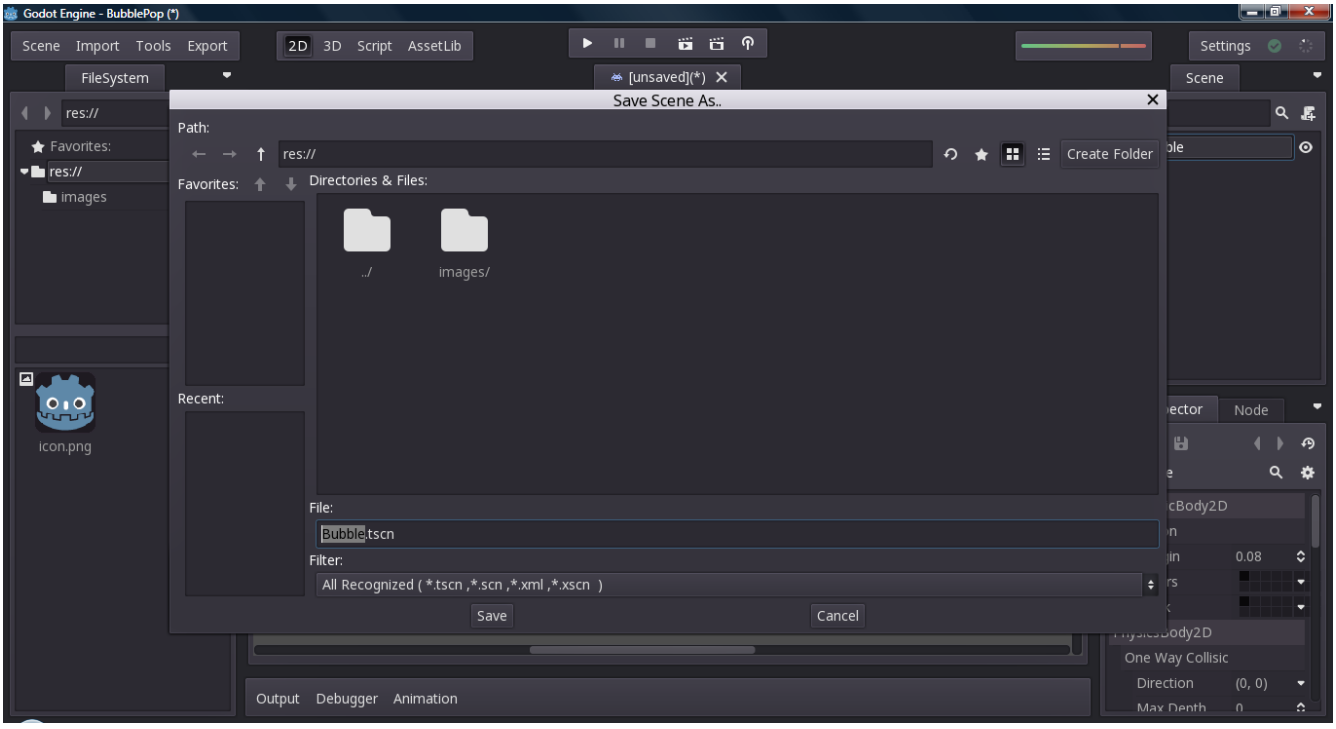
Now type “Bubble” and press enter:



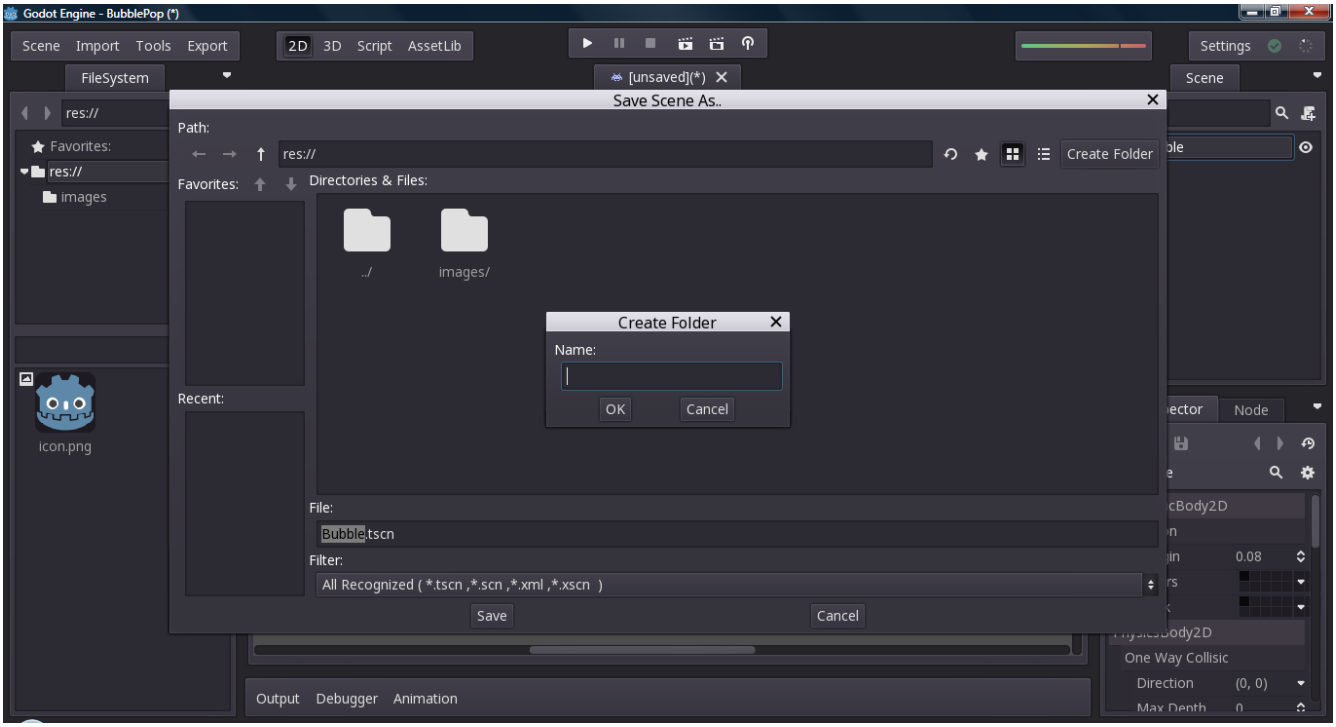
Changing the name of any node works the same way. Before we continue, let’s save our new scene. Click the “Scene” menu:



