

Reactor Extreme Edition

Introduction

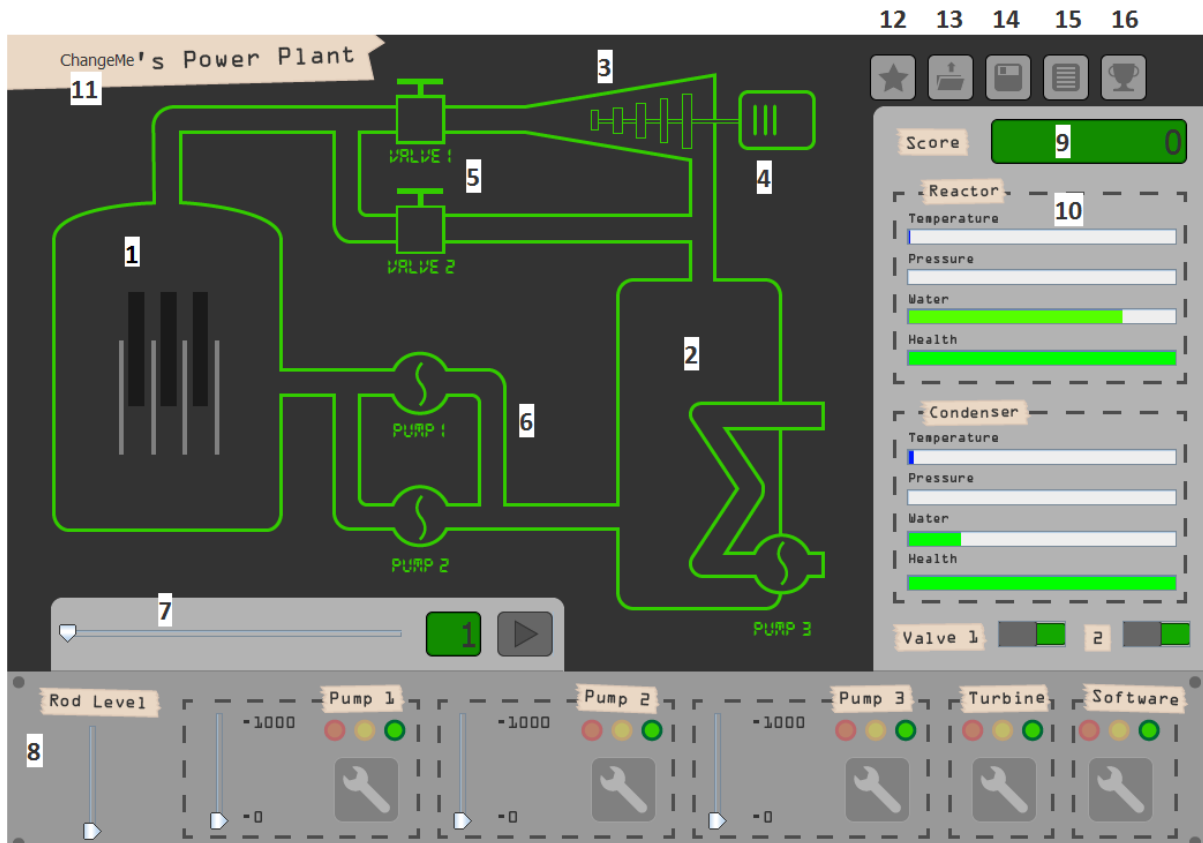
Reactor EE is a turn based game, based around controlling a nuclear power plant and trying to generate as much power as possible before the plant explodes. Many components can be controlled to prevent the meltdowns for as long as possible. This manual should provide you with the knowledge needed to control the plant successfully.

System Requirements and Installation Instructions

To play 'Reactor GEE' all you need is a keyboard mouse and a Java Runtime Environment installed on your machine. To run the game all you have to do is run the .jar file that is within the game directory. Any saved games created will be stored in the game folder.

How To Play

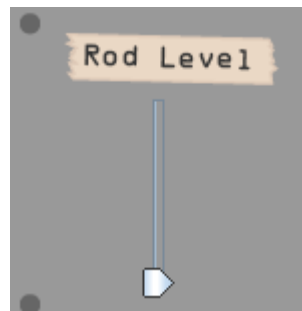
When the game is opened a new window will appear on the screen containing the game . The game window includes a diagram of the plant, a control panel with various sliders and buttons and bars that contain all the readings from the condenser and reactor. The aim of the game is to produce as much power as possible without the reactor failing with the power output acting as the final score. As the player you can control the valves, pumps and control rods to try and maintain a safe pressure and temperature while producing power.



