

Fakultät für Informatik Labor für Computergrafik Prof. Dr. G. Umlauf



Konstanz, 16.03.2020

Assignment 1

"Multimedia"

Deadline 18.05.2020 25.05.2020, Discord.

Description of assignment

The goal of this assignment is to read a long text ("A MIDSUMMER NIGHT'S DREAM", Shakespeare) into Matlab, analyze the relative occurrence frequencies of the ACSII symbols, and compute the corresponding Huffman code and its average code word length. Encode the text using the corresponding Huffman-code.

For the solution realize the following four steps:

- 1. Read the data.
- 2. Analyze the text.
- 3. Compute the average code word length and the entropy.
- 4. Output of the codes.