**CHAPTER 2**

**LITERATURE REVIEW**

**2.1 Survey of existing system**

The existing system is manual based and need lot of efforts and consume enough time. In the existing system we can order items online but the allotment processes are done manually. It may lead to corruptions in the allocation process as well as order fee calculation. The existing system does not deals with mess calculation and complaint registration.

**Disadvantages:**

* More human power.
* More strength and strain of manual labour needed
* Repetition of same procedure.
* Low security.
* Data redundancy.
* Difficulty to handle.
* Difficulty to update data.
* Record keeping is difficult.
* Backup data can be easily generated.

**Advantages of the Developed System:**

Using this database, we can minimize errors and reduce hassles. All records can be preserved and there will be no risk of data loss. It is a great facility for both customers and the staff management.

Database keeps all the information in an organized manner. To it is ready to create, read, update and delete data in the database. All problems currently faced by customers while ordering food items can be solved by this data base management system. We just need proper management and maintenance of the database.

This is how we will be to solve these real-life problems with the help of technology and make the world a better place to live.

**2.2 Software Requirement**

Our whole system is designed via NodeJS and MySQL database. This is web-based application so if we host it in some live web server then only system requirement will be internet & a device. Though the listed items are used to build this project:

**Operating System**: Windows

**Frontend Languages**: HTML, CSS

**Backend Languages**: Node.js, Express.js, EJS, MYSQL

1

INTRODUCTION

1.1

OVERVIEW

1

INTRODUCTION

1.1

OVERVIEW

**2.2.1 Frontend**

**1. HTML**

**HTML** or​ **HyperText**​ **Mark-up Language** is​ the standard mark-up language used to create web pages. HTML is written in the form of HTML elements consisting of *tags*​​enclosed in angle brackets (like <html>). HTML tags most commonly come in pairs like <h1> and </h1>, although some tags represent empty​ elements​and so are unpaired, for example <img>. The first tag in a pair is the *start*​ *tag*​, and the second tag is the *end*​ *tag* ​(they are also called *opening tags* ​and *closing tags*​ ​).

**2. CSS**

**Cascading Style Sheets (CSS)** is​ a style sheet language used for describing the look and formatting of a document written in a mark-up language. While most often used to style web pages and user interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages’ use CSS style sheets to describe their presentation.

**2.2.2 Backend**

**2. Node.js**

**Node.js** (Node) is an open source development platform for executing JavaScript code server-side. Node is useful for developing applications that require a persistent connection from the browser to the server and is often used for real-time applications such as chat, news feeds and web push notifications.

Node.js is intended to run on a dedicated HTTP server and to employ a single thread with one process at a time. Node.js applications are event-based and run asynchronously. Code built on the Node platform does not follow the traditional model of receive, process, send, wait, receive. Instead, Node processes incoming requests in a constant event stack and sends small requests one after the other without waiting for responses.

This is a shift away from mainstream models that run larger, more complex processes and run several threads concurrently, with each thread waiting for its appropriate response before moving on.

**2. EJS**

**EJS** or **Embedded JavaScript Templating** is a templating engine used by Node.js. Template engine helps to create an HTML template with minimal code. Also, it can inject data into HTML template at the client side and produce the final HTML. EJS is a simple templating language which is used to generate HTML markup with plain JavaScript. It also helps to embed JavaScript to HTML pages. To begin with, using EJS as templating engine we need to install EJS using given command:

npm install ejs –save

**3. Express Server**

**Express** is a minimal and flexible Node.js web application framework that provides a robust set of features to develop web and mobile applications. It facilitates the rapid development of Node based Web applications. Following are some of the core features of Express framework −

* Allows to set up middlewares to respond to HTTP Requests.
* Defines a routing table which is used to perform different actions based on HTTP Method and URL.
* Allows to dynamically render HTML Pages based on passing arguments to templates.

**2.2.3 Database**

**MySQL**

**MySQL** is an Oracle-backed open source relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL runs on virtually all platforms, including Linux, UNIX and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with web applications and online publishing.

* MySQL is released under an open-source license. So you have nothing to pay to use it.
* MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
* MySQL uses a standard form of the well-known SQL data language.
* MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.
* MySQL works very quickly and works well even with large data sets.
* MySQL is very friendly to PHP, the most appreciated language for web development.