Instructions on how to run the test:

1. You need either Maya 2011 or higher (preferably 2012). I used the students' version which is available online. All you have to do is register and inform about the faculty you come from. Professors have access to the software as well. Here is the link:

http://www.autodesk.com/education/free-software

Maya needs a dedicated graphics card and at least 4 or 8 Gb of RAM, otherwise it may not be able to run properly.

2. Run it.

3. Open the file including the mesh:

> 3.1. File -> "Open Scene...", and search for the folder where the model "meshCheckerboardCookie2D.mb" is stored.

3(bis). You may see a grid in front of you, this is shown by default in Maya. In order to hide go to Display -> Grid.

4. Now you should have the model in front of you, although it may be in wireframe mode. If you can see the model with the texture loaded go to step 7. Otherwise, go on reading.

5. To see it in solid mode and with the texture on you will have to press '5', and then '6' (press '4' if you want to go back to wireframe mode for some particular reason).

6. The model with the checkerboard loaded should be visible now, if so, go to 7. However, this may not be the case because Maya can't store relative paths for the textures, so you have to indicate where it is. Go to tab called "MatBody" which shows the information related to the material assigned to the interior mesh, and then click on the icon also marked in magenta.
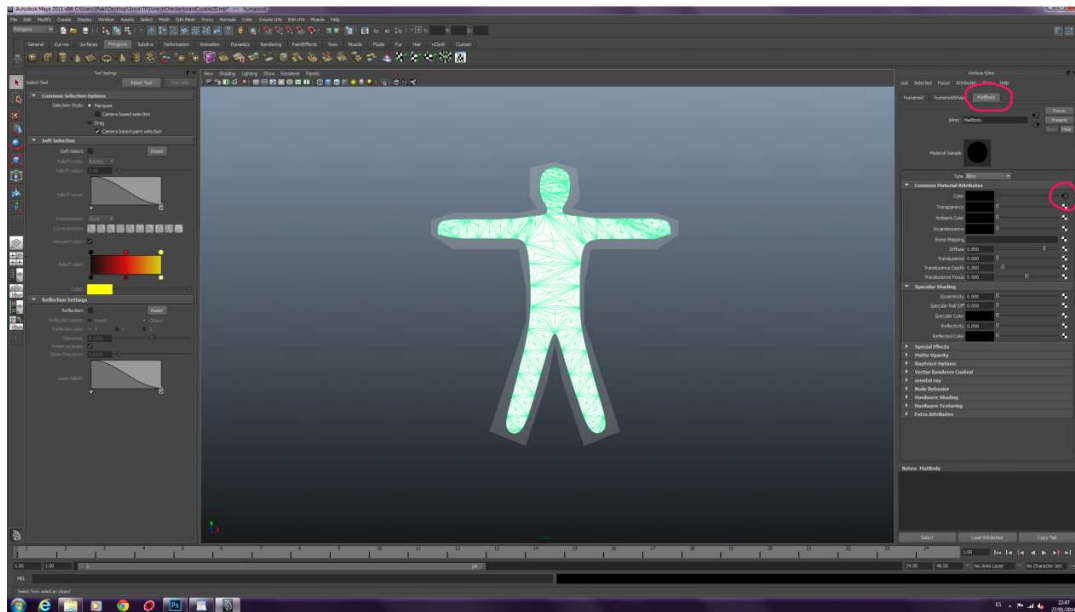
You will have accessed the texture object. Click on the folder icon and search for the texture "BodyTexture.png".
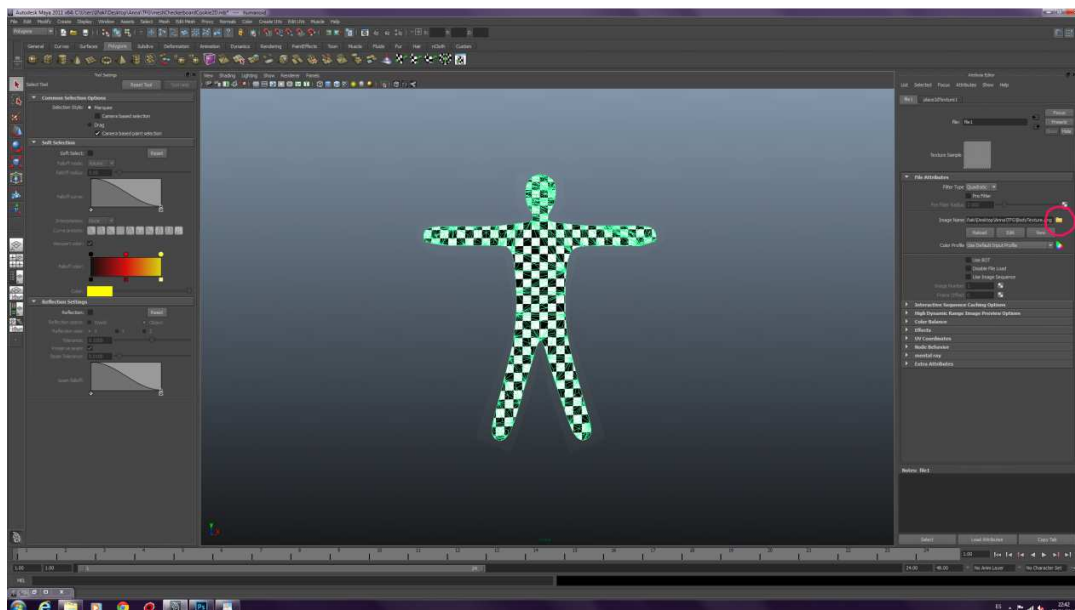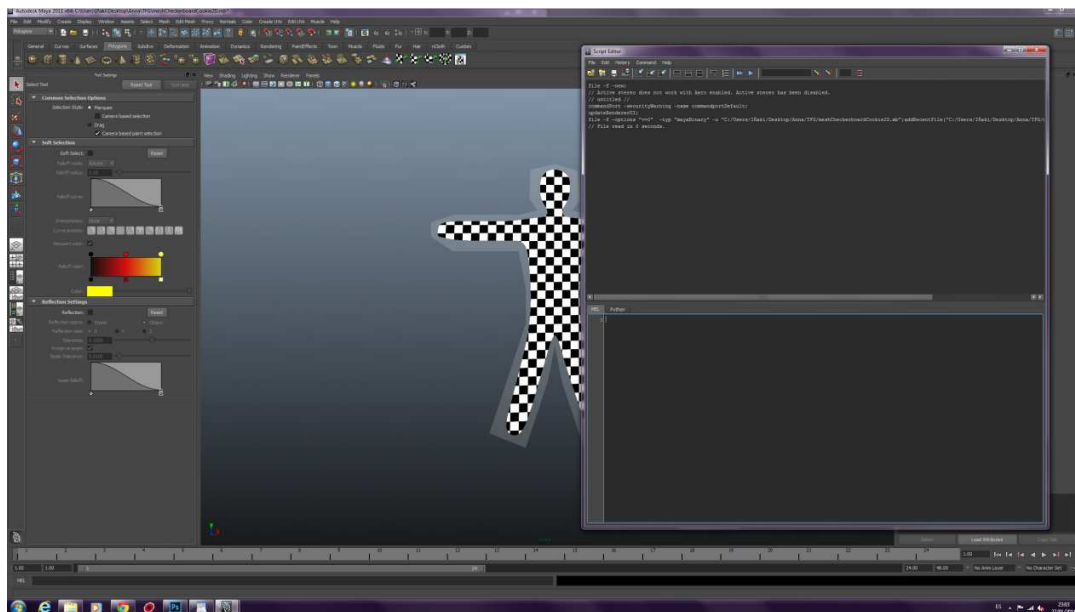

