

ABSTRACT

Customer satisfaction is the key to success for any business. In a restaurant, the traditional hand-waving method for calling services is inefficient often leading to many complaints. The Restaurant Management System increases operational efficiency through use of an internal wired communications system. The communications system increases customer satisfaction by leaving a system at each table which the customer can use to request for a server. This system allows managers and owners to easily monitor restaurant functions and employee progress.

In many popular restaurants, waiters/waitresses tend to miss out on tables or customers' calls during busy hours potentially decreasing ones clientele. While this is an ongoing issue, there is still no product that drastically improves the communication between the servers and the customers in the current market. Hence, the goal is to design a system in which the customers can call their servers easily and help the restaurant increase overall efficiency.

INTRODUCTION

In many popular restaurants, waiters/waitresses tend to miss out on tables or customers' calls during busy hours potentially decreasing ones clientele. While this is an ongoing issue, there is still no product that drastically improves the communication between the servers and the customers in the current market. Hence, the goal is to design a system in which the customers can call their servers easily and help the restaurant increase overall efficiency. An internal wired communication system will allow prompt notification to the server when a customer requires service. Moreover, servers can also be more focused on serving their current customers and save their time and energy from always keeping an eye out for needy customers.

On top of meeting the needs of customers, restaurant managers can also monitor the response time of their waiters/waitresses through use of this system. Hardworking, proficient employees will become more recognized while lazy, inefficient employees become motivated to improve. As a result, the restaurant becomes more efficient and possibly increasing morale while improving the level of customer satisfaction.

Project Aims and Objectives

Now a day, the world is getting into digital world. System was trying to build out to make people even more convenience on any aspects. Restaurant Management System provide an system based food ordering system without help of a waiter. It involves seller and buyer which could bring benefits to each other. It is win-win situation that will bring benefits to the world. This system was bringing a convenience for customer that can make order by help of a computer.

It provides customer with a completely new way to make order. By providing customer convenience and also increase the sales. No time wasted with order taking or letting the customer browse the menu over the system.

This system provides more reliable usability, maintainability and dependability functions. By creating quality, easy to keep track management of new system. So that it can streamline all the works by a simple click. By develop the system based food ordering system can reduce the unnecessary costs such as staff salaries, customer satisfaction, reputation, etc. Our restaurant also easy to keep track for the maintenance and point redemption.

