



Department of Computer Science

ANIMATION - COMP3351

Animation Basics

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This activity talks about animation basics. This activity put you in a position to understand what animation is and how we can do it using blender.

We will use the default cube in blender, it is important to note new panel in blender, called timeline.



At the beginning, we need to set the first key frame.



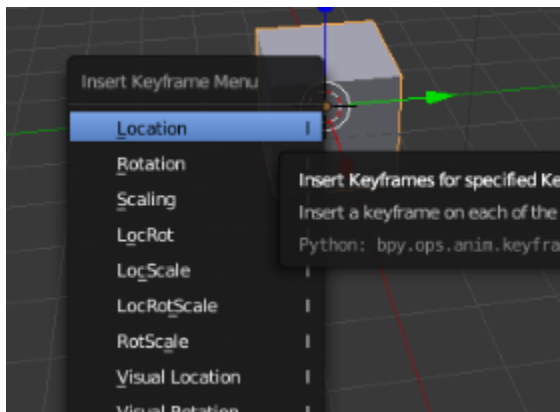
The red button here to start recording frames, it is called “Automatic key frame insertion for objects and bones”.

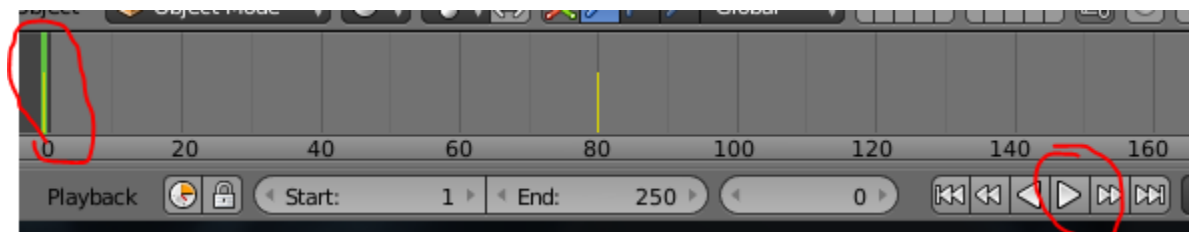
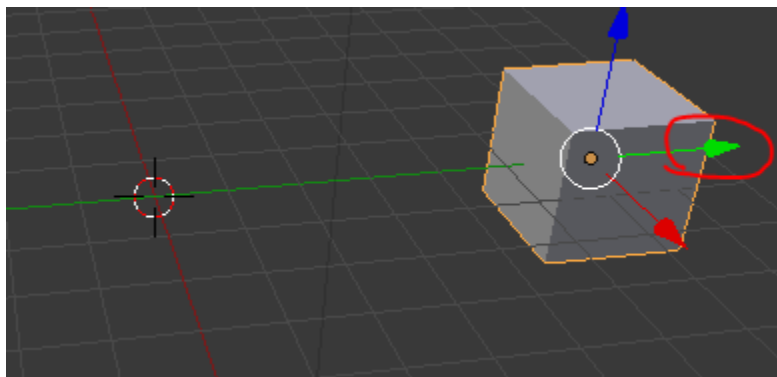
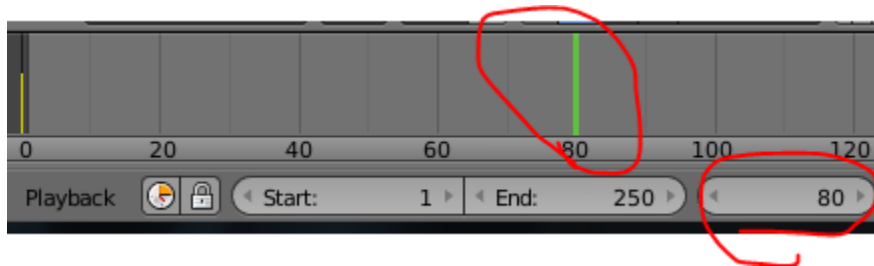
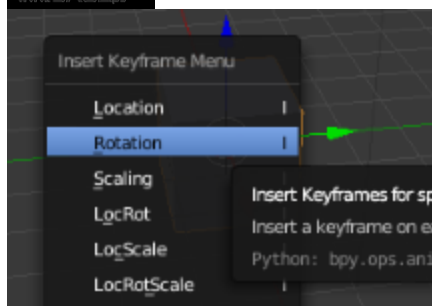


Those options can be change at any time they indicate the start and end of the animation.

