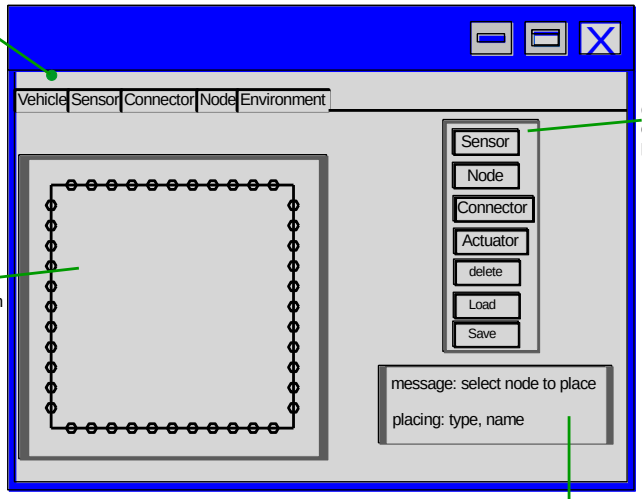
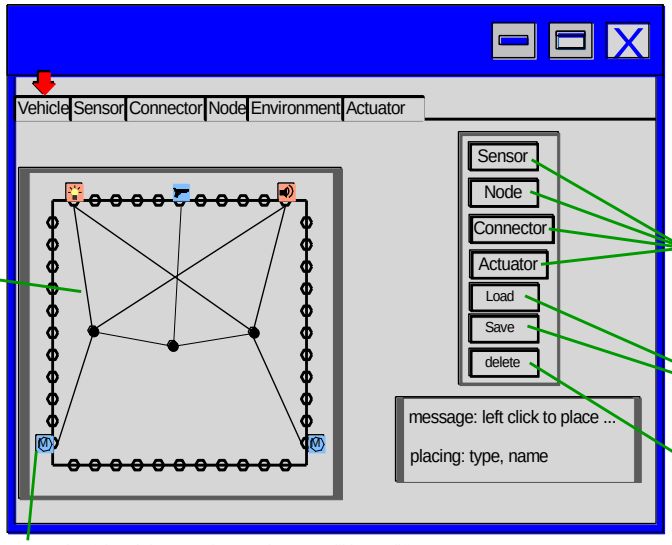
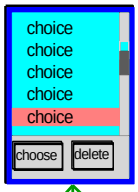
General Overveiw



Vehicle Tab

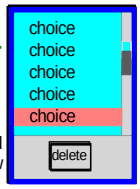




These buttons lead to a file chooser where the user can choose the specific component to add. The user creates components to add in the tab associated with each button. However the file chooser will be disguised so that it does not appear to be a file chooser. The files associated with each component will be stored in pre-determined directories and parsed to show only the filename with no path or extension.

These two buttons lead to a traditional file chooser.

Delete button will show a list of all components currently in the vehicle and allow to delete them(only from vehicle, not from directory). When a user clicks on a line it will highlight the associated componet in the vehicle draw widget in red.
In the future user can also click in model directly and press delete.



Sensor/Stimuli Tab

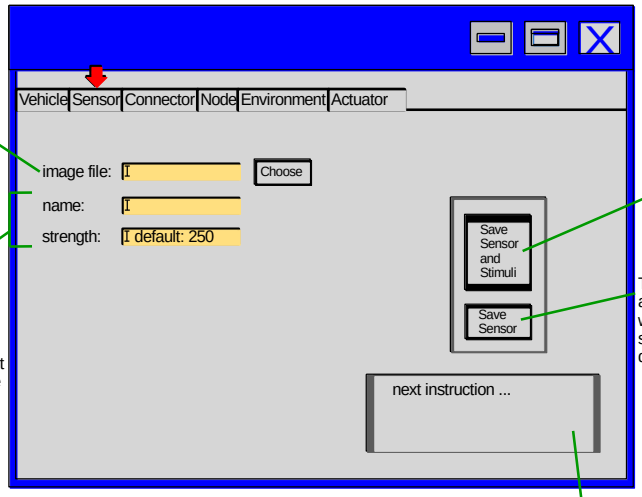


Image file must a png and is preferably 32 x 32 pixles. Otherwise the image will be scaled to 32 x 32, but this may distort the image. The user can only enter a filename throught the file chooser. The same image file will used to represnet stimuli in the environment tab.