ORGANIZATION STRUCTURE

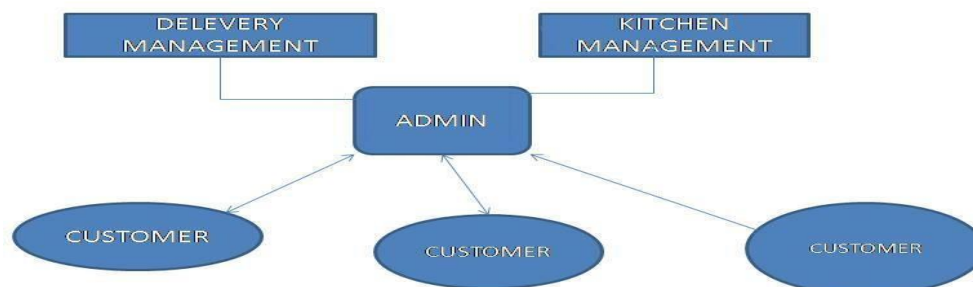


Figure- organization structure

EXISTING SYSTEM

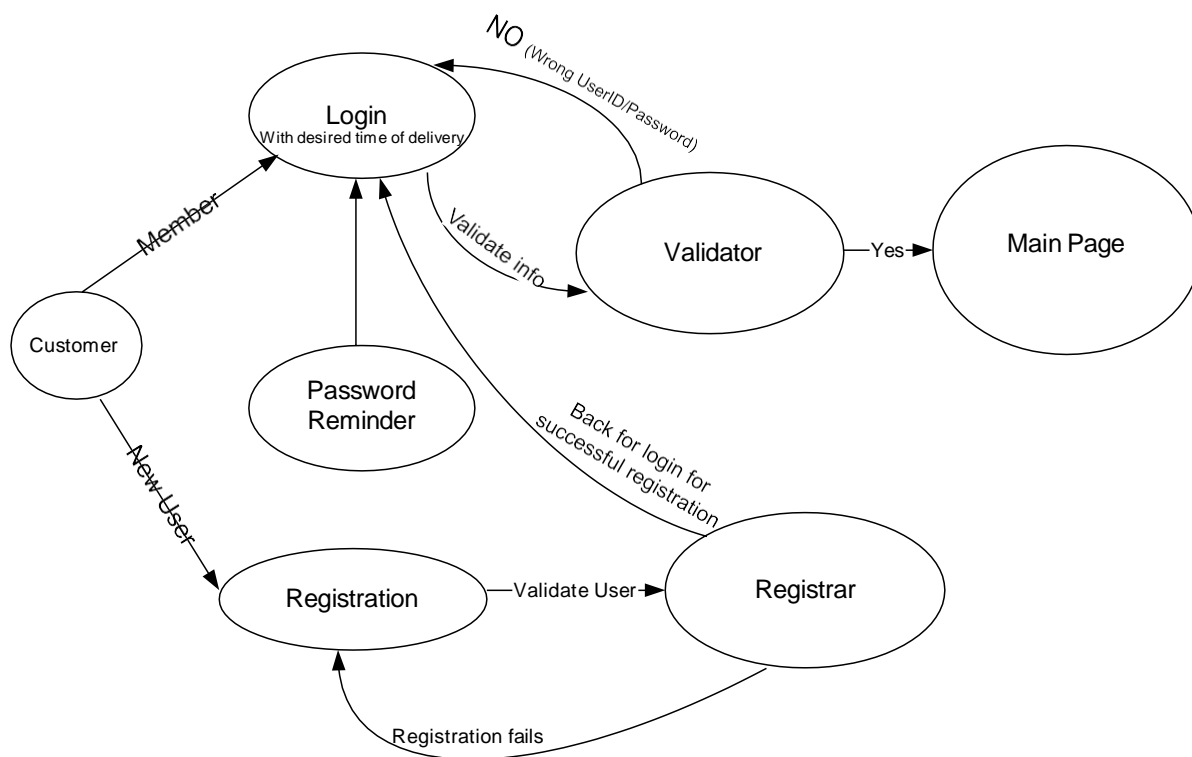
Today, we will go to a restaurant, then a waiter come and take order. Sometimes the waiter is busy otherwise he is not see me. And he is not take order as soon as possible. We will compare Restaurant Management System between, today system come human errors is possible like can't take order correctly. We will need to other items we are waiting for their time.

We can see the speciality of Restaurant Management System we can see the price of the item in the menu. But today system we can see the total amount we can see at the last moment. But Restaurant Management System when we take order then we can see the total amount.

SYSTEM DESIGN

SYSTEM DESIGN FOR CUSTOMER

Customer Interaction



For giving the order, the user should become a member initially. User would have to install his information like the address and other

key information so that he doesn't have to give his information each time. For signing up every customer has to give some this details such as address, name, Contact no etc and the most important is email ID which is the primary key to identify each customer uniquely, thus email becomes the User ID for the customer.

The only thing needed here is to sign in to the system through the system. Now he would have the option to edit his current information and big thing to order the food diminishing the human interaction. He would have today's menu in front of him and he have the clear choices for order. He has variety of things to do here and have the option to cancel the order before the serving. For the first time to access the system, customer has to give his key information like identification and so on.

For the management side, it is quite possible to book many orders concurrently. System will be able to book nearly infinite number of orders at a time. Management side has more updated information and they can get the currently orders. System will be able to deal with the customers who don't come to take there orders by blocking them and not letting them to signup again. This is done by maintaining some information regarding the status of order and the relative customer. So according to that the system can deal him. How system deals with him..? He should have to pay the amount of the last order in order to continue with his membership.