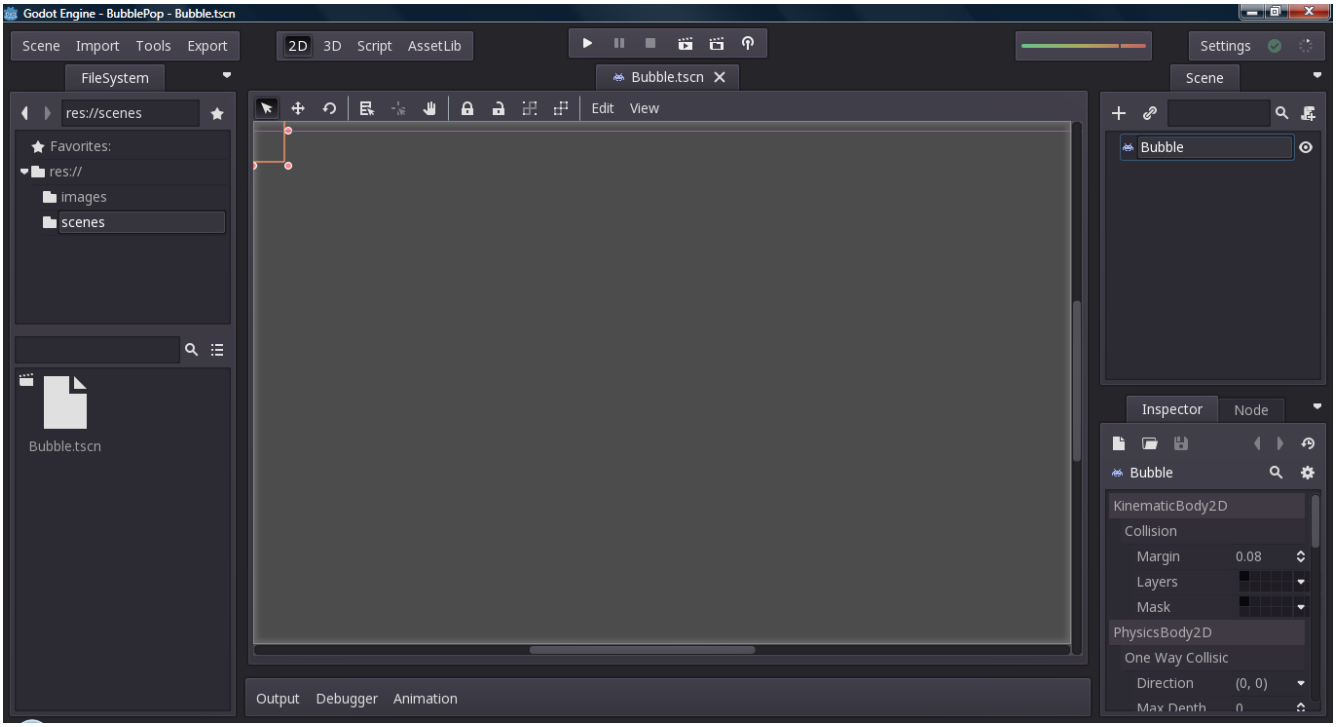
Now choose “Save Scene” to open the save dialog:



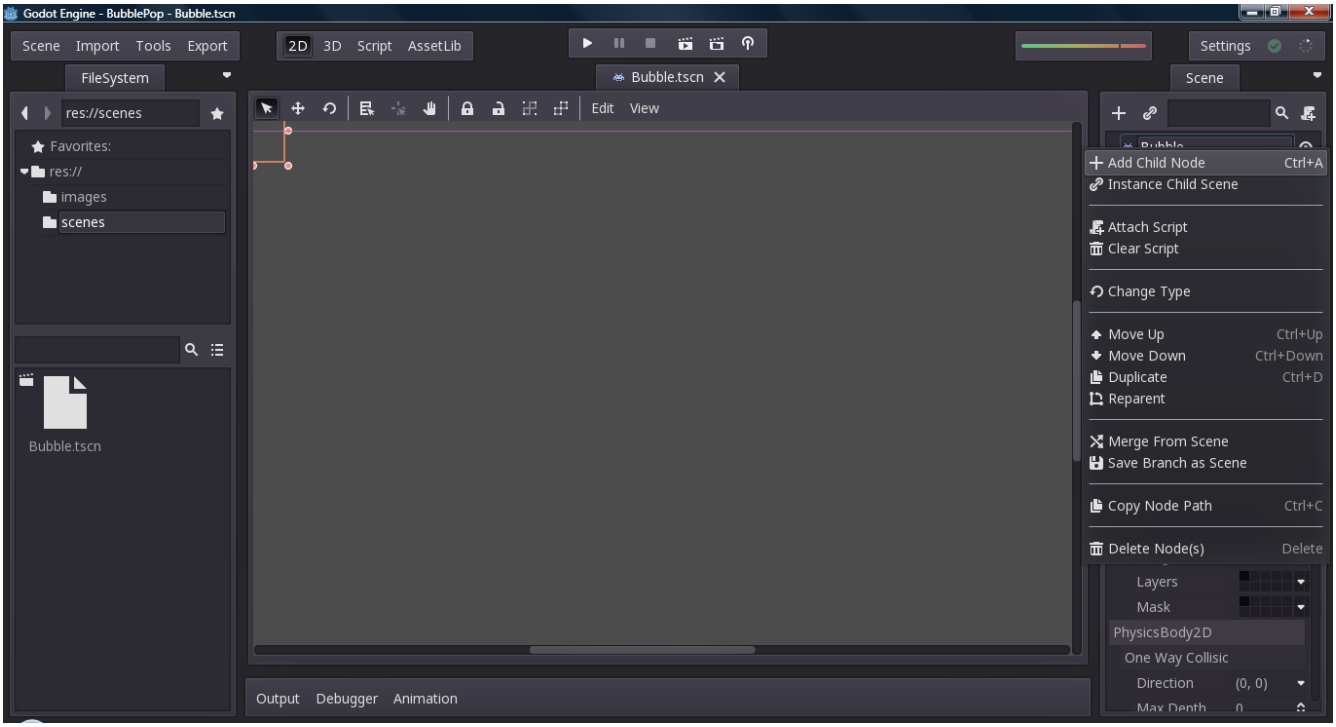
We will be saving all our scenes in a subfolder called “scenes”. Click the “Create Folder” button:



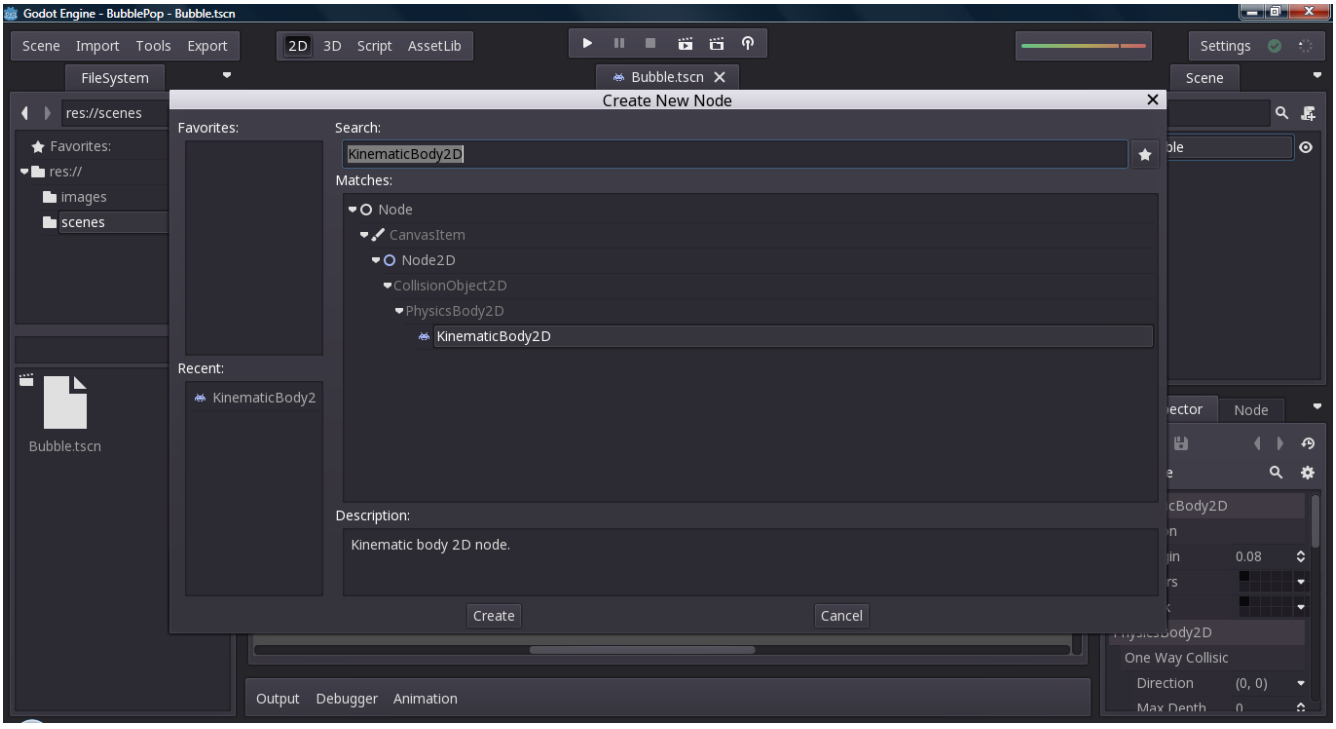
