1. Introduction

Analysis in software development is the vital phase as it gathers the needs and requirements of the customers. The product we are developing is for the customer and by the customer. Analysis fulfills the desire of the customer and their product. In this phase customers are directly or indirectly involved in the developing process to analyze and collect the specifications. Analysis helps to decompose the current scenario and analyze the problems or redundancy the customer might be facing and produce the problem statement in the future work.

Reasons to use analyze method in our project:

* To collect the requirements and understand it.
* To collaborate with the customer.
* Decompose the scenario and understand the problem.
* Provide problem statement

There are lots of ways to analyze and gather information from customer. Many activities are involved in this process. Some of the information gathering methods we will be using are:

* Questionnaire: In this method many questions are presented to the customer regarding the product specifications. It may be for one or for group of people. Objective type questions are practiced more as they are simpler, fast and easy for both parties which make the questionnaire more effective. Long questions shouldn’t be stated as the answer may be out of topic and we cannot get what we asked for. For these types of question there is another method which involves interview.
* Interview: It is the most relevant way of gathering analysis as both the parties meet face to face and discuss about the requirements. This way collects more information which may be beneficial in understanding the specifications correctly and also brings the two parties to a mutual understanding.

To understand and analyze the overview of the project a simple rich picture is proposed for both developers and customers.

CATWOE

This analysis helps to know the stake holders who are directly or indirectly involved in the project. It also analyzes the impact that will be on the stake holders if some decision are made upon the project or changed. The CATWOE analysis breaks down into:

* Customer: They are the active stake holders of the system where system requirements and needs should be taken care of. The system we will be building will directly benefit them as the system is proposed by them and it is for them. This stage in CATWOE analysis sorts out how the system is going to affect the client. In our project customer states as the end users who will be using our web application.
* Actors: Actors defines the parties involved in implementation of the system as proposed in development. They are directly involved in the process of developing the system. Admin of the project can be stated as actor in our project.
* Transformation: This defines the input and output data and information processed in the system that comes from users. What kind of input are taken and what outputs are presented should be analyzed. Furthermore, where this information should be stored is important. These processing should be made easily accessible, fast and secure in our system. Since our application is an advertising application, images of the products and their descriptions are taken as input and according to these data matching exchange outputs are presented in the website.
* World View: World view analyzes the situation outside and inside the organization or in our case the local place of the deployment. It studies the impact that will be upon the implementation of the project. Our project offers local product advertising in the market which eases the users in the area but value of similar products may be lessen by the implementation of the project.
* Owner: The owner of the project holds all the rights to make amendment changes in the system development. In our case admin holds the ownership of the project and all its behavior. Identification of owner is the vital phase of analysis in the development cycle.
* Environment: In this phase all the norms and values of the project should be in relation to the surroundings culture. It includes all the law, ethics and legal term agreements of the government. This conducts should cover the places where the product will be deployed.