You should see the checkerboard now.

Let's run the script.

7. In order to run the script we need to open the Script Editor. Go to Window -> General Editors -> Script Editor
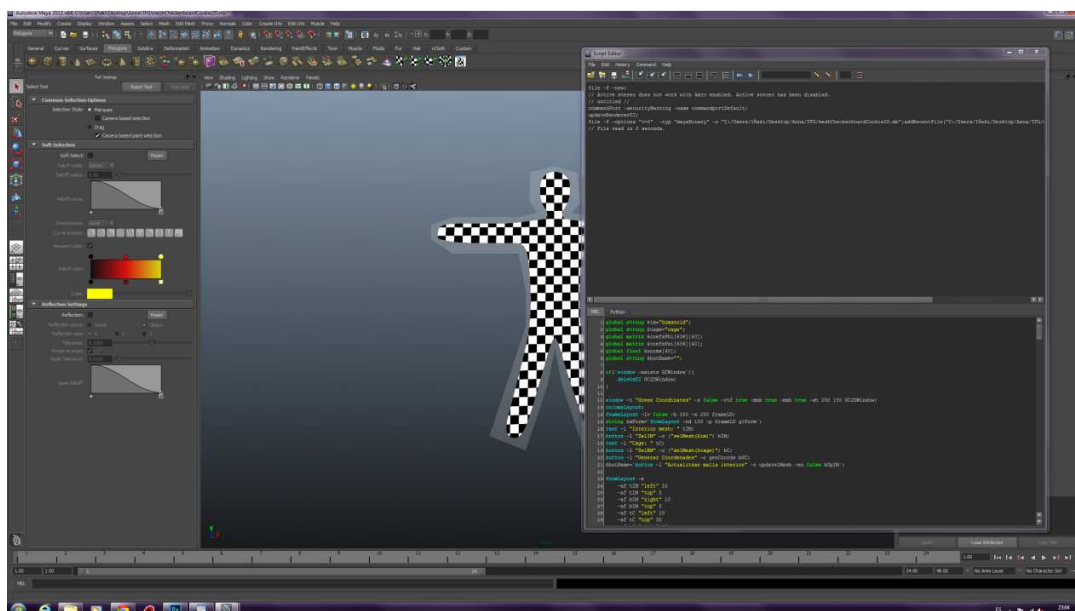
A new window like the following will appear:

Here we will have to load the script.

8. You will see two tabs, one named MEL and another one named Python. Make sure the active tab is the MEL one before you continue. In case there is no MEL tab, go to Command -> New Tab... and select "MEL".

In this new window, go to File -> Load Script, and browse the file called "GC2DHumanoid.mel", in the tab MEL.

9. Now it's time to run the script. We will do this selecting all the code (Ctrl+a) and then running it doing Ctrl+ENTER. The window to call the script should appear.
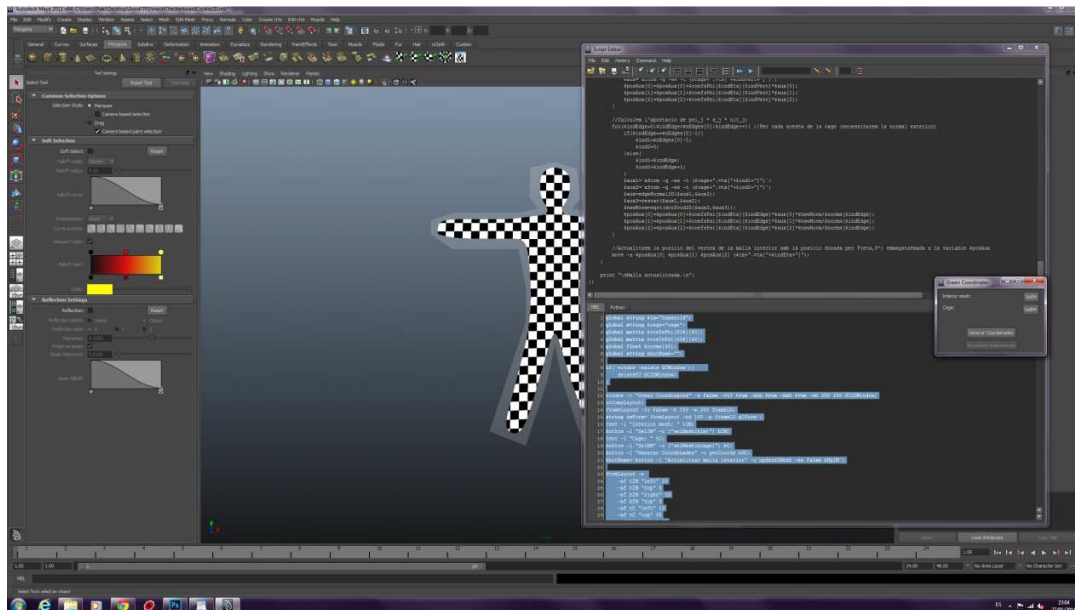

Pressing the buttons "SelIM" or "SelEM" will select either the interior mesh or the exterior mesh (or cage).

