World Building in Vivaty Studio

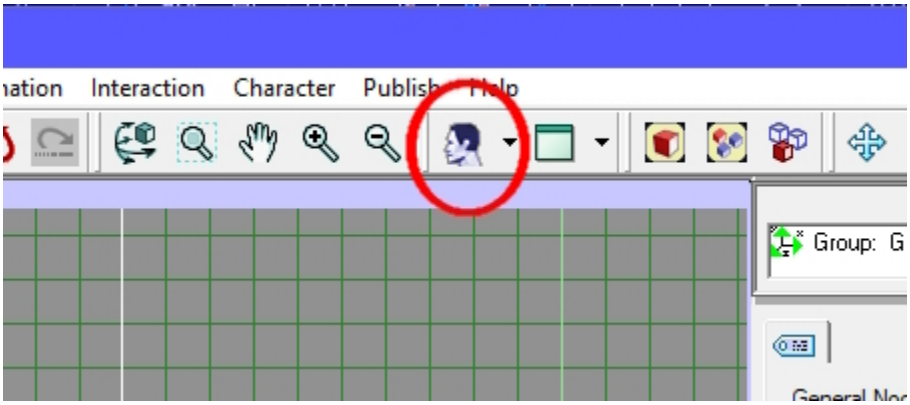
Install Vivaty Studio. Right click the install file and “Run As Administrator”.

Once installed open Vivaty Studio, and lets make it look a little more like Spazz3d as I know many of you are used to that.

On the top menu click VIEW > LAYOUTS > STANDARD LAYOUTS > SINGLE FRONT VIEW.

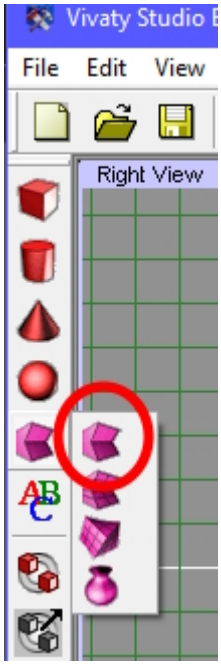
After that click VIEW > LAYOUTS > SAVE LAYOUT AS DEFAULT.

Now lets get started, we need some ground. We want to be looking top down for this so at the top of the window click the VIEWS icon to drop down a list of views. It looks like a head.



When the drop down opens, select the VIEW that appears to be looking down.

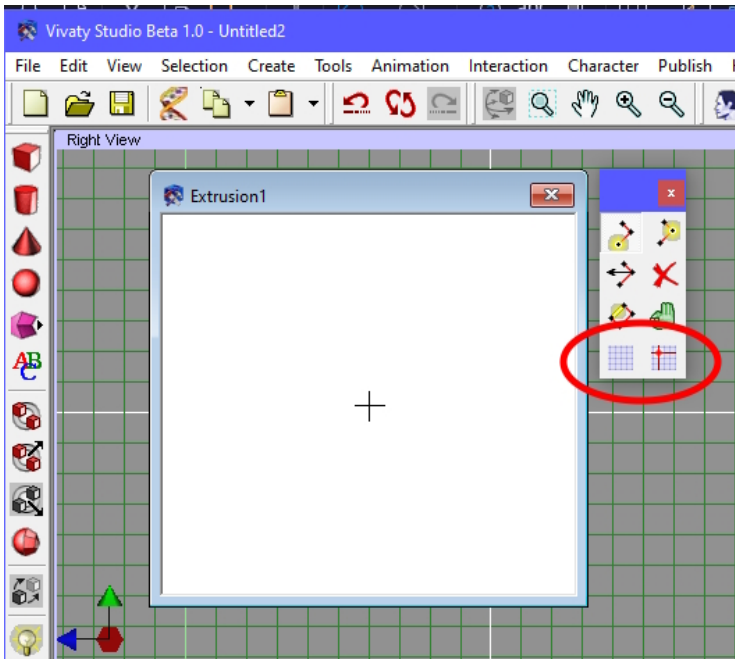
Next we select the EXTRUDE tool as seen on the right.



Then click anywhere in the grey 3D window to create an EXTRUDE.

A window titled EXTRUSION should pop up.

Turn on GRID and SNAP buttons as shown below.



Next on the top menu click

VIEW > GRID > GRID OPTIONS

Set your grid spacing and grid divisions

VRML uses METERS – 1 = 1 Meter.

If you are American use YARDS, one yard is almost exactly 1 Meter.

In the popup EXTRUSION window draw the outline of your ground area. I like to use a rectangle, then click the OK hand button.