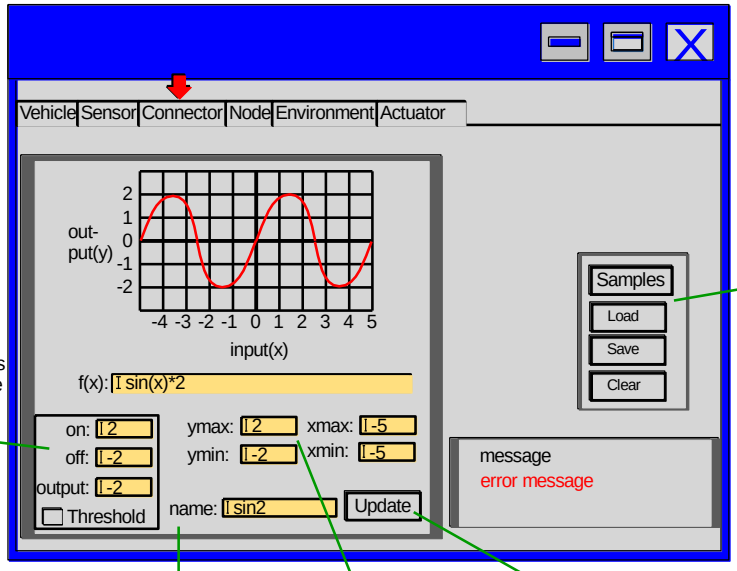
These two fields will be checked for valid values before the save action completes. A valid value for strength is 1- 5,000. All char sequences are valid for name except null. Leading and trailing whitespace will be removed.

This save button will be enabled after user has a valid value in all three fields. A stimuli file and a sensor file will be generated when button is clicked. Stimuli file will follow this naming convention: name_strength.stim so that the user can identify strenght of stimuli when placing.

This button allows users to generate additional stimuli of different strengths which are associated with the same sensor. Filename will follow the convention described above.

The message widget will give the user instructions and display any error messages.

Connector Tab



The threshold box allows the connector to activate as a threshold device. If threshold is clicked the program will ignore the equation and make a threshold function based on, off, and output.

Program will have common sample equations the user can load. The help manual will give a breif explanation of the characteristics of the sample equations.

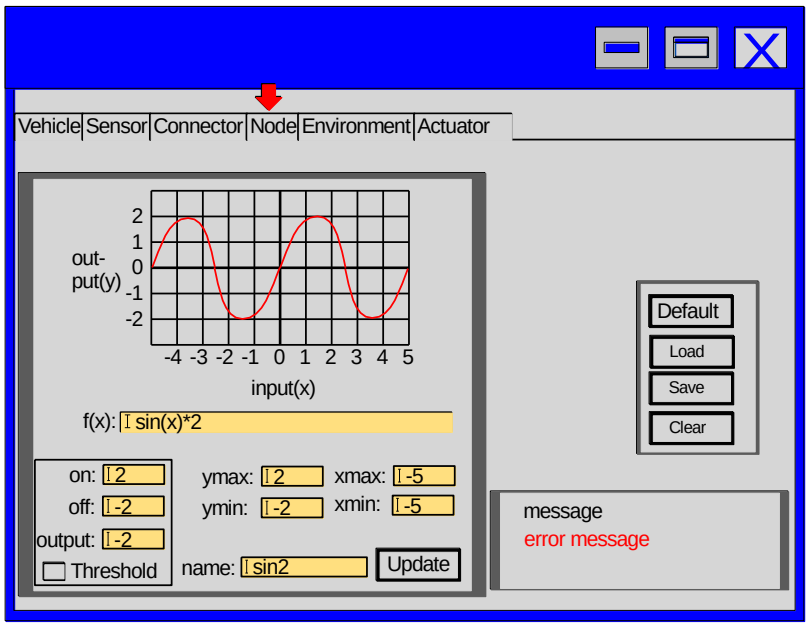
Use this panel to create cutom connectors and nodes. The equation parsing is built on the Simple(x) Numerical Formula Parser by Ralf Wirtz. The equation is saved as a string in the xml file and the engine will use the same library to evaluate the equation.