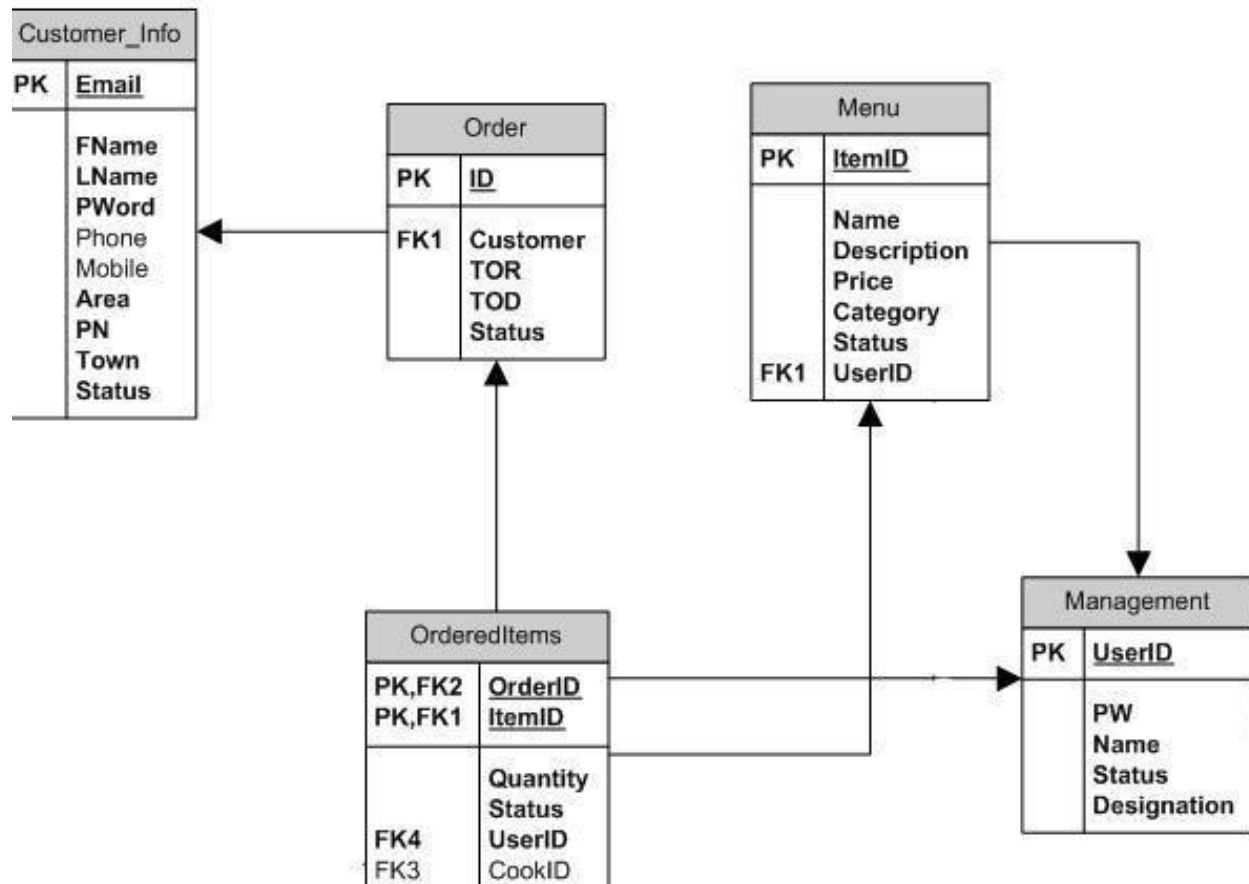
All that would be implemented in Apache Server Pages and MySQL Servlets.

At Login page we will be checking the user's existence and mapping his user ID/email ID with his password, if the user is valid then he is allowed to access further.

At Registration, it is checked that the user ID/ email ID is not pre- existening, along with various general events/acts such as the customer had entered right format of the e-mail, or it is not entered NIL, all phone & mobile numbers contain only the numbers, etc.

The option of password reminder is also included, so that when the user forgets his password then he can get a new password by giving his email ID, only if he already exists!!

MySQL DISCRIPITION



Customer Info

This table keeps the record of the customer's information before user logs on he fills up a form that guides him how he can become a member. Email ID is primary key in this table so we can recognize each member's email ID uniquely as it is used as their user ID as well. Other information includes customer Name, password, contact no, Address and status, the later tells him about whether the member is blacklisted or locked. The entity shares a 1:N relation with order utilities.,

Menu

The name insists, it contains the information of all menus and its related matter. Each menu is uniquely identified by its Item ID (Primary key). The purpose here is to provide customers all the information regarding menu such as Name (item), Description, Category, price and status (to check customer, whether that item is currently available or Not!!). Later, at the management's point of view, we provide user ID (uniquely selected by management staff) to alter the contents of table. This entity shares N:1 relationship with the ordered item entity.

Ordered Item

This table provides information to the management staff regarding the uniquely generated order ID, which may contain one or more menu item uniquely identified by Item ID. Apart from this, the management can check/alter the status of the order along with, they can alter the cook/s which was previously assigned to fulfill the order, this can be done by the management staff by logging in with User ID.

A cook can place status over this entity regarding the status of the specified item is ready for delivery or not !!, this is done by using uniquely provided cook ID. From customer's perspective, customer can check the status of his order in detail i.e. the status of each item in his order from this table as well as the quantity he ordered, the later can also be helpful at the management side. This entity shares 1: N relationship with the Menu table

Order

This table tells about the Order ID (which is a primary key), who has placed the order and gives details about the time when order was placed and the time when the order will be delivered; along with the status of the order (usually some 5 status labels are assigned). This table shares N:1 relationship with the Customer info entity.

