This assignment was pretty straightforward. I initially had plans to go above and beyond the minimum requirements, adding other navigational features to categorize measurements into distance, weight, force, etc. However, I quickly abandoned these due to pressing deadlines in other classes and reverted to a simple, elegant page with no navigational options and 6 buttons to convert back and forth between 3 different types of measurements.

I did find coding in javascript to be clunky and awkward at first. I am used to C++ so syntactical differences in the way functions are written threw me off. Fortunately, using the temperature converter from GitHub as a starting point, I was able to pick up javascript and understand it fairly quickly. The program for this project was nothing too complicated. I feel the level of difficulty was just right for a first-timer who has experience in some other language. Although I started with the GitHub code for understanding, I rewrote the temperature conversion program to add error checking and modularization, in line with the assignment requirements. I then applied that altered code to two other measurements: feet/kilometers and pounds/kilograms. There are obviously many other conversions I could have done, but I decided they would be an exercise in tedium since the code would essentially be written the same way.

Arguably one of the hardest parts of this assignment was applying a bootstrap theme. This program was very small in scale, so I didn't need all the navbars and displays that came with most themes. I started off looking at simple login form templates that I could alter, using the email box as input for numbers and the "log in" button to convert. But after messing around with that for a while, I figured I was making it more complicated than it needed to be. I also didn't fully understand forms, which all of those templates used. Finally, I settled on the Grayscale theme from StartBootstrap. I removed everything from the html except for the introductory page which I used as a background for my input buttons. While I really liked the picture that came with the grayscale theme by default, I felt obligated to find one on my own to add some degree of originality, even though the one I ultimately used was of course created by someone else. But at least it didn't feel as much like "stealing" the Grayscale template. Instead I used a satellite image of earth at night. Perhaps that wasn't the most fitting image, but I figured it might tie into the idea of converting between units (or currency, should I decide to add that functionality) from all around the world. Also the colors complimented the bootstrap primary style buttons I used.

One point of mild concern for me was whether or not to parse the numbers. From a scientific point of view, I wanted to be as precise as possible. However, for this to be worthwhile, I would need to factor in significant digits, which would add a lot of complexity to the computations. In the end, I decided to round up on the fourth decimal place. That is sufficiently precise for most non-scientific uses.

This program was created in Brackets and tested using Google Chrome, Internet Explorer, and Mozilla Firefox.