10. To generate the coefficients one must press the button "Generar Coordenades" and wait until the message "Coeficients trobats" appears.
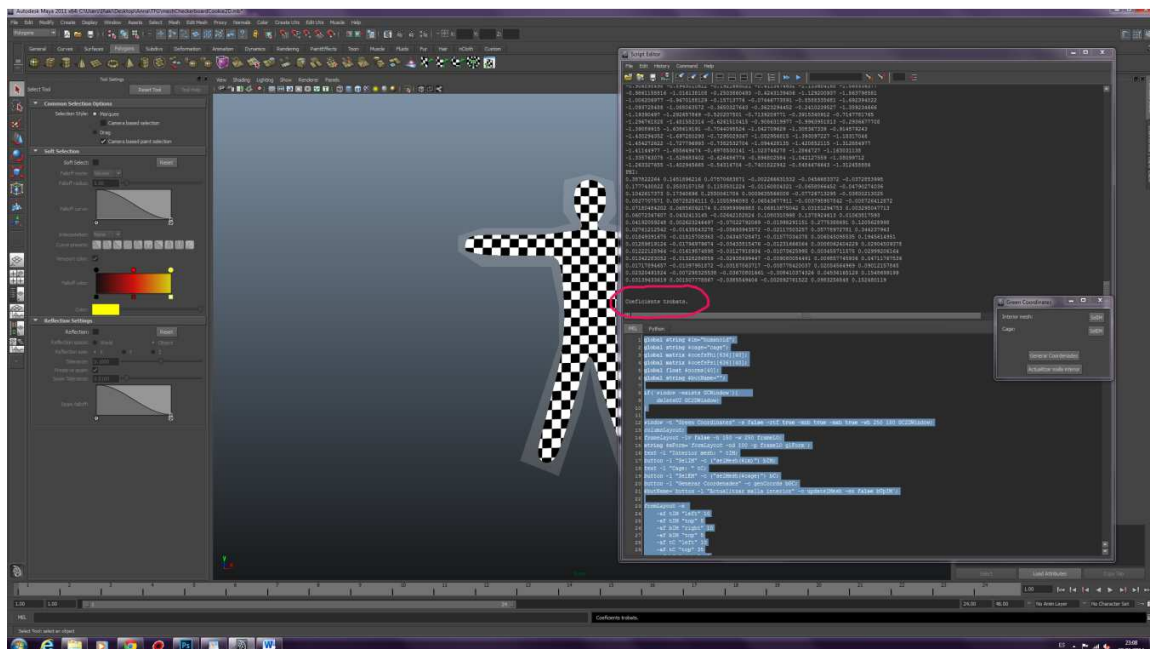
Now we can move the vertices of the cage as much as we want to make the interior mesh adapt to it when desired. The vertices of the mesh can't be accessed directly by default, but one has to tell Maya that we want to select a vertex to do something with it. In order to do so, click on the cage. It will be highlighted like in the example below (and minimize the Script Editor window to be able to see something):
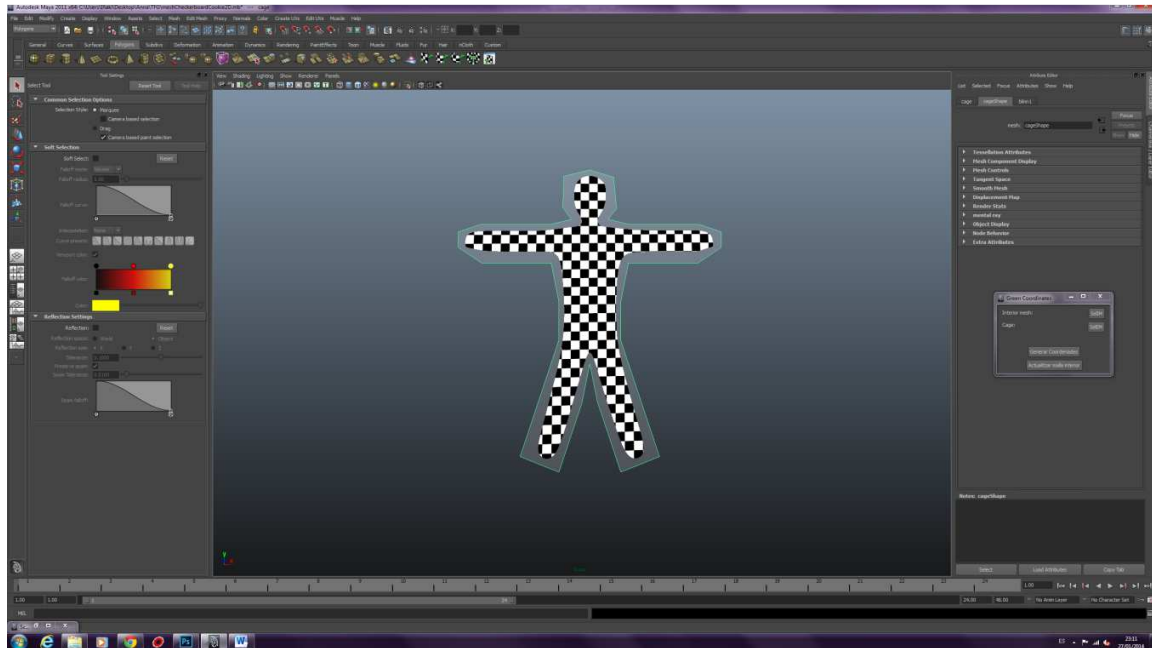

