All code and design is done by me unless otherwise stated in project description below and code comments (which will indicate the specific source for any code). Images are taken from copyright free sources. Most code is on CodePen, you may see it by clicking the Editor View option from the Change View button on the top right corner for any project you select.

Nelson Mandela Tribute Page

First project in Free Code Camp. I used Bootstrap to make my page and its components responsive. This page can be comfortably viewed on any device. In this tribute to Nelson Mandela, I carefully selected colors to match those of the South African Flag. Images resize according to screen size and the information panels at the bottom stack when the screen width is under 720px (symbolized as md in Bootstrap). The page also links to an external resource on Mandela.

Black Jack Simulator

This project is not a part of Free Code Camp. It is a personal Java simulator of the Black Jack game, as played with one dealer and one player with one deck. All code is available through GitHub by clicking on the image. If you have the software to execute .jar files, you may download the .jar file from GitHub and play. I used a stack (array implementation) to manage the cards in the deck, the game design makes efficient use of object oriented programming principles. The GUI was obtained from one of my university professors, I made changes to it for the purposes of my game (see comments in code for more information).

Random Quote Machine

Responsive web page that makes use of the getJSON function from jQuery to “GET” data from quote API. This project is my first-ever use of asynchronous JavaScript and external API’s. It also makes use of the Twitter API for users to conveniently post quotes (try it yourself!).

Weather App

Web app that makes use of the navigator object to find the user’s location, this data is then used to get the local weather from underground.com’s API. Background images change according to the local temperature.

Wikipedia Viewer

jQuery is used to get the top ten articles of any Wikipedia search and display them to the user. You may also click the “Random Article” button to get a random Wikipedia article. A greedy regular expression (^.\*[.?!]\s) extracts the first sentence from all articles in order to provide a summary for each article.

Twitch.tv Channels

jQuery is used to create tabs and make requests to the twitch.tv API for information on a list of channels such as whether each one is offline or online and the video game being displayed.

JavaScript Calculator

Calculator that runs on JavaScript. I carefully programmed each button using jQuery in order to manipulate the stack of each operation. The technique I used for calculation involved postfix notation as a way of dealing with the order of operations. In order to manage floating points, decimals are rounded up to five decimal places. Note: CE removes the last operand or operator entered, AC eliminated the whole operation.

Pomodoro Clock

A Pomodoro clock is a timer for which you can set time intervals for breaks and sessions. It is useful for working and studying because it helps you focus and make efficient use of your time. JavaScript timing events are the cornerstone of this project. The user may change pause/unpause the clock or change the length of time for breaks or sessions at any time.

Tic Tac Toe

Users may play against another person or the computer. I implemented the MiniMax algorithm for when the computer plays, making it only possible for either a draw, or a win for the computer. See the code (with comments included) for insight into how it works. MiniMax makes use of recursion to calculate all the possibilities for every future move, and assign points for every terminal state discovered.

Simon Game  
Last project in Free Code Camp. This Simon Game uses an array to keep track of the computer’s random moves and monitor the player’s moves. I used jQuery events to program buttons and game options.