If we press on the record button, then select the cube and press i. A menu of what kinds of options to detect on this object. Select Location, then re-press i and select rotation then increase the frame number to 80. Now move the cube on the y-axis, and play the animation.

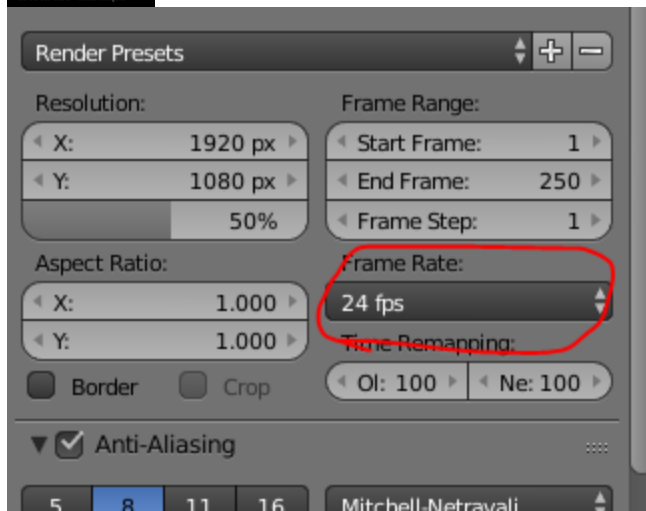
Follow the figures:



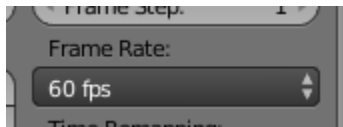


When you play the animation, you will notice the movement of the cube on y-axis.

One important option from the right panel is the frame rate (the higher the frame rate is the more frames you need to do).

