Description of Requirement Acquisition Tool

The Requirement Acquisition Tool (RAT) is a JAVA based software tool which converts the text description given by the user into list of requirements for the software engineers to work with. The GUI of the RAT consists of three panels: The upper-left panel called as input panel consists of editable text-area for the users to write, edit and modify the input text description. The right panel called as button panel has buttons to import an input file, highlight an input text in an input text-area, generate an output from an input and save an output into the file. The bottom-left panel called as output panel consists of text-area which displays list of requirements as an output.

A user can give the input description in two ways namely, by importing a textual description file by clicking on import button or by writing the description manually in the input text-area given in the tool. User can edit the imported text.

A user can highlight all the verbs and nouns phrases by clicking on highlight button which in turn will run a process in background that finds all the verbs and nouns using NLP (Natural Language Processing) tool. The user can also manually highlight the verbs and noun phrases from the text, if needed. A user can define business processes, steps and actions by selecting them from menu which pops up after right-clicking the highlighted part. The dialogue box will appear on selecting highlighted part as business process, step or action. The dialogue box has options to insert additional information about business process, step or action.

An output can be generated by clicking on the ‘generate’ button. The output text-area at the bottom of the GUI will show an output. An output is the list of requirements in an ordered format. The user can save the output manually by clicking on the ‘save’ button into a text file. The tool shall clear the input text area after the output has been saved.