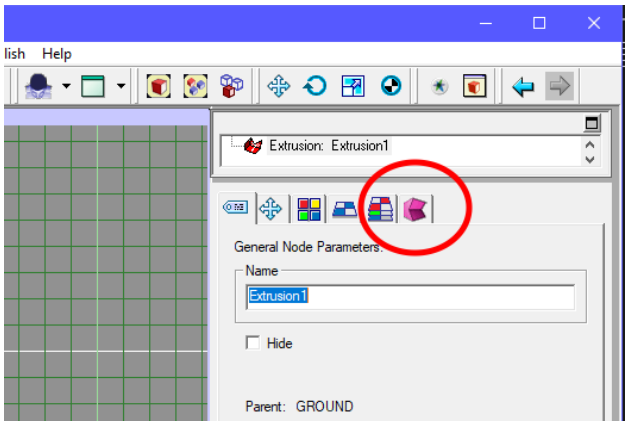
To remove points click the X button then click the point to remove.

The button to the left of the X is the MOVE POINT button.

Above the X button is the ADD POINT MID LINE button.

Above the move point button is the ADD POINT END OF LINE button.

Change your VIEW to the VIEW with the head on an angle, that is on the bottom of the VIEWS popup list.



On the right of the window you will see the PROPERTIES tabs, and an EXTRUDE tab as long as the EXTRUDE is currently selected.

In this tab, DEPTH is how much length to add to your drawing. (Third axis)

The 5 check boxes:

CCW – Which side of current selected object to draw surfaces on – Inside / Outside or Front / Back if you prefer.

SOLID – Draw BOTH sides of the object or only one.

BEGIN CAP and END CAP – Draw covers for ends of your extrude or leave open.

MIDDLE CAP – Draw the depth sides of your extrude.

For the ground we are creating, set depth to “0” and uncheck BEGIN and MIDDLE CAPS.

The second tab in the PROPERTIES tabs is the movement tab.

Here you can set:

TRANSLATION or TRANS – Move current item on the X Y Z axis.

ROTATION – Rotate current item on the X Y Z axis.

SCALE – Scale or stretch the size of the current item on the X Y Z axis.

PIVOT CENTER – Move the center point of the current item on the X Y Z axis.

Beside TRANSLATION click the ZERO ALL button.

The third tab in the PROPERTIES tabs is the MATERIAL tab.

You can select a color for the extrude here. I will use green for a grassy look.

The fourth and fifth tabs are the texture tabs, we will cover this in another tutorial.

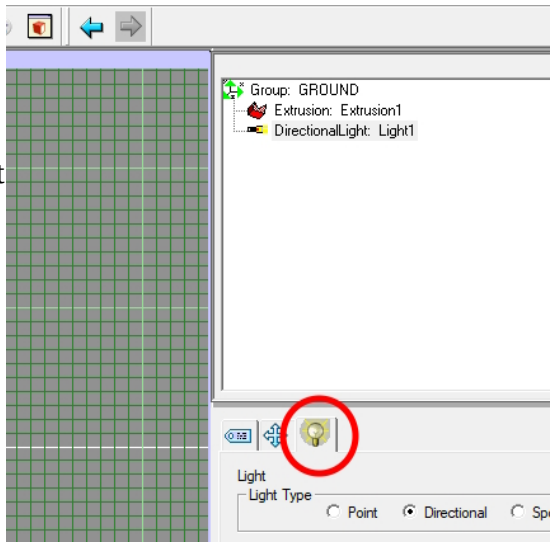
Next we need a LIGHT source or our world will be 100% black.

Click the CREATE LIGHT button shown in the picture on the right, then click in the grey 3d area to create a light.

On the PROPERTIES tabs select the movement tab. Zero the TRANS, then set your Y axis to about 20.

This moves the light upwards over the center of the world.

On the PROPERTIES tabs click the third tab shown in the picture on the right. It looks like a lightbulb.



Select POINT LIGHT. This is the easiest light to use. One light will cover the whole world we are creating.

We will cover the other light types in another tutorial.

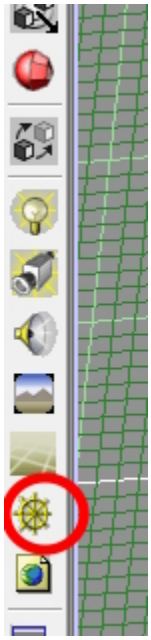
I like to set the RADIUS of my LIGHT to 1000 to cover a large enough area to cover my entire world.

