Software Requirements

Software Requirements for our project are:

- Python: If possible we could use the latest version of python i.e Python 3.9.0. or any version of python that comes after python 3.6
- Anaconda or Jupyter Notebook
- Basic Knowledge about Regular Expressions , Pattern Matching and Natural Language Processing
- Python Libraries: Here we use different python libraries for the project, they are:
 - Pdfminer
 - Regex
 - Spacy
 - Pandas
 - Os

Hardware Requirements

Hardware Requirements for the project are:

- Processor: Intel®coreTM i3-7200u CPU @2.50 Hz or more
- RAM: 8.00GB (3.90 GB usable) or more
- Operating System: Windows 7 or above
- Laptop or desktop: required to run software and automate the parser
- <u>Domain Establishment:</u> This module is responsible for creating user accounts and database creation as the proposed system is domain independent and would be used by multiple users.
- Registration or Login Module: If the new user want to interact with our system he needs to simply register into our system by completely filling details i.e. validation. If the user is already existing he needs to login.
- Parsing & Ranking: Parsing module is responsible for parsing the document and storing it in txt format which will later be used by the ranking module. The candidates information according to his/her skills and the information will be stored in the database.

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- <u>Morphological Analysis</u>: Morphology in linguistics is the study and description of how words are formed in natural language. In this phase the sentence is broken down into tokens- smallest unit of words, and determine the basic structure of the word.
- <u>Syntactic Analysis</u>: The objective of the syntactic analysis is to find the syntactic structure of the sentence. It is also called Hierarchical analysis/Parsing, used to recognize a sentence, to allocate token groups into grammatical phrases and to assign a syntactic structure to it.
- <u>Semantic Analysis</u>: Semantic Analysis is related to create the representations presentations for meaning of linguistics inputs. It deals with how to determine the meaning of the sentence from the meaning of its parts.