DATA DIRECTORY

Table name: Admin

Field	Data type	Null	Default
Ad_id	Int(11)	No	—
Ad_username	Varchar(100)	Yes	Null
Ad_password	Varchar(100)	Yes	Null
Ad_name	Varchar(100)	Yes	Null
Admin_email	Varchar(100)	Yes	Null
Phone	Varchar(100)	Yes	Null
first name	Varchar(100)	Yes	Null
Last name	Varchar(100)	Yes	Null

table name: category

Category id	Int(11)	No	---
Category name	Varchar(100)	No	---
Parent id	Int(11)	No	---
Order type	Int(11)	yes	Null

Tablename:cart

Field	Data type	Null	Default
Id	Int(11)	No	---
User id	Varchar(100)	Yes	null
Inv id	Varchar(100)	Yes	null
Quantity	Varchar(100)	Yes	null
Price	Varchar(100)	Yes	null
Inv name	Varchar(100)	Yes	null
Cart identity	Varchar(100)	Yes	null

Table name: customer

field	Data type	Null	Default
Cust id	Int(11)	No	----
Cust name	Varchar(100)	No	----
Cus id	Varchar(100)	No	----
Cus address	Varchar(100)	No	----
Cus city	Varchar(100)	No	----
Cus zipcode	Varchar(100)	No	----
phone	Varchar(100)	No	----
Email	Varchar(100)	No	----
Password	Varchar(100)	No	----

Table name: Order

Field	Data type	Null	Default
Order id	Int(11)	No	null
Order name	Text	Yes	---
Order date	Datetime	No	---
Order status	Int(11)	No	---
Delivery date	Datetime	Yes	Null
Comment	Text	Yes	Null
Order flag	Int(11)	yes	Null
Order user id	Int(11)	yes	Null
Order price	Decimal(20,4)	Yes	Null

Table name: payment

Field	Data type	Null	Default
Id	Int(11)	no	---
Posted date	Date	no	---
Description	text	no	---
Payment type	Varchar(50)	no	---
amount	Varchar(50)	no	---

DEVELOP MANAGEMENT

PROGRAMMING LANGUAGE

PHP: Hypertext Preprocessor

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP is now installed on more than 244 million websites and 2.1 million web servers. Originally created by Rasmus Lerdorf in 1995, the reference implementation of PHP is now produced by The PHP Group. While PHP originally stood for *Personal Home Page*, it now stands for **PHP: Hypertext Preprocessor**, a recursive acronym.

PHP code is interpreted by a web server with a PHP processor module which generates the resulting web page: PHP commands can be embedded directly into an HTML source document rather than calling an external file to process data. It has also evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP is free software released under the PHP License, which is incompatible with the GNU General Public License (GPL) due to restrictions on the usage of the term *PHP*. PHP can be deployed on most web server

DATABASE

MySQL

MySQL is the most popular database system used with PHP.
What is MySQL?

- MySQL is a database system used on the web
 - MySQL is a database system that runs on a server
 - MySQL is ideal for both small and large applications
 - MySQL is very fast, reliable, and easy to use
 - MySQL supports standard SQL
 - MySQL compiles on a number of platforms
 - MySQL is free to download and use
 - MySQL is developed, distributed, and supported by Oracle Corporation
 - MySQL is named after co-founder Monty Widenius's daughter: My
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The data in MySQL is stored in tables. A table is a collection of related data, and it consists of columns and rows.

DEVELOPMENT SOFTWARE

Macromedia Dreamweaver 8

Macromedia Dreamweaver 8 is a professional HTML editor for designing, coding, and developing websites, web pages, and web applications. Whether you enjoy the control of hand-coding HTML, or prefer to work in a visual editing environment, Dreamweaver provides you with helpful tools to enhance your web creation experience. This guide introduces you to using Macromedia Dreamweaver 8 if you're unfamiliar with any major aspect of it. The tutorials in this guide lead you through the process of creating a simple but functional website.

The visual editing features in Dreamweaver let you quickly create web pages without writing a line of code. You can view all your site elements or assets and drag them from an easy-to-use panel directly into a document. You can streamline your development workflow by creating and editing images in Macromedia Fireworks or another graphics application, and then import them directly into Dreamweaver. Dreamweaver also provides tools that make it easy to add Flash assets to web pages.

