Neural Networks applied in NLP

Lab 1

Create a crossword puzzle game with at least 7 words from a specific, user-suggested theme. Use Wordnet and NLTK to automatically generate clues, which should be a combination of definitions, synonyms, antonyms or other Wordnet relations.

Steps:

- 1. (0.25p) Exploit WordNet's hyponym/hypernym hierarchy to collect words that are related to a user given theme (e.g. sport, books, food).
- 2. (0.25p) Generate the crosswords puzzle
- 3. (0.25p) For each mapped word, extract a linguistic feature using NLTK's interface to Wordnet (synonyms, antonyms, meronyms, definitions etc.)
- 4. (0.25p) Provide it in a user-friendly manner