Now type “scenes” and click “OK”. Then click “Save” in the save dialog. Now that we have saved our new scene, we can see it in the lower left pane if we click the “scenes” folder in the upper left pane:



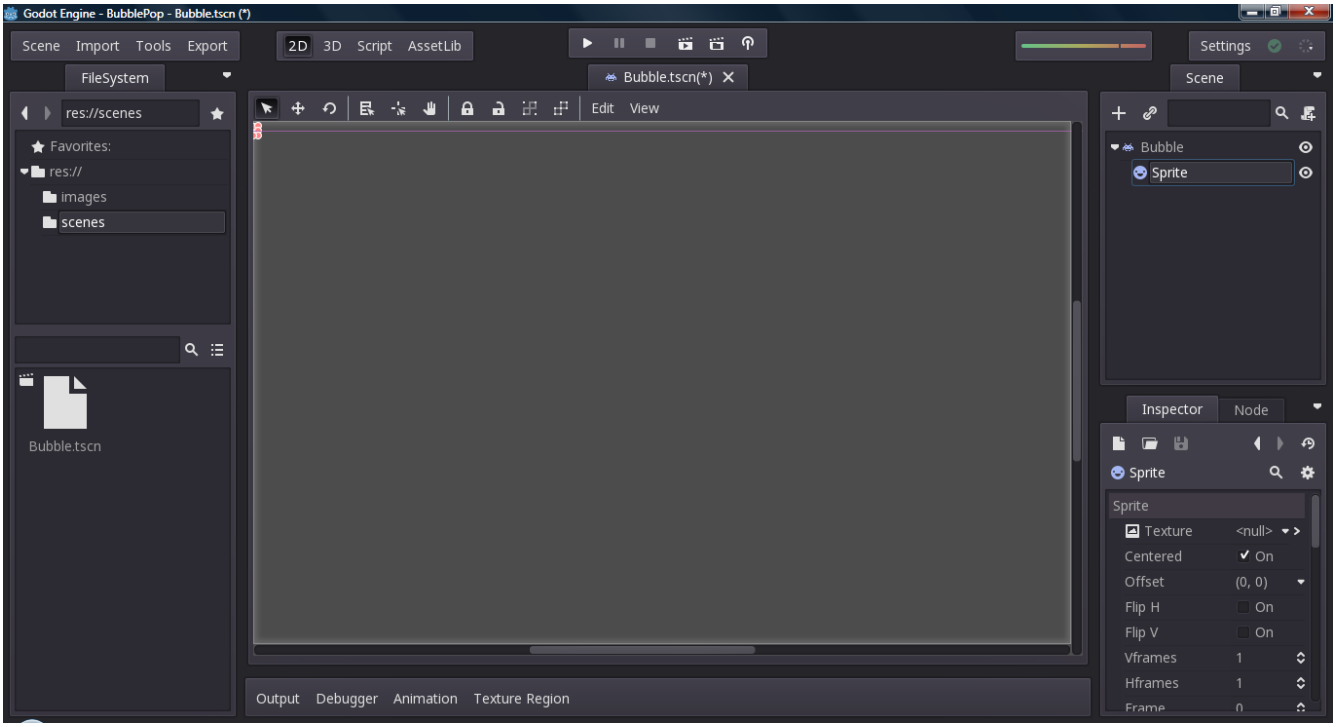