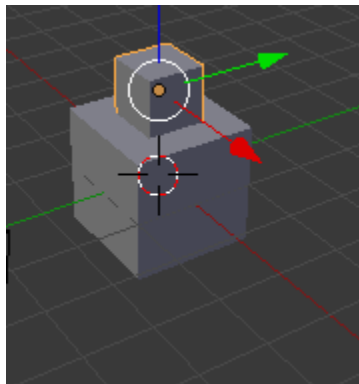


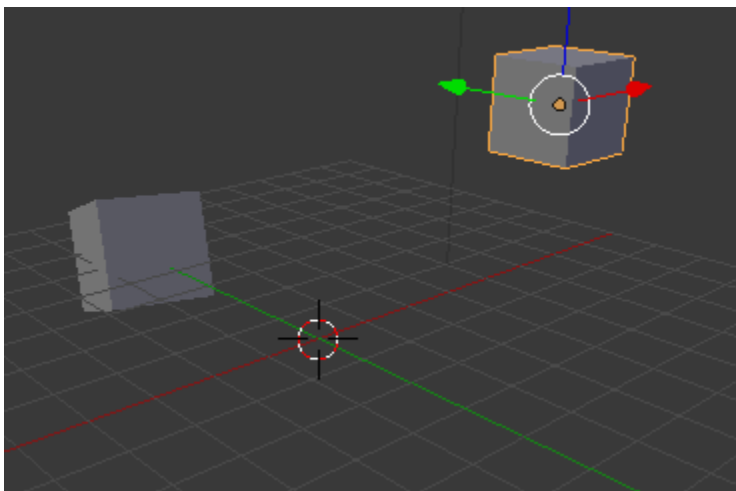
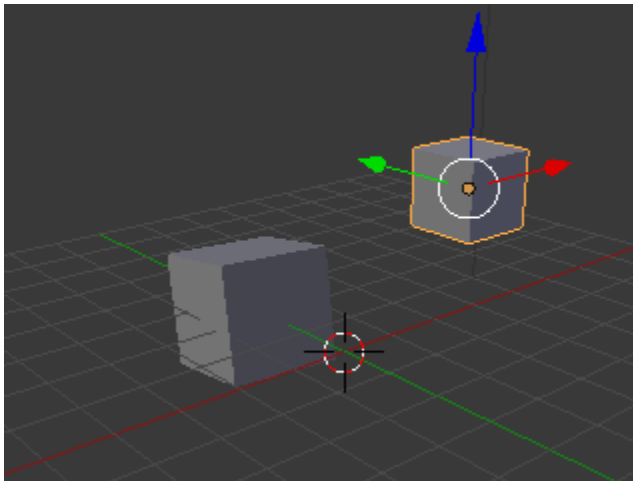
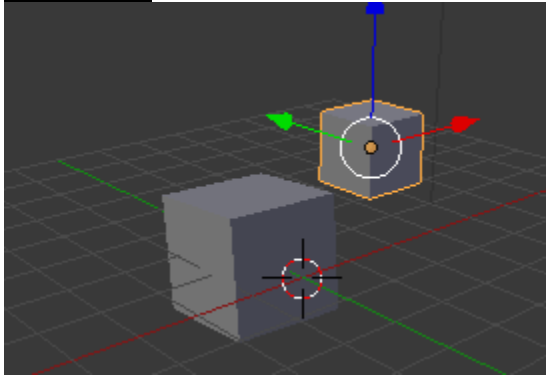
If we increase this number and run the animation, it will go smoother and faster. Let us try a frame rate of 60, and then press play. Note: If we want the animation to move slower as the 24 fps goes, we need to add more frames.



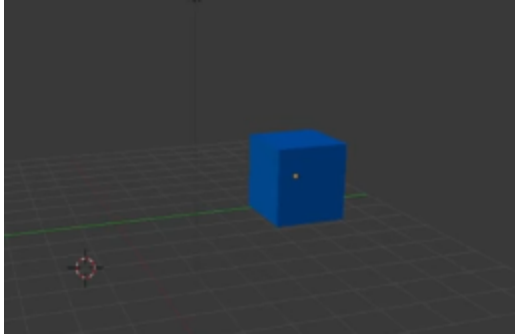
Let us add another cube mesh (press shift+a), and let us move both cube in our scene.

Press the record button, select number of frames, and press I and start moving rotating or any option you like.

