CHAPTER 4

SYSTEM DESIGN

**4.1 INTRODUCTION**

System design is the process of defining the architecture, modules, interfaces and data for a system to satisfy specified requirements. System design could be seen as the application of systems theory to product development. System design implies a systematic approach to the design of a system. It may take a bottom-up or top-down approach, but either way the process is systematic wherein it takes into account all related variables of the system that needs to be created from a architecture, to the required hardware and software, right down to the data and how it travels and transforms throughout its travel through the system

**3.2 Assumptions and Constraints**

**4.2.1 Assumptions**

One assumption about the product is that it will always be used on systems that have enough performance. If the system does not have enough hardware resources available for the application there may be scenarios where the application does not work as intended or even at all.

**4.2.2 Constraints**

* The developed system should run under any platform i.e., unix, linux, mac, windows etc.
* All mandatory field should be filled by an individual.
* Details provided by the individual during his signup should be stored in database.
* More space is required to keep all the records. Database should not be overloaded.

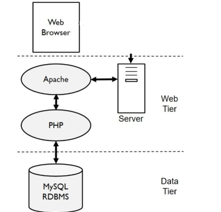
Tables of the database are design normalized table

**4.3 Functional Decomposition**

**4.3.1 System Technical Architecture**

The Apache server used to execute PHP programming and MYSQL server used to store database records. The project “Helpy-Hands” works under following technical architecture.

PHP Architecture

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**4.3.2 System Software Architecture**

The xampp software has following software architecture.

Server Apache

Business Layer

Database Connector

Presentation Layer

HTML, CSS, JS, JQuery Database

PHP MYSQL database connection