Mastermind

Kameron Kincade
Ryan Langewisch
Taylor Sallee

The game of Mastermind has simple instructions and few rules, yet involves a lot of strategy and thought in order to win. We originally chose the game because of its simplistic game play, but it involved much more effort than initially thought.

Although our web interpretation of Mastermind is designed to look best on a desktop monitor, the webpage itself if completely scalable. This was one of the more time consuming aspects of our web game. Every HTML5 element is positioned either relatively or absolutely and therefore maintains the correct position on the screen when you zoom in/out. This also means that every clickable element also scales in order to maintain its functionality.

Our version of Mastermind also utilizes many CSS3 features in order to make the game visually appealing to the player. These features include shadowed borders, transparent div backgrounds, and fading animations. Along with our nicely designed board, the feature we are most proud of is the color selector tool. Once the user selects a peg, a color wheel fades in for the user to select one of the eight colors. As they hover over a color, the color picker increases in size and changes the color of the original peg.

Checking the user's guess is another area where we spent a lot of time. Knowing how to color key dots and how many key dots to display proved to be a challenge. This required multiple debugging phases for our original checkGuess() function.

One final really cool feature was the layered canvases we used. The bottom canvas displays the board, while the top one displays the color wheel. This was hard to implement because layering items and allowing scalability requires the elements be absolutely positioned.

The combination of all these features, along with the utilization of jQuery for animations, is evidence to why we deserve full credit for the assignment. We poured our blood, sweat, and tears into our implementation and are very proud of what we have accomplished.