

BLENDER EXERCISE KEYFRAMES

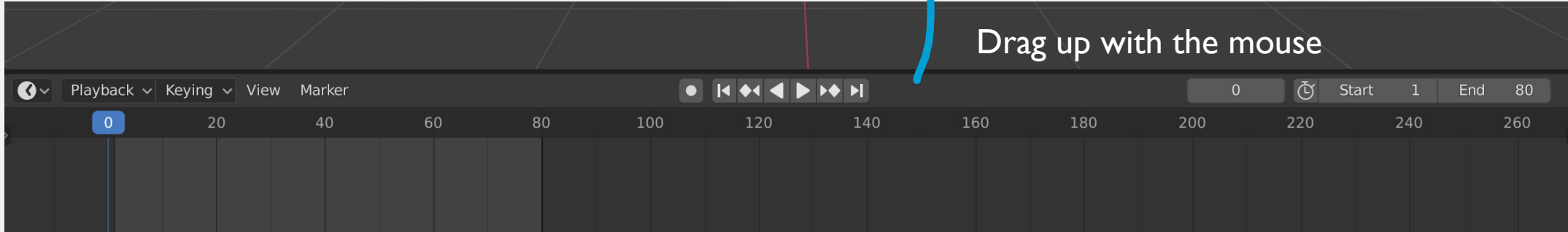
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Exercise on GitHub in the Exe3 folder



1. Open the windmill.blend available on github
2. Click on the windmill object and duplicate it [shift] [D]
3. We will call the two windmills: *original windmill* and *new windmill*
4. Move [M] the *new windmill* in a New Collection (I will call the collection “Static windmill”)
5. Now drag with the mouse the Timeline panel up



6. Click on the original windmill
7. Set the Timeline to 0
8. Push [I] to add a Keyframe, select the “Rotation”
9. Move by 20 frames
10. Rotate partially the Windmill, push [X] to rotate on that axis
11. Push [I] to add a Keyframe, select the “Rotation”
12. Repeat steps 9, 10, 11 until the *original windmill* is again in the initial position and it has done a complete 360 deg rotation.
You can use the *new windmill* in the “Static windmill” Collection as an indicator of the initial position of the *original windmill*.



6. In the animation Timeline set the end to the position of the final keyframe, in the example, at slide 2, the value is 80
7. Deactivate the “Static windmill” Collection
8. In the Output Properties, change the output folder from /tmp/ to your folder, in which you will save the rendered PNGs
In the Output Properties you can also change the fps (consider that with the default of 24 fps a video with 80 frames lasts around 3 seconds)
9. Click on Render → Render Animation (At the end in your output folder you will have many PNGs)

Done!

Now you can create a video: open a new Blender Project File → New → Video Editing, import your sequence, check that the output properties are consistent with the original project (this blend. project should have the same resolution and the same frame rate of the original blend. project), check if the correct output folder is selected and choose FFmpeg video and the encoding you want, then render it as animation.



Blender documentation

- Latest version (the latest version at today is 2.91)
<https://docs.blender.org/manual/en/latest/index.html#>
- 2.83
<https://docs.blender.org/manual/en/2.83/index.html#>