In addition to drag-and-drop features that help you build web pages, Dreamweaver provides a full-featured coding environment that includes code-editing tools (such as code coloring, tag completion, a coding toolbar, and code collapse) and language reference material on Cascading Style Sheets (CSS), JavaScript, ColdFusion Markup Language (CFML), and other languages. Macromedia Roundtrip HTML technology imports your hand-coded HTML documents without reformatting the code; you can then reformat code with your preferred formatting style. Dreamweaver also lets you build dynamic, database-driven web applications using server technologies such as CFML, ASP.NET, ASP, JSP, and PHP. If your preference is for working with XML data, Dreamweaver provides tools that let you easily create XSLT pages, attach XML files, and display XML data on your web pages. Dreamweaver is fully

customizable. You can create your own objects and commands, modify keyboard shortcuts, and even write JavaScript code to extend Dreamweaver capabilities with new behaviors, Property inspectors, and site reports.

Notepad++

Notepad++ is a free source code editor and notepad replacement that support several languages. Running in the MS windows environment, Its use is governed by GPL license. Based on a powerful editing component scintilla. Notepad++ is written in C++ and uses pure win32 API and SLT which ensure a higher execution speed and smaller program size.

Notepad is a full featured text editor with features like syntax high lighting and syntax folding like HTML,ASP,JAVA,CSS and PHP etc.

Firefox/Google Chrome

Firefox and Google Chrome is used to testing the web pages. And both browsers are used to search for more information to do this project.

PROBLEM BASED BY CURRENT SYSTEM

SERVICE QUALITY DECREASE

All the food service needed to go through a voice call. When customer make order, staff write down orders. Customer just can make order which they walk in or call. They cannot make order as they like. The accociated benefits will gradually be reflected in our customer service, information management areas. Since all the food ordering done in manual way. So the customer have to queue up to make order.

TIME CONSUMING

When customer call an waiter during busy time. They cannot make order at the busy time. Otherwise customer can make order waiting until after a period of time. When customer make order, a food getting after a time delay. This experience customer give an unsatisfied experience.

FUTURE DEVELOPMENTS

The main dispatcher system software may have a few areas to improve on in the future. The current system allows anyone to view and modify the database. Adding a user profiles with password will improve the overall security of the system. As for eccentric feature, colour code different request status, request type, or waiter id would make the request table easier to read. In the future, it would be efficient to join this main dispatcher software to the existing ordering software that restaurants use today to increase the productivity

CONCLUSION

The purpose of the wireless restaurant management system is to improve worker efficiency and to maximize profit margin of restaurant owners by providing better service. Providing prompt response to customers through use of a System and data collection by the Main Dispatcher will allow this to happen. This project proved to be a larger task than expected due to lack of manpower and late arriving parts. Certain functionality also had to be abandoned to meet time constraints. The System is not designed to replace the existing ordering systems which are at many restaurants but to complement it. Once the Restaurant Management System becomes further refined with the ideas discussed in the previous section, it will pose to be an indispensable tool.

REFFERNCE

- www.google.com
 - www.wikipedia.com
 - Active expert software B. V.2010
<http://www.activexpert.com/xmstoolkit/howto/>
 - <http://www.dynamicdrive.dynamicindex3/snow.com.htm>
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APPENDICES