Right-click on the cage again and hold it; many options will appear. Release the mouse right-button when you are over "Vertex".
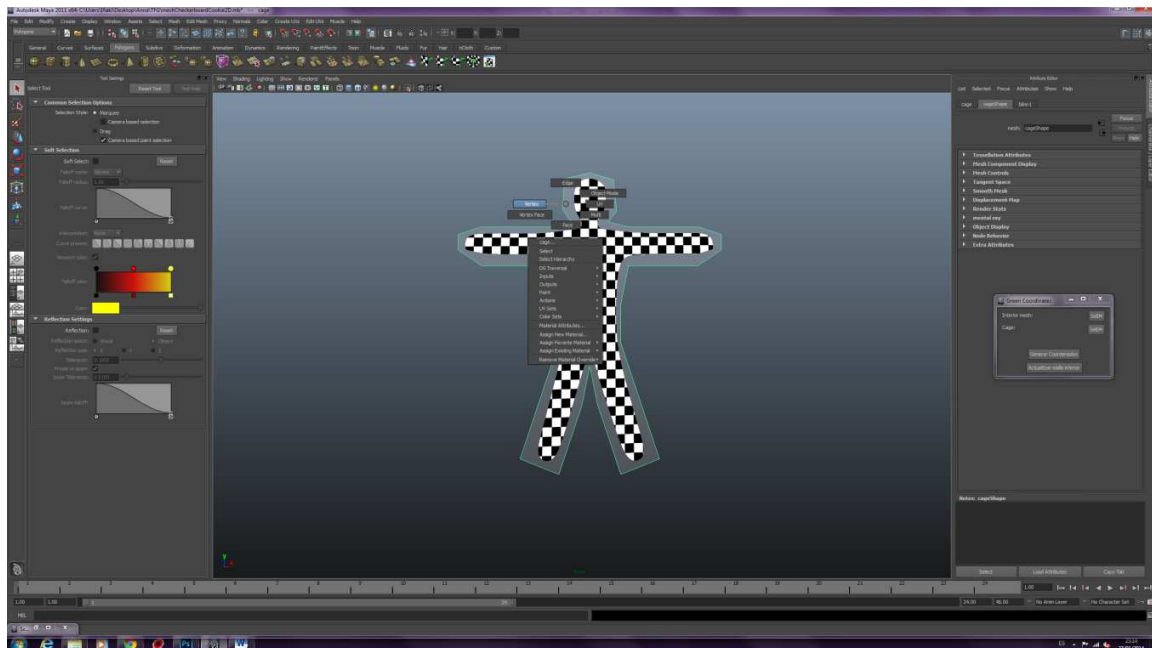

Now you will be able to see the vertices in pink.

