

Konstanz, 20.03.2019

Assignment 2

„Multimedia“

Deadline 06.05.2019, F033.

Description of assignment

Goal of this assignment is encode a short sequence of symbols that contains many repetitions, e.g. „/WED/WE/WEE/WEB/WET“, using the LZW method. The encoder as well as the decoder have to construct the correct dictionary. Because the dictionary hold string of different lengths, the Matlab cell-array data structure can be used.

For the solution you can use the following templates:

1. `lzw_encode.m`: Template for the encoder.
2. `lzw_decode.m`: Template for the decoder.
3. `lzw_test.m`: A test script.

Hints:

- <http://www-home.htwg-konstanz.de/~umlauf/Skript/Matlab.en.pdf>
- To store a dictionary you can use a cell-array, which can store strings and matrices of different sizes. It is defined by the command `cell`. A detailed description is available using the command `help cell`.
- To concatenate strings you can use the command `strcat`.
- To search a string in the dictionary you can use `strmatch`. In case the search fails, the return vector is empty. This can be checked using `isempty`.

Deadline 06.05.2019, F033.