SCREEN DESIGN

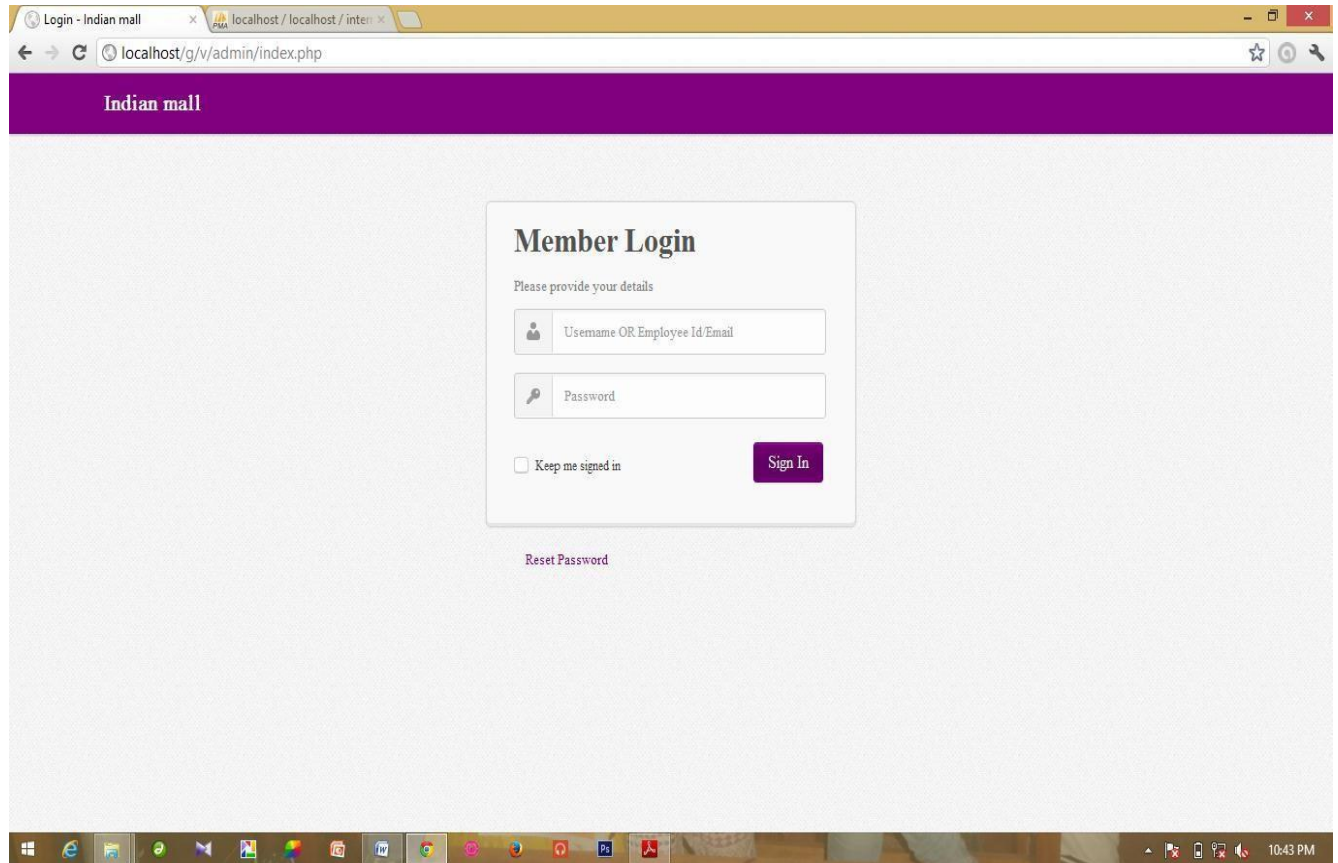


Figure – member login

This page is contain login into home/main page. Login done by entering a unique Username and Password.