Be sure to save your work often. The “Save All Scenes” command in the “Scene” menu will save all changes to all scenes and scripts. Now we need to add our sprite to the scene. Right-click the “Bubble” node:



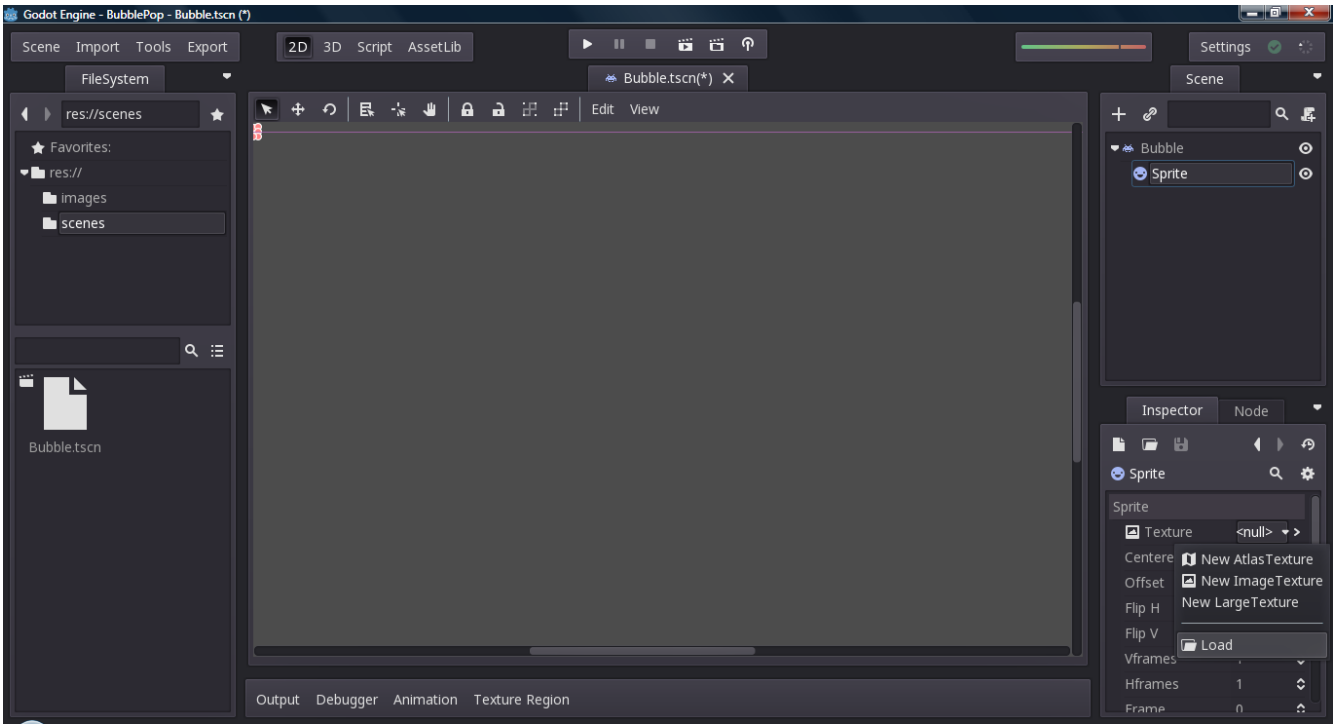