1. This is the Reactor which is the most important component of the plant. If the reactor fails it's game over. The reactor will fail if the temperature or pressure gets too high. As the player, you can control the level of the control rods within the reactor to affect the temperature.
2. The Condenser is used to cool the steam from the reactor. The flow of the water from the condenser is controlled by its valves and pumps.
3. This is the turbine and provides the power to the generator. The speed of the turbine is affected by the pressure in the reactor and condenser and whether valves 1 and 2 are open.
4. The Generator outputs the power from the plant.
5. Valves are used to control the flow of water and steam around the system and are important for controlling the pressure of the system.
6. Pumps are also used to control the flow of water in the system. This helps to cool the reactor down.
7. This slider and button control the time steps. When the button is pressed a certain number of time steps will be carried out. The slider is used to control the amount of time steps that the game steps when the button is clicked.
8. This is the control panel where all the commands can be performed. The various commands exist as slides and buttons.
9. This is the score which increases with the power output.
10. This is the information panel. It includes updates about the condition of the plant such as the various temperatures and pressures and whether the valves are opened or closed.
11. This is where you can enter your name.
12. This button is used to begin a new game.
13. This button is used to load a saved game.
14. This button is used to save the current game.
15. This is the help menu from here you can look at the manual for instructions.
16. This button is used to look at the leader boards for the game.

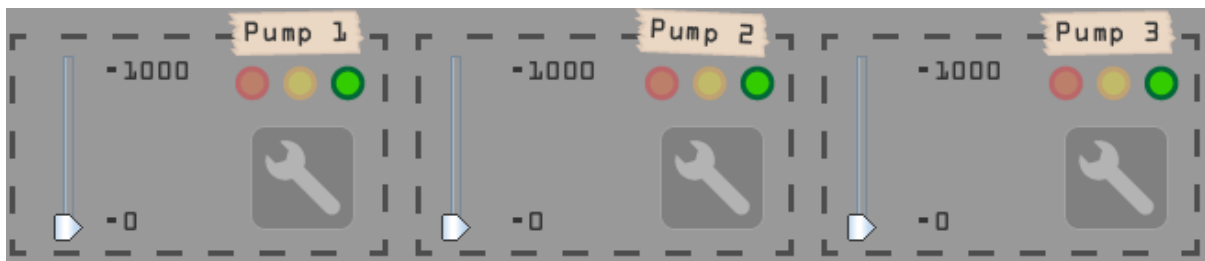
Plant Commands

Set Control Rods



This slider alters the levels of the control rods in the reactor. The level of the rods is on a 0-100 scale and any number between these can be set as the level.

Pump Controls



These sliders are used to turn the pumps on or off and set their RPMs. The RPM can be set anywhere between 0-1000. Pump 1 and Pump 2 control the water flow to the reactor and Pump 3 controls how much cold water is pumped around the condenser.

Valve Controls



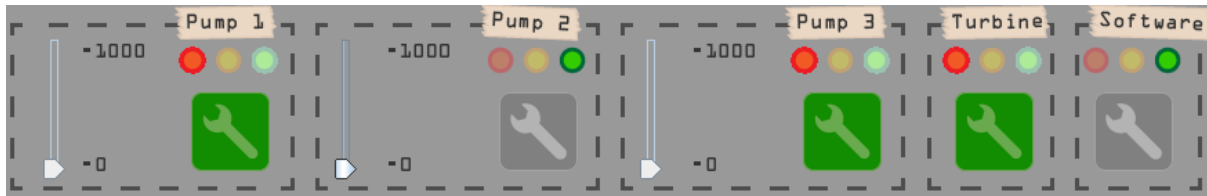
These buttons are used to switch the valves between the reactor and the turbine/condenser on and off.

System Commands



These buttons are used to start a new game, load and save the game, look at the high scores and also a button for the manual. When hovered over a tooltip should appear that gives the function of the button.

Repair Commands



The spanner buttons on the control panel are used to repair the components they belong to. When they are greyed out it means that the component is not broken. When the button is green it means that the component needs repairing. The lights above the buttons represent the state it's in. A green light means it is working, amber is being repaired and red is broken.