

ASSESSMENT 1

GUI DOCUMENTATION

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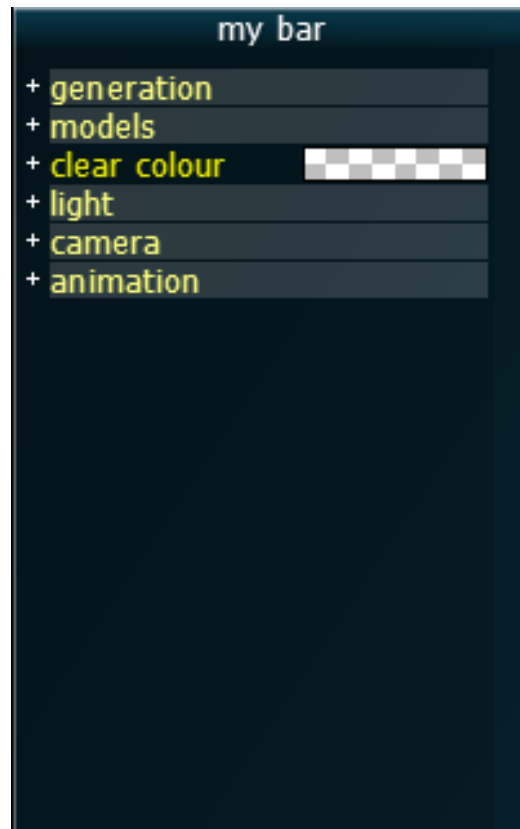
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2: How to use the GUI



2.1: Navigation

The GUI is made up of several drop down menus with different fields of input that the user can alter to change elements of the program.

Each drop down menu is labelled differently, e.g. the first menu is named 'generation', and can be identified by the light gray box surrounding the label.

Each field within the drop down menus are also labelled. They are not surrounded by a light gray box, but will have some sort field or option beside them that can be altered to affect the program. E.g. the 'clear colour' option is not a menu but a field.

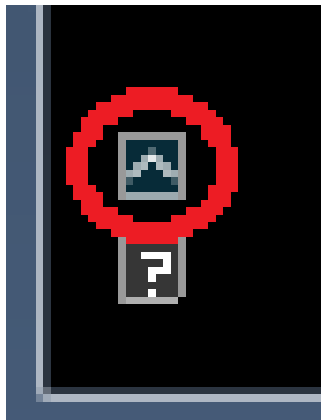
2.2: Interaction

To hide the GUI, hover the mouse over the name of the GUI, 'my bar', and move the mouse towards the new button that has appeared on the **right**. This is shown below highlighted with red.



Click this button and the GUI will be minimised.

To re-show the GUI, look towards the bottom left of the screen for another small arrow button, shown below highlighted with red.



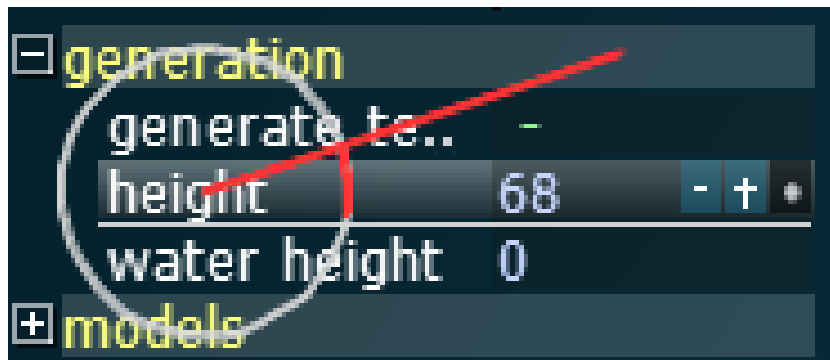
Clicking this will re-show the GUI.

To change the size of the, hover the mouse over the name of the GUI, 'my bar', and move the mouse towards the new button that has appeared on the **left**. This is shown below highlighted with red.



Clicking this will re-size the GUI.

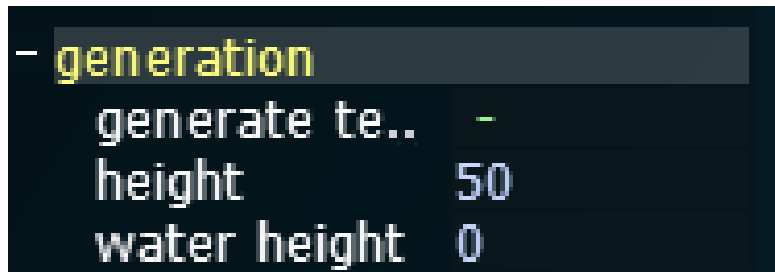
The RotoSlider is a feature active on some of the fields that allows the user to quickly alter values. To use the RotoSlider on a field, click and hold the mouse on the label and drag the mouse out, and around in a circular motion to increase or decrease the value in this field. This is shown below.



3: Generation

This menu holds fields that allow the user to alter the world's randomly generated terrain.

To open this drop down menu, click the small plus button next to its label.



3.1: Generate terrain

The 'generate terrain' field acts a button that allows the user to generate a new random terrain.

To generate a new terrain, click the '-' in the field next to its label.

3.2: Height

The 'height' field allows the user to alter the height, or amplitude, of the terrain.

To edit this field, click on the number next to the label and edit its contents using the keyboard.

The user can also use the RotoSlider to alter the value in this field.

3.3: Water height

The 'water height' field allows the user to alter the height of the water.

To edit this field, click on the number next to the label and edit its contents using the keyboard.

The user can also use the RotoSlider to alter the value in this field.

