

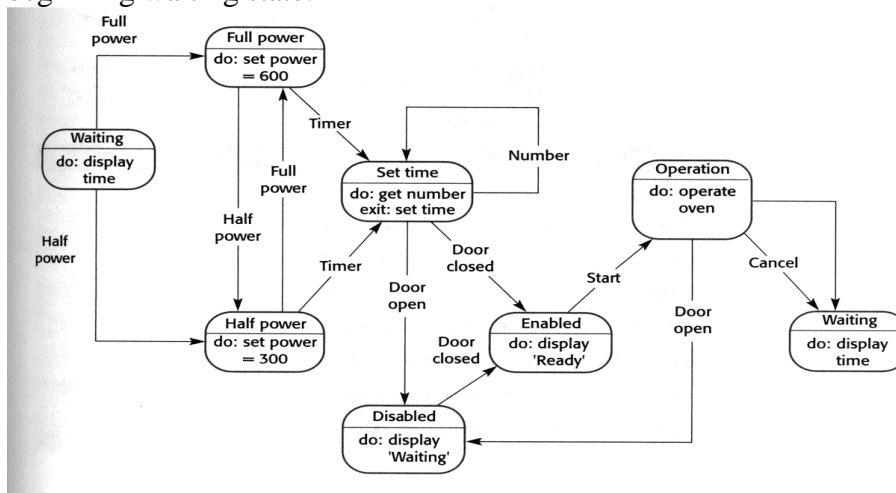
VIRTUAL WORLD DESCRIPTION

On the startup of the flash movie, one can see the stable with two horses on the left. On the upper right is a diagram or schematic of where the user is interacting. On the lower right is an interactive window that represents a microwave interface. This window is necessary for the entering of numerical data.

The initial layout shows the view of inside the horse barn. The two horses are on either side and the user is to select from one of them. Following the selection, the user has chosen either Half-Power or Full-Power based on the different types of horses: Pony and Stallion, respectively. From this selection, the user is then transported to the exterior of the horse barn, where they are reminded to shut the barn door behind them. Once they do this, then they are prompted for the length of time to be run. Once the start button is pressed, they then begin running or walking the horse. Following its termination, the user is then transported back into the stall where he or she can begin the process once again. The user can get a feeling of where he/she is by the upper-right menu that displays the plan view of the architecture depicted on the left window.

DETAILS OF MAPPING

The interactive flash movie represents the behavior of the FSM of a microwave. It begins with the user choice for the horse that corresponds to the choice of level of power for the microwave. The second state is reached when the user clicks the time from the lower right menu. This represents the corresponding state for the microwave when the user enters the time to cook. Following this a check is performed whether or not the door is opened, if it is the user is asked to close it. Once this is done, the microwave starts and the horse runs. If the user chooses to cancel the process then they are transported into the beginning waiting state.



FSM of the Microwave Used for Modeling

The behaviors used by the microwave can be described by the behavior of the horses.
The states can be described as the physical areas that the person is located.

	<u>FSM</u>	<u>Barn and Horses</u>
STATES	Waiting	Standing in barn
	Full Power	Stallion choice
	Half Power	Pony choice
	Set Time	Set Time
	Disabled	If gate door is open, disable
	Enabled	If gate door is closed, enable
	Operation	Run/Gait with horse
	Waiting	Back to stall

HOW TO OPEN FLASH MOVIE

- 1) Make sure that you have Flash Player version 5.0 on your computer. If not, go to www.macromedia.com and download for free.
- 2) Double-click the file "microwave.swf".
- 3) Enlarge the window to allow for easier viewing.
- 4) Due to the constraints of the accuracy of the time used to represent the microwave behavior, the frame rate of the file is 1 fps. There will be a slow-motion effect for the animations, though the speed of the horses is represented by their strides.

HOW TO RUN FLASH MOVIE

- 1) Choose either the pony or the stallion from the left window of the flash movie
- 2) Close the door by clicking the "Close Door" button.
- 3) Enter the time that you want to run the horse from the menu on the lower left.
- 4) Hit the Start Button from the same menu.
- 5) Hit the Stop Button to cancel
-or-
Wait for Termination
- 6) The process returns to the horse barn and awaits another selection.

NOTE: Be sure to clear the time before entering another time over it, as it may enter faulty data.