**Chapter 2**

**2.1 Introduction to analysis**

Any detailed examination of anything complex in order to understand nature or to determine its essential features is called analysis **(Merriam-webster.com, 2019)**. In other words, it is the process of breaking down complex thing into small parts that can be understand easily. For any project it is important to understand what is happening and how the things will work. This all is done through a process called analysis. It is an important phase in Software development life cycle. In this phase the requirements are captured accordingly, in this phase a customer/client expresses what he wants the system to do in order to fulfill his requirements. Technical person or the person from developer team analyse each requirement provided by the users/clients and make sure that the requirements can be fulfilled in the software in the system without affecting its system functionality and without causing any problems.

Analysis is done for following reasons:

**Studying the current system**

Any project is initiated because there might be problem with the existing system. In order to make the current system efficient and make it free from errors and bugs new system needs to be designed. Analysis will help in collecting the facts from existing users also it will help to collect information about current system boundary, details of the system and the people affected by the system.

**Defining new system objectives**

Analysis will help to prioritize user requirements. It will give a clear idea of what the system should be and will make the developer team (Technical person) clear about the needs of user/client from the system. Analysis will help in understanding each and every aspects of current system and indicate how the things can be made efficient with the deployment of new system.

**2.2. Analysis Methodology**

The literal meaning of methodology is theoretical, systematic study of the methods and ways applied to any fields of study. Analysis refers to studying and methodology refers to the systematic approach, so combing these, analysis methodology means the methods of studying the system by help of various resources that will help in making the study efficient and less time-consuming. There are mainly 9 analysis methodology that can be used in studying the system. Among them I will use Soft System Methodology.

2.3. Feasibility study