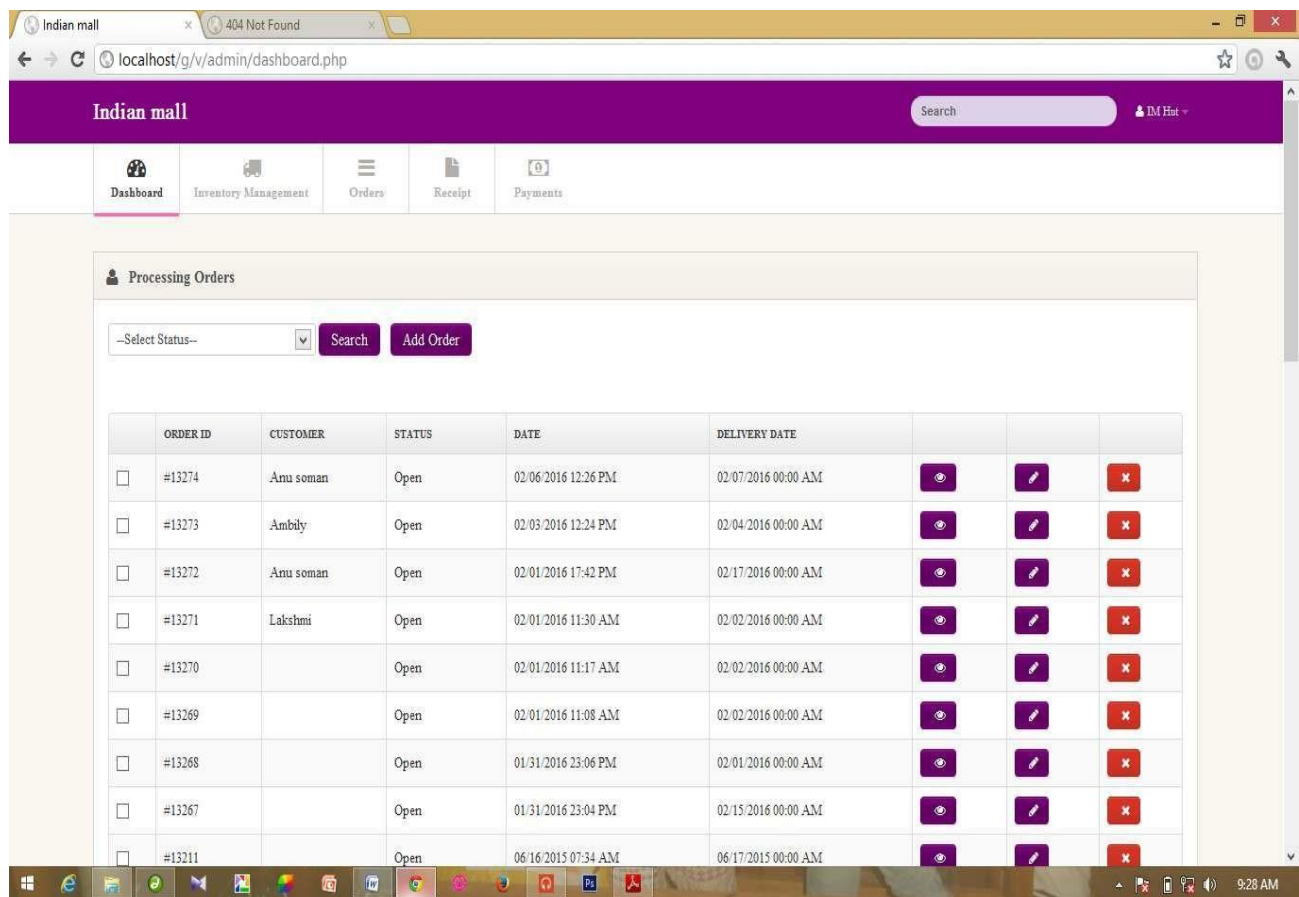


Figure –Dashboard

This menu contain the ordered list and add order button. The order list page show all the order ordered by customer. They can enable view/delete order by pressing the corresponding buttons. They also delete the order/cancel transaction.

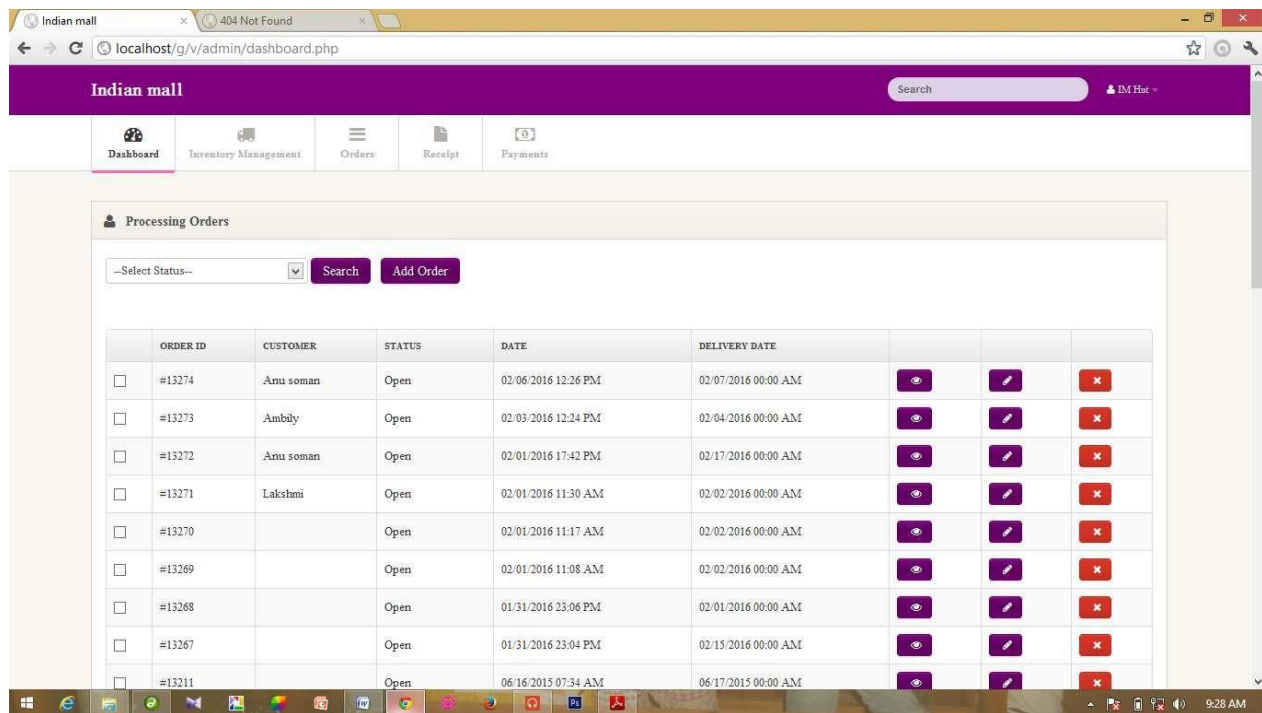


Figure –add order

This page has also show all the food item which can view by category. It allow customer to order food and select quantity and add it to order list. Customer can view their order in dashboard.

