**SYSTEM DESIGN**

**INPUT DESIGN**

Input design is a part of overall system design, which requires careful attention. It is the process of converting user-originated inputs to a computer-based format. The major objective of the input design is to make data entry easy, logical and error free.

In Visual Basic input to the system is entered through forms. A form is “any surface on which information is to be entered, the nature of which is determined by what is already on the surface”. If the data going into the system is incorrect, then processing and output will magnify these errors. So designer should ensure that form is acceptable and understandable by the user.

This application has been developed in a user-friendly manner. The layout of the form is made in such a way that the user will not find any difficulty in going from one field to other by just pressing the tab. During the processing the cursor is placed in the position where the data must be entered.

The user is also provided with an option of selecting an appropriate input from a list of values. Necessary dropdown list boxes and combo boxes are included for necessary fields so that the user need not remember all the data and can just select from it.

Validation is made for each and every data entered. Help messages are also provided whenever the users enter a wrong data into a particular field. This makes the user to understand what is to be entered, moreover whenever an erroneous data is entered the error message is displayed and the user can move to the next field only after entering the correct data.

The clear label for the menus and fields are also provided. Consultations are provided so that a user can view the details of any process at any time.

**OUTPUT DESIGN**

One of the most important features of a system for users in the output it produces. Output design should improve the system’s relationship with the user and help in decision-making. Considering the future use of output required, and depending on the nature, it is displayed on the monitor for immediate need of obtaining the hard copy.

The objective of output design is to define the controls and format of all printed documents and reports and of screens that will be produced by the system. Computer output is the most important and direct source of information to the user.

**Objectives Of Output Design**

1. Design output to serve the intended purpose.
2. Deliver the appropriate quality of output.
3. Choose the right output method.
4. Provide output on time.

Output, generally refers to the results that are generated by the system. The output of the system is designed so as to include number of reports. Reports reflect the output design.

**DATABASE DESIGN**

The activity deals with the design of the database. A key is to determine how the access paths are to be implemented. A physical path is derived from a logical path. The general theme behind database is to handle information as a whole. A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently.

The general objective is to make information access easy, quick, inexpensive and flexible for the user. Database design is the most critical part of the design phase. An elegantly designed, well-defined database is a strong foundation for the whole system. Files in a relational database are called as tables. Columns of tables represent data and rows represent the records in conventional technology.