Auxiliary document clarifying the running environment

To set up Huffman algorithm worker:

Double click on index.html to open the html file on web browser. There is no set up required since this is a plain Html – Javascript project.

There are many ways to use the Huffman Encoding algorithm.

1) simply type your input into the text box, and watch the tree, bits, and compression percentage dynamically change with each character.

2) Drag and drop a text file into the text box, and the program will automatically populate the text field, as well as build the tree, display the bits, and show the compression percentage for the file you dropped.

3) After doing either of these, if you want to keep the encoding that you just created, you can click on the "Download" button, and your browser will initiate a download of the encoded file.

4) However, your typical text editor will not be able to correctly interpret this file, because of its encoding. If you wish to see the decoded contents of your encoded file, you may use the "Upload" button, everything will be populated and your output will be downloaded to a .txt file.

Runtime Environment:

A simple Html Javascript application: All the functions and methods use are vanilla Javascript. Only a Jquery file has been used to help create a more colorful and user-friendly UI. Along with Jquery, bootstrap has also been used for the CSS design process. The root folder is divided into three sub folders for organization purposes. The first css folder holds the styles and other css documents. The fonts folder holds a file responsible for providing proper fonts to the project. Finally the js folder holds other subfolders responsible for the main functionality of this project. The file and text folders are used to take

and handle inputs either from user typing in values or user inputting values through a file. The libraries folder is used for helper methods which help in decorating the whole project including the binary tree. However, the implementation of the entire binary tree is done completely by me. The library is just used for external styling. Finally in the gui folder. The main index.js file is responsible for the organization of many of the functions used to create this project. It manages and concurrently runs all the functions to help create the Huffman implementation. Finally in the Huffman folder, All the files are used to implement particular tasks such as creating binary tree, creating bit string, creating character to code table, creating compression ratio, etc. This is the main brain of the project.