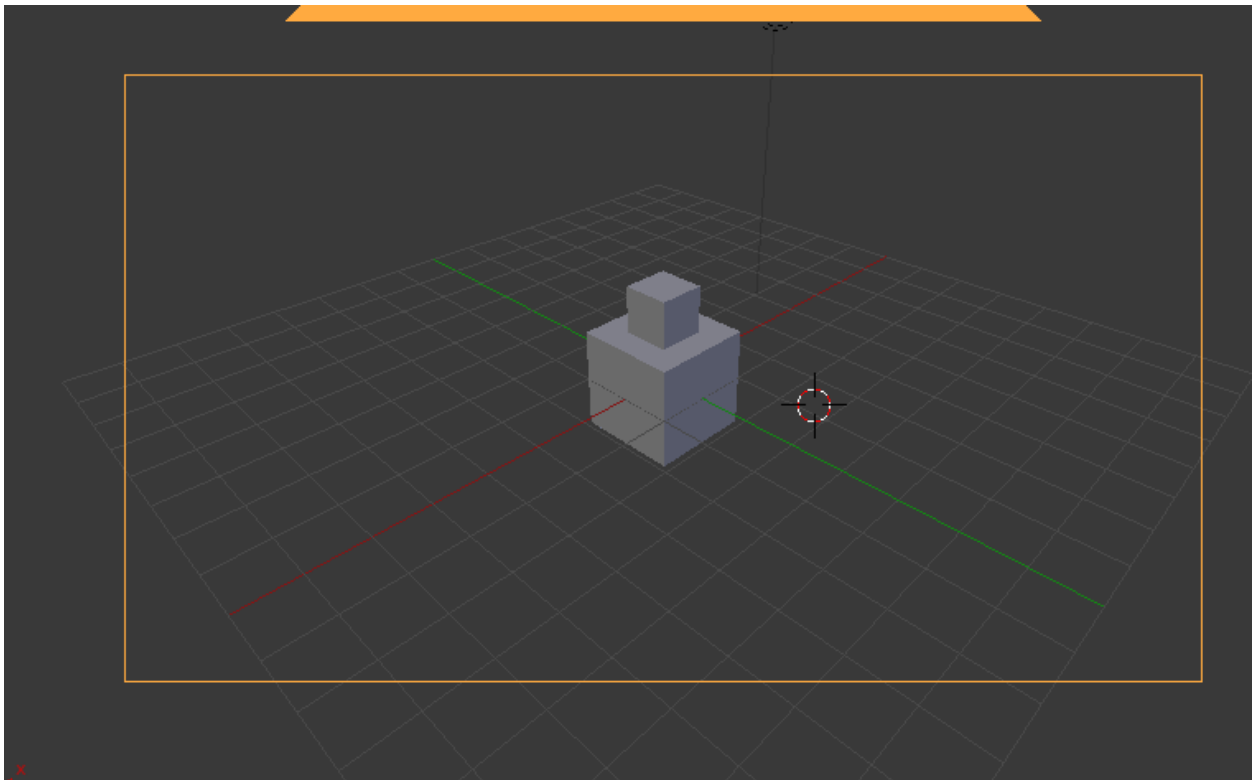




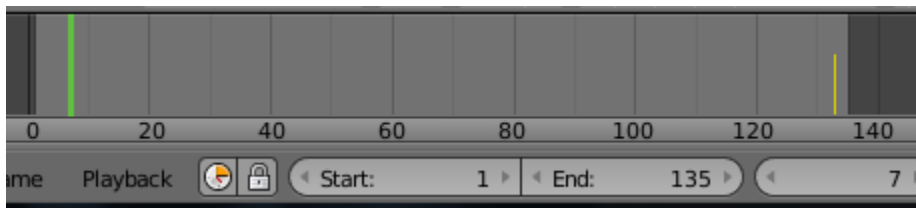
It is important to know that we can add meshes, materials, modifiers, etc. to those objects and do the same steps to build our animation. We will not go through those options because you have been seen them in previous activities.