I also like set all ATTENUATION to zero, and set INTENSITY and AMBIENT INTENSITY between 0.2 and 0.8. X_ITE considers 1 to be equal to 100% normal outside daylight.

X_ITE is limited to 4 or 8 lights depending on the version.

Next we need a navigation node. This gives X_ITE some basic information about how your world is to behave.

On the left, click the CREATE NAVIGATION NODE button, then click in the 3d area to create it. The icon looks like a pirate ship steering wheel, seen in the picture on the right.



On the PROPERTIES tabs, zero your TRANS. Then select the third tab on the far right. It also looks like a pirate ship steering wheel.

COLLISION DIST is how far from the center of your avatar is considered the point where you would hit something.

HEIGHT is obviously how tall your AVATAR will be, but also how low something can come before your AVATAR hits it. (Remember this for later)

STAIR STEP SIZE is the highest height of a barrier an AVATAR can climb.

HEADLIGHT ON can be unchecked as we will use proper lighting.

SPEED set to 5 or more, anything lower seems very slow.

NAVIGATION TYPE most commonly is WALK, ANY.

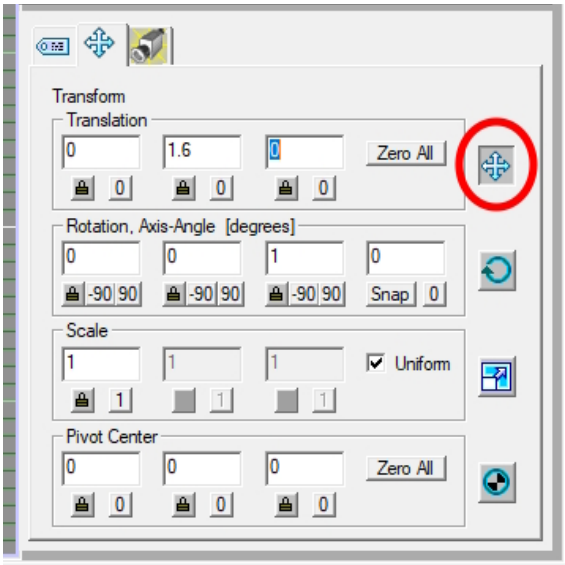
Now we have a ground, a light, and a navigation node. We need a VIEWPOINT so our AVATAR has something to BIND to when the world loads.

BIND just means your AVATAR will move to that VIEWPOINT and that VIEWPOINT will then move along with your AVATAR.

On the left just below the create LIGHT button, click the create VIEWPOINT button, and click in the 3d window to create it. It looks like a movie camera.

On the PROPERTIES tabs zero your TRANS and then set the Y axis to your HEIGHT from your NAVIGATION NODE.

Next make sure your VIEW is top down, and that TRANS is selected in the PROPERTIES tabs as shown on the right.

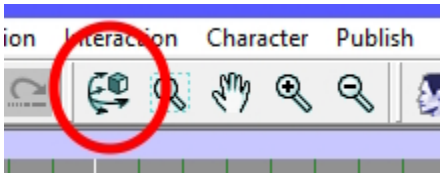


Now in the 3d window, click and hold anywhere, and drag your VIEWPOINT around to where you want it.

Once your VIEWPOINT is placed, lets have a look at our world so far.

At the top of your screen, ZOOM OUT to see your whole world.

Then click the rotate freely button shown in the picture below.



Now click and hold in the 3d window, and drag the cursor around.

Lastly we need a background.

There is a standard way to do this, and then there is my way.

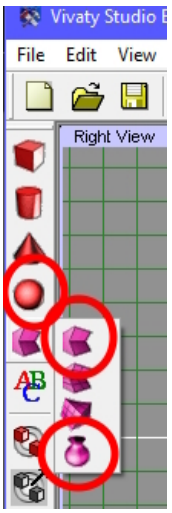
Firstly, the standard way.

On the top menus click CREATE > CREATE BACKGROUND, then click in 3d to create it. On the PROPERTIES tabs zero the TRANS.

On the PROPERTIES tabs you can select the far right tab, and set your sky and ground color. I have never used this method but feel free to try it.

Second option, my way.

You can create your choice of: SPHERE, ROTATION, or EXTRUDE. Make it very large, so that it covers over your entire world without cutting any outer edges behind the sky.



SPHERE is the easy option. You just set the radius high, and uncheck the SOLID checkbox.

In the PROPERTIES tabs, zero your TRANS. Then in the MATERIAL tab, the third tab, select your sky color.

Save your progress.

Lastly on the top menus click FILE > EXPORT X3D OR VRML and create your world wrl file.