CHAPTER – 2

REQUIREMENT ANALYSIS

2.1 EXISTING AND PROPOSED SYSTEM

2.1.1 PROPOSED SYSTEM

HELPY HANDS project has been developed to override the problem of food waste. To reduce Restaurants, Hostels, PGs food wastage by giving leftover food to NGOs. NGOs will raise a request, in case of any leftover food, Restaurants, Hostels, PGs have. This request is sent to the manager of that particular places. The NGO manager then approves the request and assigns it to one of the NGO employees for takeaway and forwards the request to the particular manager. The leftover food at the restaurants, hostels, pgs can be given to NGOs at the end of the day. The admin can track the history of Food donor and NGOs for the leftover foods. NGO donate food to poor people and Add delivery details, by this Food donor can keep track of whether the food is donated to poor or not. Donating food to an NGO is a great way of helping poor.

2.1.2 EXISTING SYSTEM

Every Restaurants, Hostels, PGs has challenges to overcome and managing the food waste. Food banks have set up waste leftover food helplines so that restaurants, Hostels, PGs who intimate availability of food for donation. Often such intimation is given at a late hour and pick up time is also late that is after midnight. Keeping in view the fact that food goes stale soon in India's hot climate. Many NGOs do not have facilities to undertake leftover food collection. So we need a application which ease the process of saving food wastage and help the needy.

2.2 TOOLS AND TECHNOLOGIES USED

2.2.1 Windows 10 Operating System

Windows 10 is a series of operating system produced by Microsoft and released as a part of its windows NT family of operating system. It is the successor to Windows 8.1, released nearly two years earlier, and was released to manufacturing on July 15, 2015, and broadly released for retail sale on July 29, 2015. Windows 10 receives new builds on an ongoing basis, which are available at no additional cost to users, in additional test builds of Windows 10 which are available to Windows Insiders.

 One of the Windows 10's most notable features are its support for the universal apps, an expansion of the Metro-style apps first introduced in Windows 8. Universal apps can be designed to run across multiple Microsoft product families with nearly identical code -including PCs, tablets, smartphones, embedded systems, Xbox one, Surface Hub and Mixed Reality.

2.2.2 XAMPP Toolkit

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache friends, mainly of the Apache HTTP server. MYSQL database, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMP, it makes transitioning from a local test server to a live server possible.

Features of XAMPP

- XAMPP is regularly updated to the latest releases of Apache, MariaDB, PHP and Perl.
- It also comes with a number of other modules including OpenSSL, phpMyAdmin, MediaWiki, Joomla, WordPress and more.
- Self-contained, multiple instances of XAMPP can exist on a single computer, and any given instance can be copied from one computer to another.
- XAMPP is offered in both a full and standard version(Smaller version).

2.2.3 PHP Language

PHP is a popular general-purpose scripting language that is especially suited to web development. It was created by Rasmus Lerdorf in 1994. The PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive initialism PHP: Hypertext Preprocessor. PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response. Additionally, PHP can be used for many programming tasks outside of the web context, such as standalone graphical applications and robotic drone control.

Benefits of PHP

- PHP runs on various platforms(Windows, Linux, UNIX, Mac OS X, etc,)
- PHP is compatible with almost all servers used today(Apache, IIS, etc,)
- PHP supports a wide range of databases, PHP is free.
- PHP is easy to learn and runs efficiently on the server-side.

2.2.4 Apache Web Server

Apache is an open-source and free web server software that powers around 40% of websites around the world. The official name is Apache HTTP Server, and it's maintained and developed by the Apache Software Foundation. It allows website owners to serve content on the web , hence the name webserver. It is one of the oldest and most reliable web servers, with the first version released more than 20 years ago, in 1995. When someone wants to visit a website, they enter a domain name into the address bar of their browser. Then, the webserver delivers the requested files by acting as a virtual delivery man. Here at Hostinger, our web hosting infrastructure uses Apache in parallel with GIX, which is popular web server software. This particular setup allows us to get the best of both worlds. It greatly improves server performance by compensating the weaker sides of one software with the strengths of another.

2.2.5 MySQL Database

 MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter and "SQL", the abbreviation for Structured Query Language. MySQL is free and open-source software under the terms of the GNU General Public License and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB. MySQL is a component of the LAMP web application software stack (and others), which is an acronym for Linux, Apache, MySQL, Perl/PHP/Python. MySQL is used by many database-driven web applications, including Drupal, Joomla, phpBB, and WordPress. MySQL is also used by many popular websites, including Facebook, Flickr, MediaWiki, Twitter, and YouTube.

2.2.6 Sublime Text Editor

Sublime Text is a shareware cross-platform source code editor with a Python application programming interface (API). It natively supports many programming languages and markup languages, and functions can be added by users with plugins, typically community built and maintained under free-software licenses. Sublime Text has several features that you should know about & use, features that provide great ease of use or power.

- **Auto-completion in sublime text**
  Lazy is good when it comes to text editors.
- **Quickly insert text & code with sublime text snippets**
  Snippets + field markers + place holders=far less typing!
- **Select multiple Lines, Words, & Columns**
  One of the absolute coolest features of Sublime Text.

2.3 HARDWARE AND SOFTWARE REQUIREMENTS

2.3.1 SOFTWARE REQUIREMENTS

Operating System   : Windows 10

Front End   : HTML, CSS, JavaScript

Back End   : PHP

Data Base   : MySQL, XAMPP

Tools   : XAMPP Toolkit, Apache Web Server, Sublime Text Editor.

2.3.2 HARDWARE REQUIREMENTS

Processor   : Intel Core i3

RAM   : 4GB

Hard Disk   : 40GB