There are two exercises we would like you to complete and submit as part of your application process.

## Restrictions

Only use Javascript, CSS and HTML.

No third-party libraries or frameworks (jQuery, Vue, React, Bootstrap, etc).

## Submission Instructions

Below are the steps required to submit the exercises. GitHub Pages will host your final submission.

Create a new repository on GitHub (do not fork or clone this one).

Put all files for the submission in a docs/ folder.

Enable GitHub Pages for your repository: Publishing GitHub Pages

Share the link back to Shannon Brown (shannonb@unr.edu) for both submission exercises.

## Exercise A: Geolocation Report

An instructor has provided a list of cities and their geocoordinates (latitude and longitude) <file attached>. Convert into JSON file. The instructor would like a web application which fetches the data and displays it to a user. The application should calculate the distance between the University of Nevada, Reno and the city listed in the file. The instructor has provided a function for you to use for this purpose. Lastly, the rendered data should be sortable by ascending and descending calculated distance.

### Instructions

The web application should fetch the JSON at runtime from here: cities.json

Calculate the distance between each city and the University of Nevada, Reno using this function: distance.js

Display the name, latitude, longitude, and calculated distance for each city in the JSON file.

Allow the student to sort the data, ascending and descending, based on the distance.

## Exercise B: Custom Button

<file attached>

### Instructions

Duplicate the button above as an HTML element using just CSS and HTML.