Click “Add Child Node” and the create create node dialog will appear:



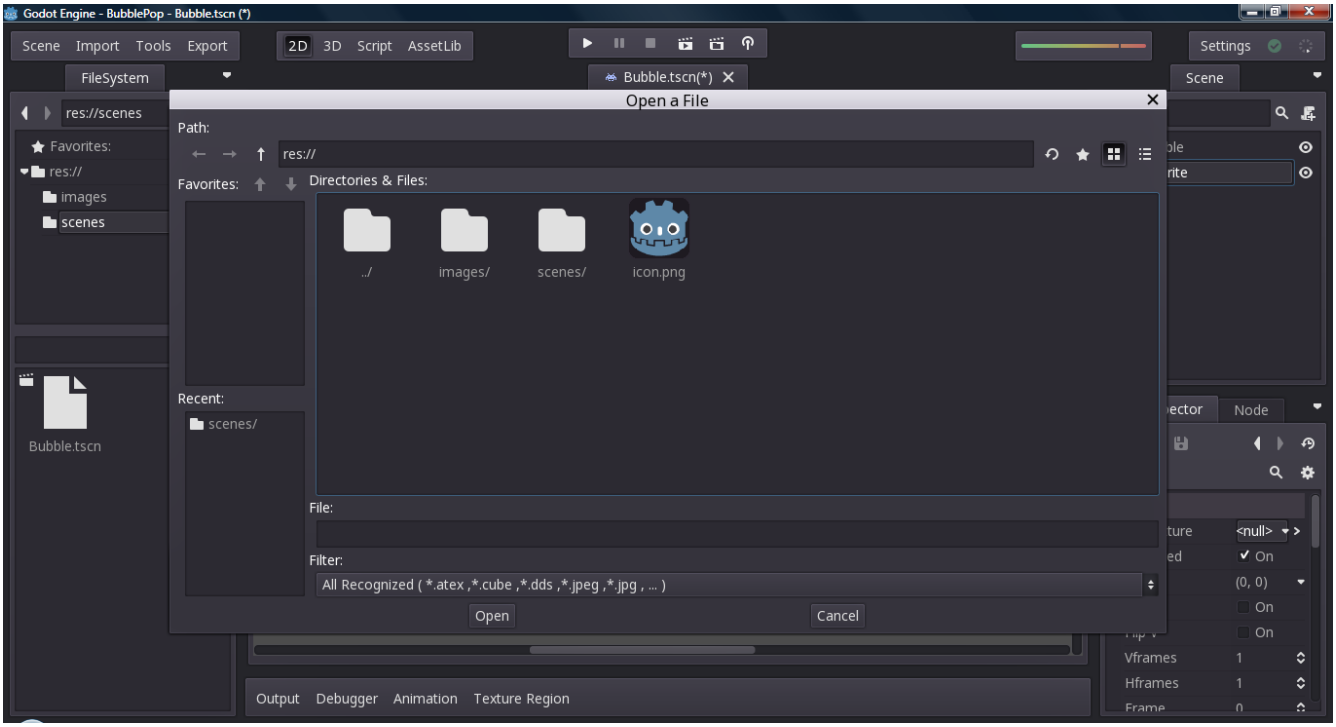
This time, create a new Sprite node:



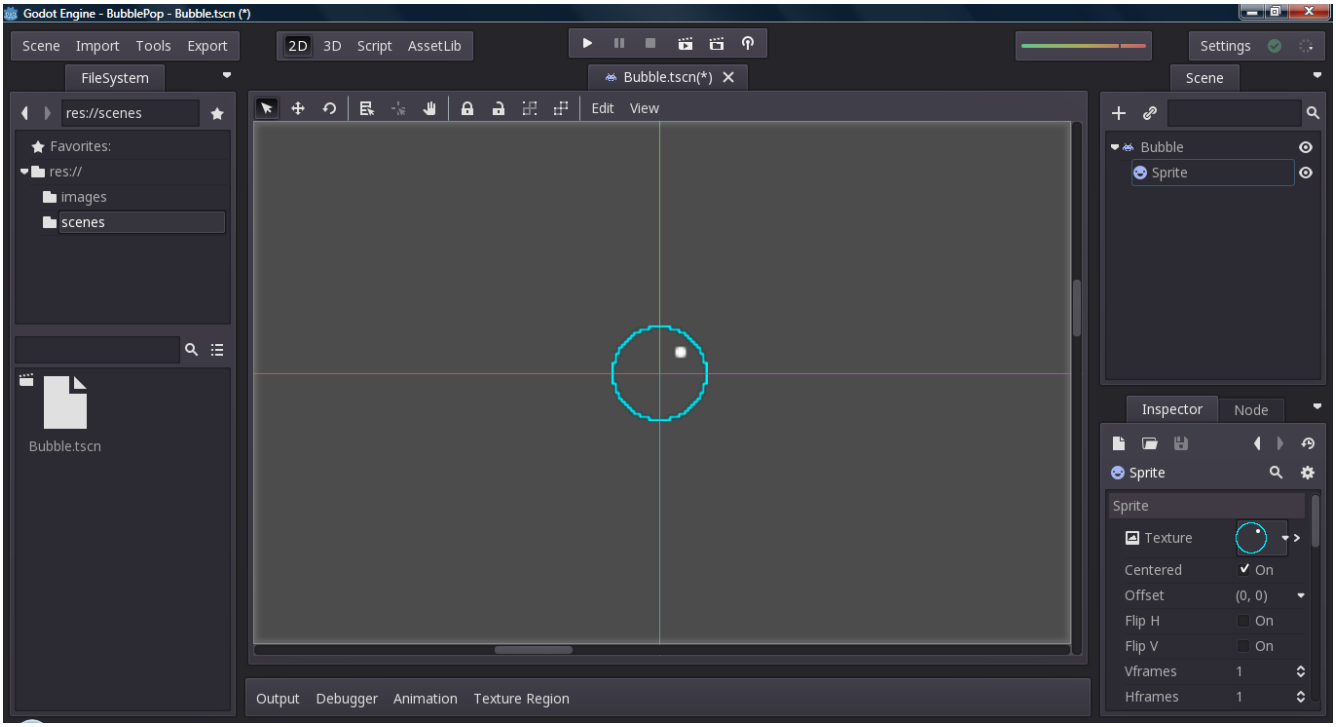
Notice how the new node is a child of our “Bubble” node. But wait, nothing appears to have changed in the workspace in the middle. That is because our sprite has not been assigned an image yet. Let’s fix that right now. In the lower right pane, click the box beside “Texture”:



Now click “Load”:



Enter the “images” folder and choose our bubble image:



As you can see, our bubble object now has a visual representation in the middle workspace. However, we are not finished yet. In order to detect collisions with other objects, our bubble also needs a collision shape. We will cover that in the next lesson.