By selecting the vertices you want to move and the "Move Tool" on the left, one can get the desired configuration of the cage. All you have to do is to left-click on the yellow-box and while holding the mouse button, move the mouse at will.
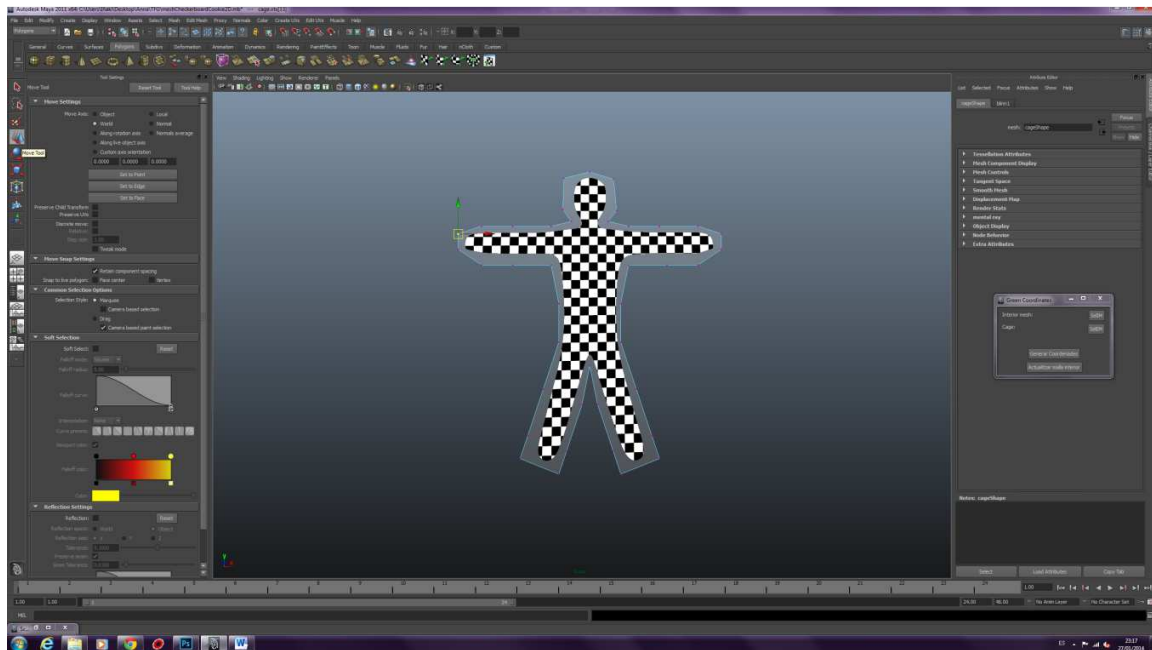
10. Now all we have to do is pressing the button on the Green Coordinates window "Actualitzar malla interior" and see the result.
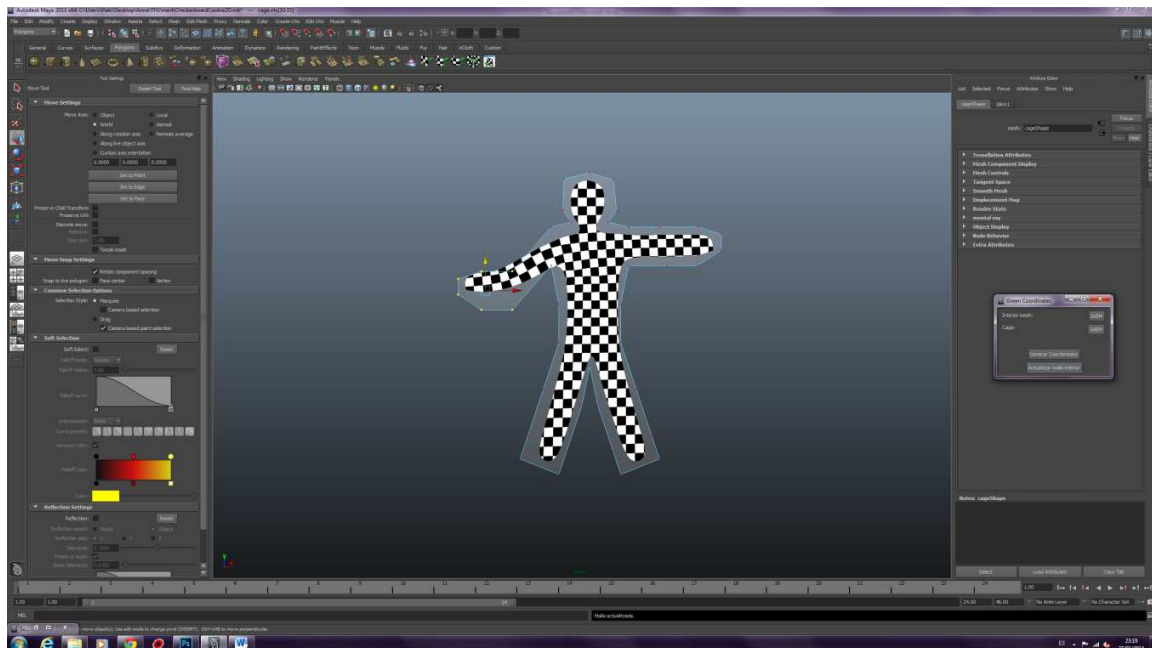
In case any further help is needed: abelliri8.alumnes@ub.edu.