**Requirements Acquisition Tool**

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**Project Description**

The Requirement Acquisition Tool is a JAVA based software tool which converts the input given by the client in the form of a textual document into software requirements for the software engineers to work with. The tool uses predefined rules, which are applied on the textual document to get the required output. The GUI is divided into three parts: Input text-area for the clients to open, edit and modify the text, the right panel which consists of buttons for opening, processing, generating and saving documents and the output area which displays the list of requirements.

Constraints:

C.1 The RAT must be programmed by JAVA.

C.2 The RAT must be platform independent.

Requirements:

R.3 The RAT must provide a capability to acquire requirements for developers, Customers and users from business process description automatically.

R.4 The RAT must provide a graphical user interface (GUI) for user input the description.

R.4.1 The RAT must provide a text-area for the user to enter.

R.4.2 The RAT must be able to import previously saved text documents.

R.4.3 The RAT must allow user to paste and type in the requirements and edit them.

R.5 When the user clicks on the “Process” button, RAT must be able to implement Natural Language Processing on the input text.

R.5.1. RAT must be able to highlight the transitive verbs and nouns in the input text.

R.5.2 The User must be able to edit the highlighted text after the NLP.

R.5.3 The Tool must allow the user to categorize the highlighted text into business process, operation, and action using a right-click menu.

R.6. When the user clicks on the “Generate” button, RAT must be able to generate list of requirements.

R.6.1. RAT must take the business processes and list them as main Requirements like R1, R2.

R.6.2. RAT must take the steps and list them as sub points to their corresponding Business processes like R.1.1, R.1.2.

R.6.3. RAT must take the actions and list them as sub points to their corresponding actions like R.1.1.1, R.1.1.2.

R.6.2. RAT must be able to form sentences using the identified words following set of pre-defined rules.

R.6.5. RAT must prioritize the requirements in the same sequence as the text.

R.6.6 RAT must also allow user to change the priorities.

R.7. RAT must have a “Save” functionality, which allows the user to save the output in a file.

R.8. RAT must use sound software engineering principles for its development and deployment.

R.9. RAT must undergo unit testing, integration testing and acceptance testing. The test cases can be documented.