

HW 5: Walking Tour

Your task is to do the following:

1. Learn Blender to such a degree that you can create an original model of a structure, creature, or other thing. (It must be your original work, but you will not be graded on artistic ability.)
2. Place this model in a scene inside your program. The scene must have at least one other item in it (the ground counts).
3. Use the keyboard to walk around your model, inspecting it as you like.

Your main class will be called `WalkingTour`. Here is an example, using the textbook's space shuttle model.



Make the display wider than it is tall, as might befit a movie or first-person game.

Here are the key presses that your program will need to accept:

- **Up arrow & W:** Both keys must move the camera forward a small amount, relative to the current facing.
- **Down arrow & S:** Both keys must move the camera backward a small amount, relative to the current facing.
- **Left arrow & A:** Both keys must move the camera to the left a small amount, relative to the current facing. They will not turn the camera.
- **Right arrow & D:** Both keys must move the camera to the right a small amount,

relative to the current facing. They will not turn the camera.

- **Home & Q:** Both keys must turn the camera to the left a small amount, which will affect the directions that the arrow keys move.
- **PgUp & E:** Both keys must turn the camera to the right a small amount, which will affect the directions that the arrow keys move.

The easiest way to make your screen accept keyboard input is to have your `WalkingTour` class implement the `KeyListener` interface (in addition to `GLEventListener`). This will require that you implement some new methods: `keyPressed()`, `keyReleased()`, and `keyTyped()`. You can find documentation for these online.

You will of course need to submit your model file (as a `.obj`) in addition to any textures you use.

That's it!

Extra Credit:

There is a chance here for a small amount of extra credit. The above input method is relatively easy, but it is awkward. Held keys will pause after the first signal, like is done in a word processor (not a game). Your job here is to redesign the user interface to be smoother like you would expect in a game. Feel free to reassign keys however you wish, so long as all of the above functions still exist. You may also make use of the mouse if you want, and add new features like looking up and down. If you do this, be sure to provide an explanation of everything you did in the comments.