# UHNM Technical Test

Using the attached HTML file as a basis, Write a javascript application that takes the following function properties (These can be hard coded as variables):

**StartWord** - a four letter word (that you can assume is found in the DictionaryFile file)

**EndWord** - a four letter word (that you can assume is found in the DictionaryFile file)

Your program should calculate the shortest list of four letter words, starting with StartWord, and ending with EndWord, with a number of intermediate words that must appear in the DictionaryFile file, *where each word differs from the previous word by one letter only.* The result should be written out in the output tag within the HTML document.

For example, if StartWord = Spin, EndWord = Spot and DictionaryFile file contains

Spin

Spit

Spat

Spot

Span

then Result should contain

Spin

Spit

Spot

Two examples of incorrect results:

Spin, Span, Spat, Spot (incorrect as it takes 3 changes rather than 2)

Spin, Spon, Spot (incorrect as spon is not a word)

Your solution should deal with the case where the dictionary file is not in alphabetical order.

Please explain the thought/development process you went through to achieve your solution.

Do not worry if you cannot fulfill the criteria, we want to see how you approached the problem.