

The architectural pattern used for this project was a Model View Controller. The model is the 40 by 40 array that held the states of the automaton. The view is the HTML file js-1.html. The controller is the draw-stuff.js, is triggered in the view file, modifies the state array, and draws the results onto the view. This type of implementation makes the controller very coupled to both the model and the view. A better implementation would be to have the controller just modify the model and have the view observe changes to the model and draw itself accordingly. This way all logic of “drawing” is removed from the controller. The project would become more maintainable and understandable.

The below sequence diagram shows the two objects ViewBoundary and CellaEntity. The trigger comes when the user opens the HTML file in their browser. The view begins to trigger the entity object and initializes the automaton. Once initialized nextGeneration() is called and CellaEntity begins to draw onto the view using the Automaton rules.

