

Building an armature

Armature gives you possibility to move parts of a model in an animation or a game.

1. Preparations

Use the human figure you have done or download that from <http://tapsanjutut.fi> select "Save the target", open it with Blender from the upper right corner File – Open

Start in Object mode

If you use your own human figure, select the Wrench tab from the right side menu. The human figure has Multiresolution Modifier added, but you need to apply it, so press "Apply".

2. Adding the bones

Press Z to select Wireframe mode (or select it from the Viewport shading menu).

Left click the Origin at the center of the body.

Select View -Ortho or NumPad 5 to change from Perspective view to Ortho view (flat dimensions, no perspective).

Press Shift + A: then select Armature and Single bone in the menu: that will be the backbone.

Press N to get the second toolbar on the right. There at the Location set the values of X, Y and Z to zero.

Turn the body to see it both from the front and side view (NumPad 1 and Numpad 3 if you can use Numpad) and check the backbone is inside the body, not at or behind it! Bones must be inside the body.

Tab to Edit mode

Zoom the body and the backbone closer

A to Unselect all.

Right click the upper part of the backbone to select it.

E to Extrude the a new bone along the arm: make upper arm bone, lower arm bone and hand bone, do that for both arms.

Right click the lower part of the backbone and Extrude hips, thigh bones, leg bones and feet bones, neck and head too if you need them.

3. Naming the bones and parenting it to the body

From the right hand toolbar select the Bone tab.

Tab to edit mode

Select the backbone with right click and rename it, it's now called just "Bone"

Name the bones: backbone, upperArm.r, lowerArm.r, hand.r, upperArm.l, lowerArm.l, hand.l and so on. Confirm each name with Enter before moving to the next!

Dot R and dot L mean left and right side bones seen from the body itself.

Select Cube from the right hand toolbar tabs.

Select X-ray to see the bones through the body.

You need to parent the armature to the body:

Right click the body (child) to select it

Shift + Right click the armature to select it too (parent)

Ctrl + P, select With automatic weights

A : to unselect all

Change Pose mode (the menu at the bottom where you can select Object and Edit mode too)

Right click some of the bones

R : to rotate it, you can move the arms and legs and the head, select X, Y or Z to rotate to different directions

4. Making a simple animation

Click on the Timeline to select a new frame

Move the armature to a new position or / and place

Press i and select LocRotScale to save the frame

Click some other place on the timeline and move the armature, press i and select LocRotScale

After making enough frames press Play -button at the bottom of the timeline to see the animation.

If you want to see the animation without seeing the armature, untick X-ray.

