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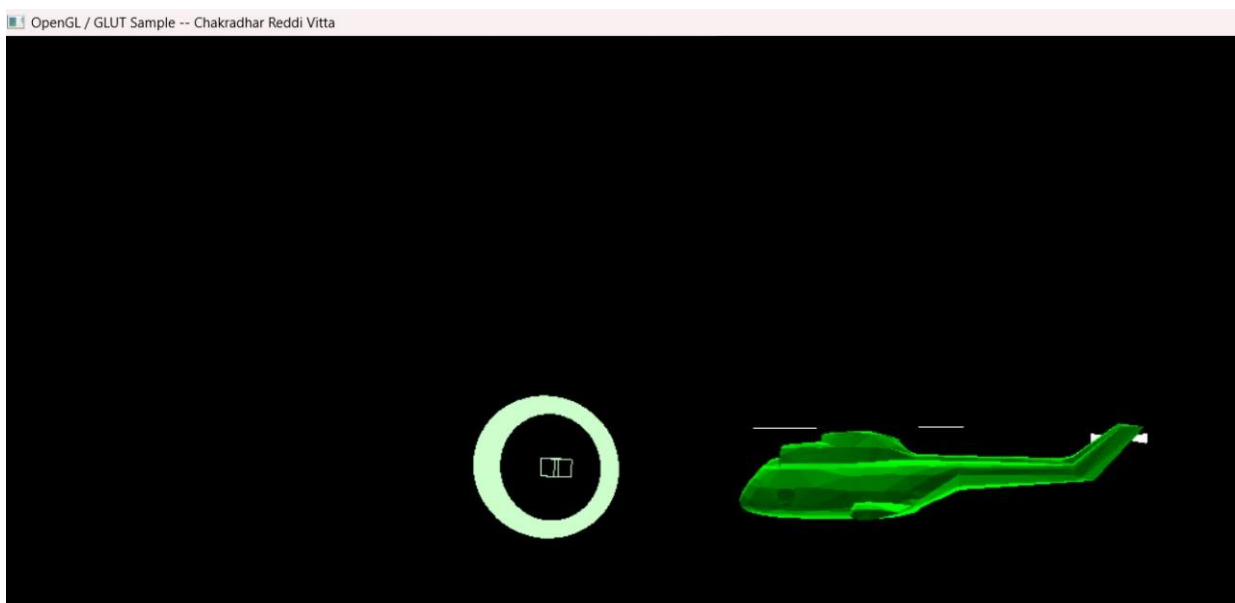
934-595-987

## Project #2

### Description:

- The blades of the helicopter are made bigger using the `glScalef(3.0, 1.0, 1.0)` command. This stretches the blades three times wider along the x-axis, which makes them look like long helicopter rotor blades.
- To make the blades rotate, we use `glRotatef(SmallBladeAngle * 2, 1., 0., 0.)`. This rotates the blades around the x-axis and makes them spin faster (twice the speed of the angle we set).
- Another rotation, `glRotatef(90., 0., 1., 0.)`, positions the blades properly so that they rotate in the correct plane, just like helicopter blades spin horizontally.
- The helicopter body stays in place and doesn't rotate with the blades. The body is drawn separately, so the blades spin above the helicopter, like how a real helicopter works.
- For the inside view (like cockpit displays or text), we use a different setup. The code switches to a 2D view using `gluOrtho2D(0.f, 100.f, 0.f, 100.f)`. This ensures that the inside view elements stay fixed on the screen.
- We also turn off depth testing (`glDisable(GL_DEPTH_TEST)`), which makes sure that the inside view elements, like text or controls, are always visible on top of the 3D scene, without being blocked by the helicopter or blades.

In your video, you can show the spinning blades, the helicopter body, and then explain how the cockpit view or any text on the screen remains fixed even as the helicopter moves.



Video Link: [https://media.oregonstate.edu/media/t/1\\_og3phf0r](https://media.oregonstate.edu/media/t/1_og3phf0r)