4: Models

This menu holds fields that allows the user to alter aspects of the models displayed in the environment.

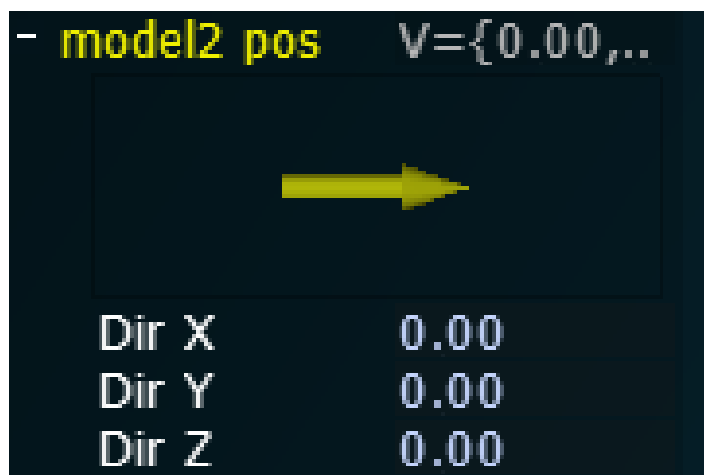
To open this drop down menu, click the small plus button next to its label.



4.1: Model pos

The field 'model2 pos' allows the user to alter the position of one of the models in the environment.

This field can be expanded by clicking the plus button beside its label.



The user can alter the position of the model by changing the numbers in the fields next to 'Dir X', 'Dir Y' and 'Dir Z'.

The user can also use the RotoSlider on the labels 'Dir X', 'Dir Y' and 'Dir Z'.

The user can also click and hold the mouse on the yellow arrow and then drag the mouse in a given direction to change the models position.

4.2: Model scale

The field 'model2 scale' allows the user to change the scale of one of the models in the environment.

This field can be altered by clicking on the number next to the label and changing it using the keyboard, or by using the RotoSlider.

5: Clear Colour

This option is not a drop down menu, but a field that can be changed.

This field allows the user to alter the colour in the background of the program.

This field can be expanded by clicking the plus button beside its label.



To alter the background colour, the user can click on the numbers next to the labels and alter the values within the fields using the keyboard, or the user can use the RotoSlider in the labels of the fields.

The 'Red' option changes how much red is in the background colour.

The 'Green' option changes how much green is in the background colour.

The 'Blue' option changes how much blue is in the background colour.

The 'Alpha' option has no effect.

The option 'Mode' changes the way that the user can interact with the background. Initially it is set to 'RGB' but it can be changed by clicking the mouse on the 'Mode' label or the field next to it. This will change the options for the user to use, but the way to interact with them remains the same.

6: Light

The 'light' menu allows the user to alter aspects of the 3D lighting in the program.

To open this drop down menu, click the small plus button next to its label.



6.1: Light dir

The 'light dir' field allows the user to change the direction that the light is pointing.

This field can be expanded by clicking the plus button beside its label.



The user can alter the direction of the light by changing the numbers in the fields next to 'Dir X', 'Dir Y' and 'Dir Z'.

The user can also use the RotoSlider on the labels 'Dir X', 'Dir Y' and 'Dir Z'.

The user can also click and hold the mouse on the yellow arrow and then drag the mouse in a given direction to change the light direction.

6.2: Light colour

The 'light colour' field allows the user to change the colour of the light.

This field can be expanded by clicking the plus button beside its label.



To alter the light colour, the user can click on the numbers next to the labels and alter the values within the fields using the keyboard, or the user can use the RotoSlider in the labels of the fields.

The 'Red' option changes how much red is in the light.

The 'Green' option changes how much green is in the light.

The 'Blue' option changes how much blue is in the light.

6.3: Light spec

This field allows the user to alter the secularity value of the light. By default it is set to 1.

The specularity value alters how shiny an object looks.

To alter the this field, the user can click on the number next to the label and alter the value within the field using the keyboard, or the user can use the RotoSlider on the label.

7: Camera

This menu allows the user to alter aspects of the camera.

To open this drop down menu, click the small plus button next to its label.



7.1: Camera speed

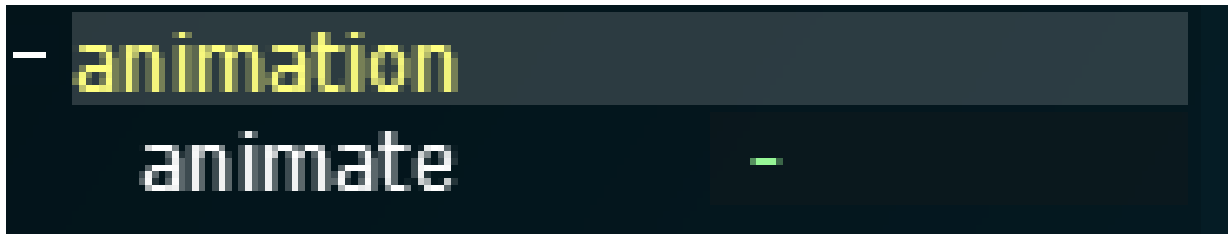
The 'camera speed' field allows the user to alter how fast the camera moves around within the environment.

To alter this field, the user can click on the number next to the label and alter the value within the field using the keyboard, or the user can use the RotoSlider on the label.

8: Animation

This menu allows the user to alter aspects relating to model animation.

To open this drop down menu, click the small plus button next to its label.



8.1: Animate

The 'animate' field allows the user to turn on or off model animations.

To turn on or off animations, click the '-' field next to the 'animate' label, or click on the label itself.

When animations are **on**, the '-' will be replaced with a tick.