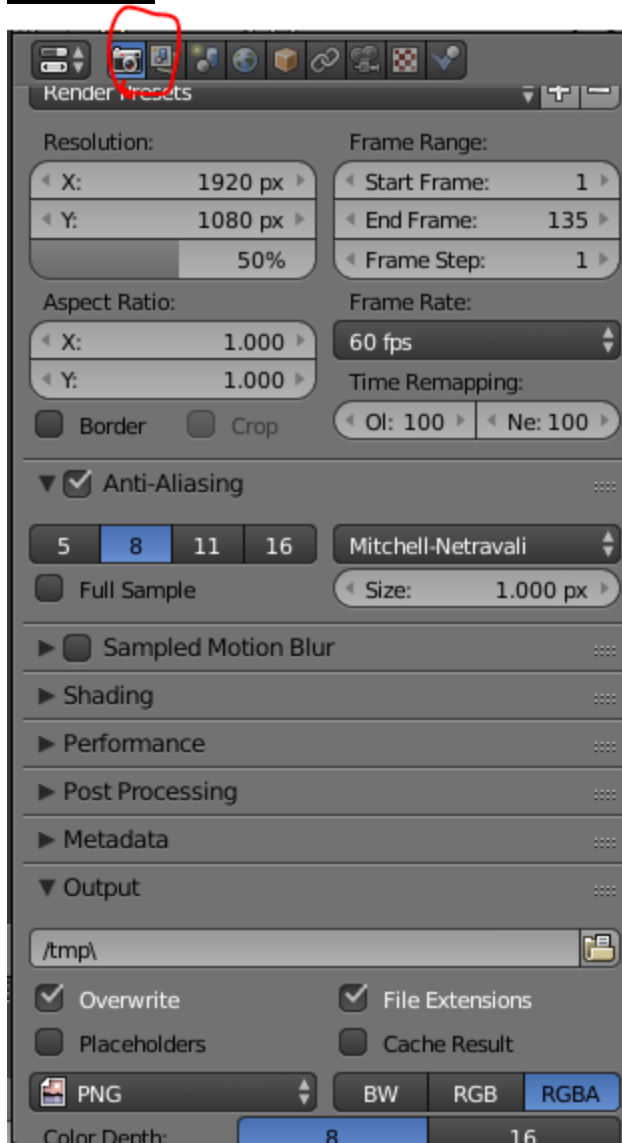
Let us start, with rendering options for our scene. At the beginning, we want to set the camera in the desired position. The easiest way to do that is using the user view. View your objects from the point you like to set the camera there then press (ctrl+alt+0).



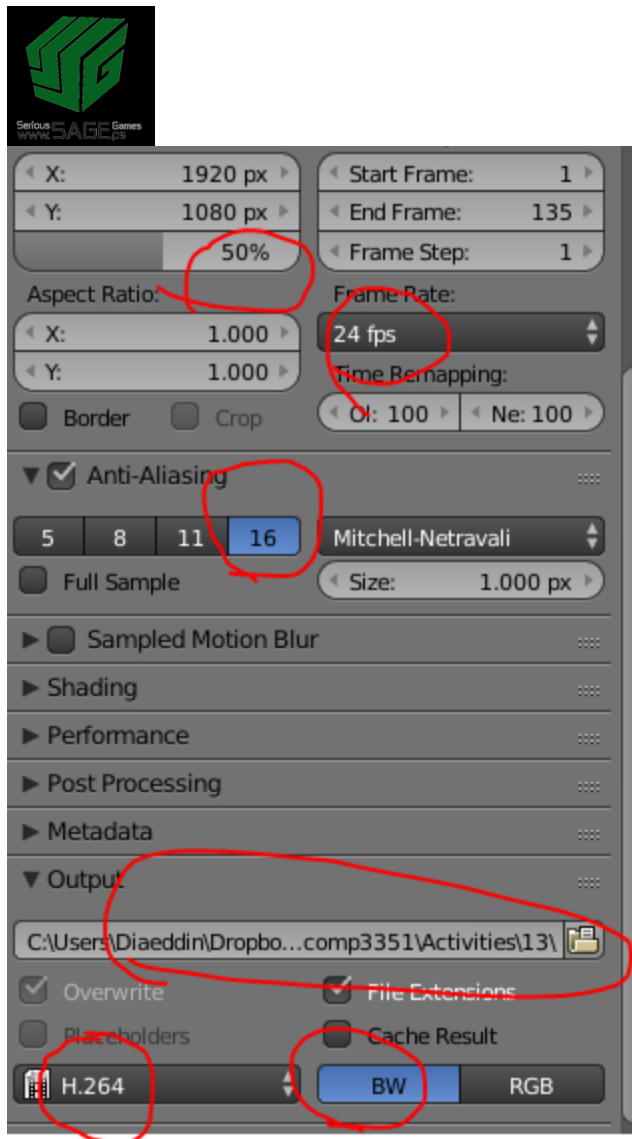
Now set the start and end time in your timeline.



