

Lab Sheet for NLP, Part 1/5**Task 1**

Label all the words in the following text with their major parts of speech (PoS). Mark each sentence as declarative, question, or command. Mark the verbs as stative, transitive, intransitive or ditransitive. Mark the adjectives and adverbs as positive, comparative or superlative. Indicate the tense of each verb. Indicate the number of the nouns (i.e. are they singular or plural?). Mark each noun as either a count noun or a mass noun (in its context).

To solve this task, find and explore The Internet Grammar of English and/or similar online resources describing the syntax of modern British English (BrE). Use it to find the meaning of any terms in this worksheet that you don't understand.

THE TEXT:

The soldiers tramped into the yard of the inn. The Red Bull was ancient, and the yard was cobbled. The iron nails in the soldiers' boots rang against the stone, striking sparks. John and I watched them warily through the bars of the stable door; the stink of wet hay infested our nostrils. The soldiers' breath steamed like a cauldron in the cold Autumn air. "Give me the pistol!" I ordered.

Task 2

Search the Internet for working conversational agents, and play with them if they are runnable. Try Wikipedia to get you started; also use the keywords: ALICE, Cleverbot, Jabberwacky, Rollo Carpenter, PARRY, ELIZA, chatbot, chatterbot, conversational agent, Loebner prize, Turing test. Try to find out, through your conversations with real chatbots, what their limitations are. Do they have a single practical purpose, or are they more general? What are their NLP capabilities? Is their code freely available?

Task 3

Find some basic information about the NLTK library for Python (which will be used in subsequent labs). Get it ready to use if you haven't done so previously. Here are some options:

- On NTU machines, start "Python 3.4.1" from SoftwareHub. It includes a number of important AI libraries.
- On your own laptop, type "pip3 install nltk" or, if that doesn't work, "pip install nltk", into a terminal. A Python distribution needs to be already installed for that.
- Download WinPython on any Windows machine. It can run without installation, so you do not need administrator rights.