**Chapter 3**

**Requirement Analysis**

Requirement analysis results in the specification of software’s operational characteristics indicates software’s interface with other system elements and establish constraints that soft- ware must meets. Requirement analysis allows the software engineer (sometime called Analyst or Modeler in this role) to elaborate on basis requirements during earlier requirement engineering task and build models that depict user scenarios, functional activities , problem classes and their relationships, system and class behavior and the flow of data as it is transformed.

The requirements analysis task is a process of discovery, refinement, modeling and Specification. Model of the required data, information and control flow and operations Behavior are created.

* 1. **Non – Functional Requirements**

As the name suggest these are the requirements that are not directly interacted with specific Functions delivered by the system.

* **Functionality:** This software will deliver on the functional requirements.
* **Flexibility:** It provides the users to draw the character easily.
* **Learn ability:** The software is very easy to use and reduces the learning work.
  + 1. **Hardware Requirements**
* Internet Connectivity.
* Web Camera
* Storage Space: Minimum 32 GB free; Recommended 64 GB or more
* Memory (RAM): Minimum 4 GB; Recommended 8 GB or above
  + 1. **Software Requirements**
* Python 3.x
* XAMPP / LAMP STACK
* OpenCV