

Milestone 1 Term Project

Project Name: File Compression Tool

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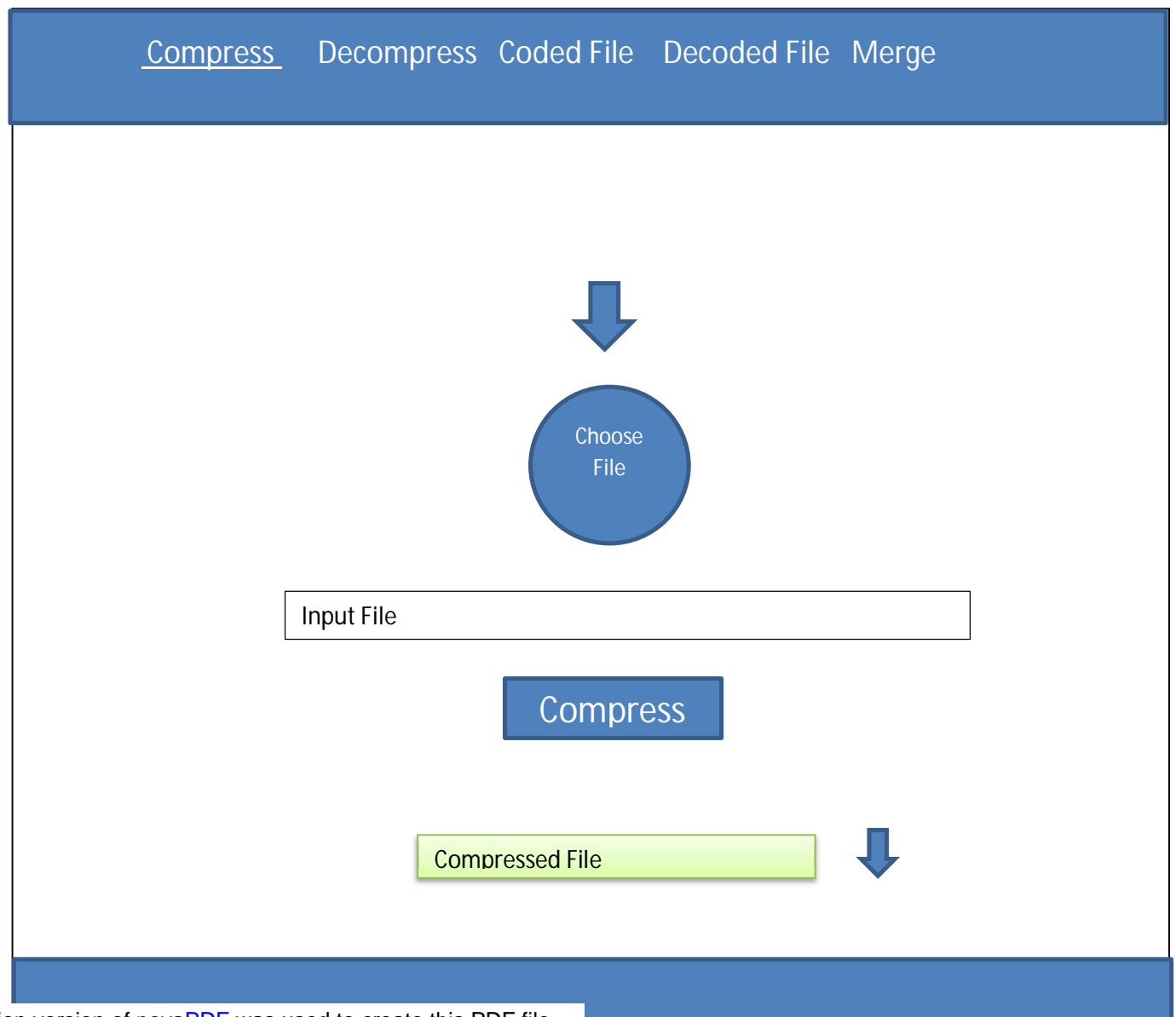
Algorithm Name: Huffman Coding Algorithm

Huffman coding is a lossless data compression algorithm. In this algorithm, a variable-length code is assigned to input different characters. The code length is related to how frequently characters are used. Most frequent characters have the smallest codes and longer codes for least frequent characters.

There are mainly two parts. First one to create a Huffman tree, and another one to traverse the tree to find codes.

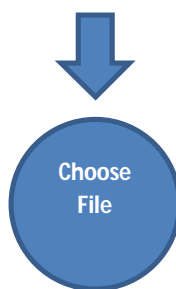
For an example, consider some strings "YYZXXYYX", the frequency of character Y is larger than X and the character Z has the least frequency. So, the length of the code for Y is smaller than X, and code for X will be smaller than Z.

Interfaces Pages:





Compress Decompress Coded File Decoded File Merge



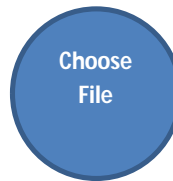
Input File

Encoded

Encoded File



Compress Decompress Coded File Decoded File Merge

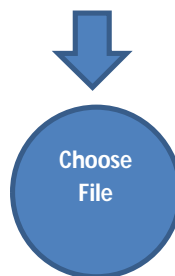


Input File:

Decoded

Decodedd File

[Compress](#) [Decompress](#) [Coded File](#) [Decoded File](#) [Merge](#)



Coding Scheme File

Compress File

Merge

Merge File