These values define the x and y range of the graph.

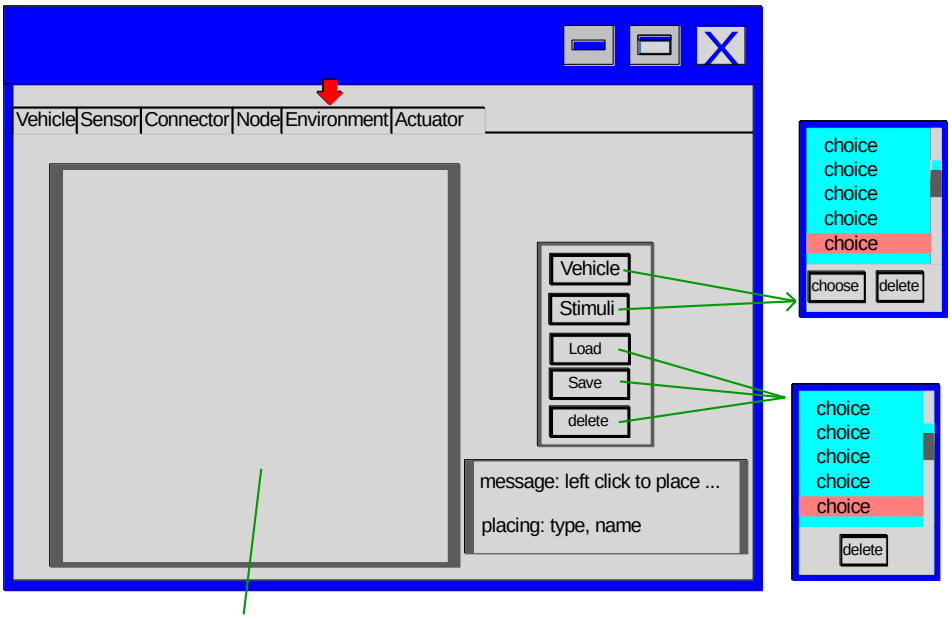
Clicking this button will apply values in textboxes to the graph out.

NodeTab

The node tab is exactly the same as connector tab, the only difference being the type of file saved.

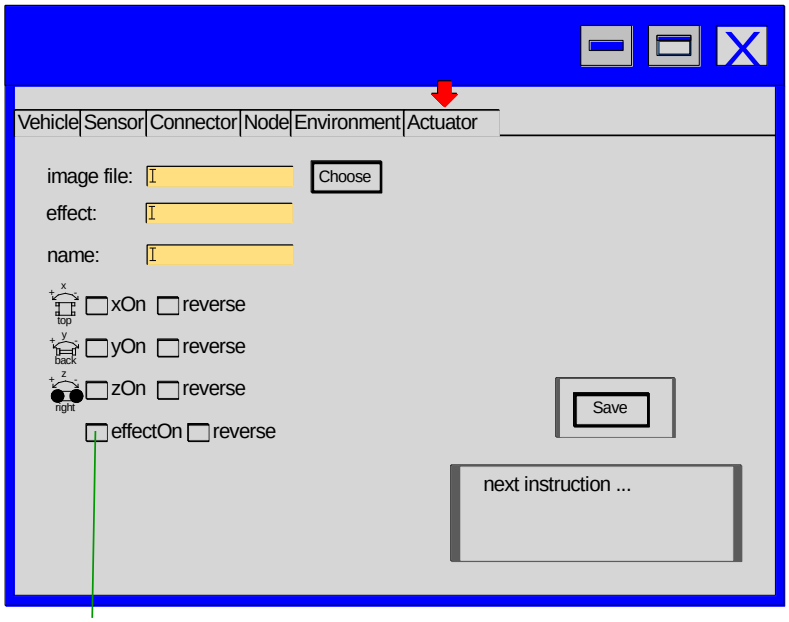


EnvironmentTab



The user can drop components anywhere inside this widget. Components can be dropped on top of one another without error. When the user drops a component a popup will ask the height of the component in 3D space.

Actuator Tab



An actuator can be a motor, noise, or anything. You can create custom actuators by checking effectOn. The program will not accept a save if x, y, or z and effect are checked. Meaning that a motor and a custom effect are mutually exclusive.