Documentation for "Jerry the Mouse Virtual Pet" (updated as of 12/4/2018)

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Key Files:

virtualPetProject.html (accessible at https://www.cs.drexel.edu/~kw875/virtualPetProject.html)

Development Environment:

PhpStorm 2018.2.5, developed by JetBrains s.r.o (https://www.jetbrains.com/phpstorm/)

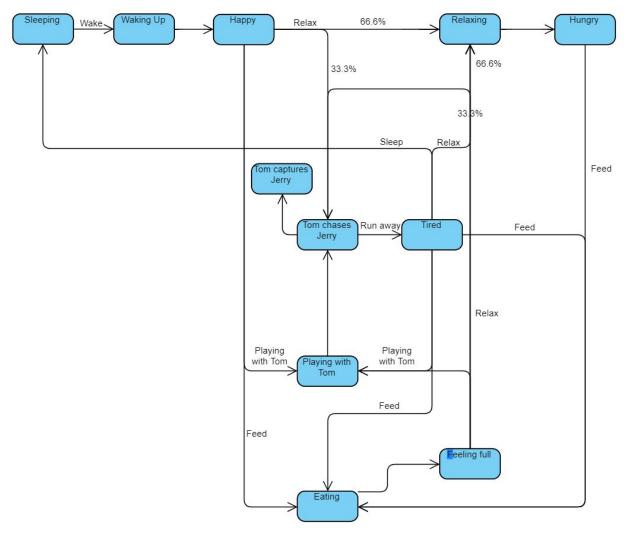
Description:

"Jerry the Mouse Virtual Pet" is a JavaScript application that simulates a virtual pet that is Jerry from the comedic cartoon "Tom and Jerry". It uses multiple states to represent that status of Jerry throughout his day. Tom, a cat, and Jerry, a mouse, are two rivals who live in the same home but compete to embarrass and get rid of each other. Tom, because he is a cat, is usually chasing Jerry, the mouse, and Jerry in turn has to turn to his wits and achieve the upper hand over the cat through creative means. Take on Jerry as your pet to see experience what kind of day the mouse goes through.

Design and Experimentation:

Jerry can be: asleep, waking up, happy, relaxing, hungry, eating, full (after eating), playing with Tom, running from Tom, and captured by Tom. Some states will have detailed depth by using multiple pictures. For example, running from Tom will feature three pictures. Some states last indefinitely because a "dead Jerry" simply does not exist in the cartoon. To compensate, the application will use, for example, the cartoon's most analogous idea, which in example would be "captured by Tom".

State Machine:



Any lines that are labeled with text are transitions that require no action and are activated through a timer.

Once a player reaches the "Tired" state, they will be given the option to "Sleep" at any time. It is not represented on the state machine for simplicity and aesthetic purposes.

For Developers:

If you would like to edit the states, most of the code does not use functions but there are sectioned with whitespace so you can deduce most of the code's purpose. However, the hideActionFunctions() function does not hide the sleep() function because the button appears only when the user has reached the "Tired" state but not during any processes (such as being chased, eating). Also, instead of using if-else statements to check the current image, I have hidden all the buttons so that the user cannot "cheat" and quickly click the "Relax" button to escape from Tom chasing Jerry and interrupt processes (such as being chased, eating).