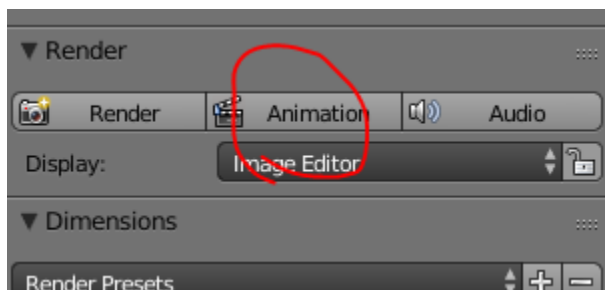
You can change whatever you like from the rendering options,



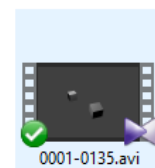
Let say for example:



Then press the animation rendering:



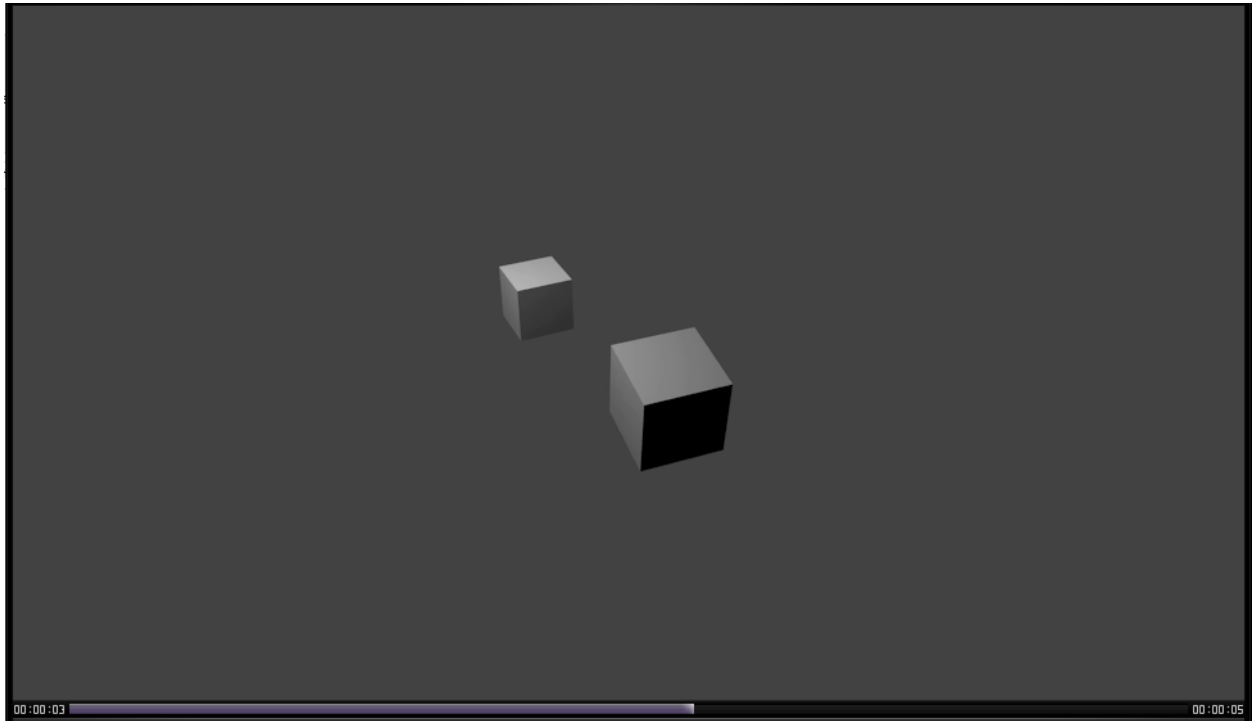
Note that these options can change to anything you like! However, the selected above not high quality.



If we go to the directory selected before rendering you will find the file there.



Play this file and see the animation we did.



End of Activity

Good Luck!