**Requirement analysis and Design**

Requirement analysis help the software engineer to better understand the problem they will work to solve. It includes the set of tasks that lead to an understanding:-

1. What customer wants exactly?
2. What is the information proposed by system?
3. What function the system performs?
4. What is the behavior of system?

**2.1 General aspect**

**2.1.1. Initiating the process**

The most commonly used analysis technique to bridge communication gap between customer and developer and to get communication process started. The idea of project disk virtualization in Linux came from the demand of customer for using this system as a mode for having store file as a number of file on any cluster node.

**2.1.2 Information domain**

The info domain consists of three different views of data and control and each is processed by a computer program.

* Information content and relationships for this we collected specific need about the requirements of the customer, jotting down the field names and functionalities of the system.
* Information flow - it represents the manner in which data and control each move through the system. This is required for the analysis of the flow of control in the system given idea about the different modules and parts of software system.
* Information structure: It represents the internal organization of various data and control items. It provides us the information about the data structure, files and tables to be used with functionality in the system.

**2.2 Requirement specification**

**2.2.1 Literature Survey:**

Before starting this project, we did some research on the various applications present in the market. We found the following applications:

* NLTK (Natural Language ToolKit)
* MALLET

**2.2.2 Requirement Analysis:**

The following are the requirements, we have figured out yet:

1. The system should consist of a single API.
2. The system should use only standard libraries of Python.
3. After user starts the application, the system should have loaded various sub modules.
4. The Morph dictionary should be attached with modules here.
5. After loading modules, the user should be asked to enter the input.
6. The text processing will be done here.
7. The output should have a readable format.

**2.3 Platform used:**

* Language used : Python(text processing)
* Linux Ubuntu Ultimate

**2.4 Software used:**

* Python development kit
* Python 2.7

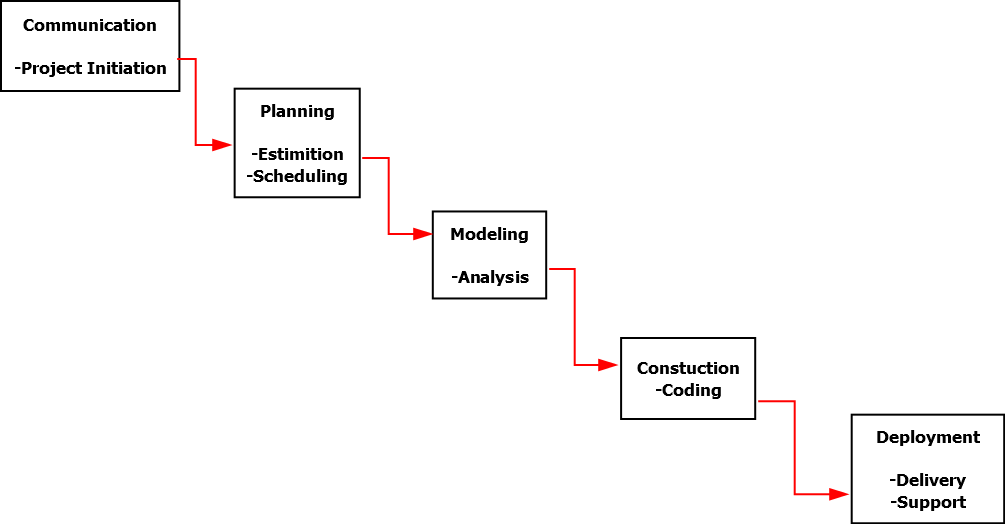
**2.5 Hardware used:**

* Minimum 1GHz Pentium PC
* Minimum 256MB of RAM
* HD space – 100MB (for Python libraries)

50MB (for TextA libraries and modules)

**2.6 Process Model**

The goal of system designer is to produce a model or representation that exhibit, commodity and delight. It provides information about the application domain for the software to be built. It fully describes the internal details of the software.

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