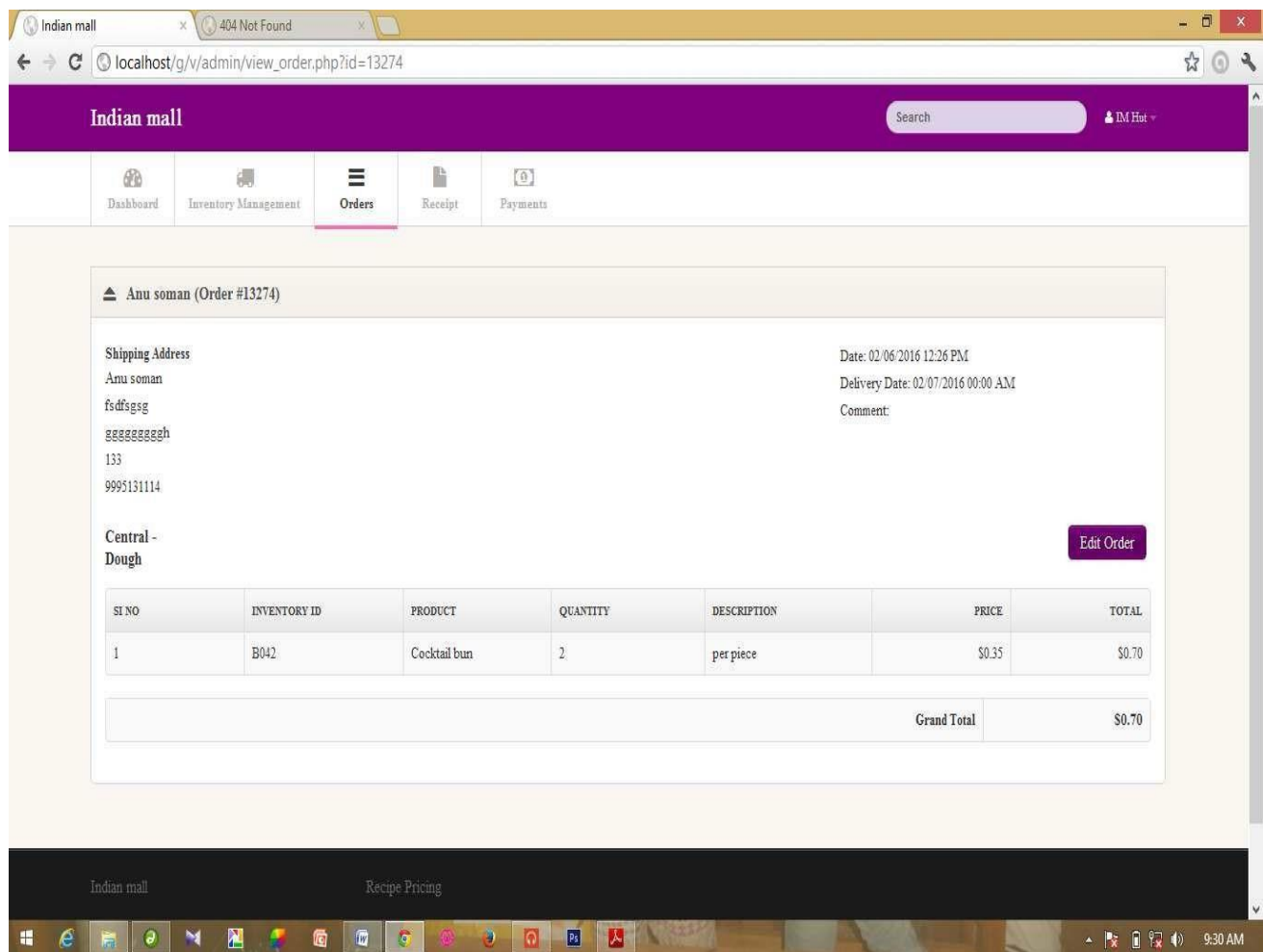


Figure – view or edit order

The screenshot displays a web browser window with the address bar showing 'localhost/g/v/admin/add_customer.php'. The page title is 'Add Customer'. The form contains the following fields:

- Customer Id: 0019
- Name *
- Address *
- City
- Zip code
- Phone *
- EIN
- Email Address *
- Password *
- Confirm Password *
- Comment

At the bottom of the form, there are 'Save' and 'Cancel' buttons. The Windows taskbar at the bottom shows the time as 9:32 AM.

Figure- add customer