Pune Vidhyarthi Griha's
College Of Engineering and Technology

PUNE VIDHYARTHI GRIHA'S

COLLEGE OF ENGINEERING AND TECHNOLGY, PUNE-09.

DEPARTMENT OF INFORMATION TECHNOLOGY

A

PROJECT REPORT

ON

"Restaurant Management System: The Future of Dining"

Under the Guidance of

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Pune Vidhyarthi Griha's
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CERTIFICATE

This is to certify that, the project entitled as

"Restaurant Management System:

The Future of Dining"

Is a bonafide work done by

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Submitted in the partial fulfillment for the award of Third Year Engineering in Information Technology as prescribed by Savitribai Phule Pune University, Pune as a record of students own work carried out under the guidance of Prof.Mrs.P.P.Pawar during academic year 2019-2020.

Prof.Mrs.P.P.Pawar
Project Guide

Prof.S.S.Dixit
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ABSTRACT

Every organization, whether big or small, has human resource challenges to overcome. Every organization has different employee management needs, therefore we design exclusive restaurant management systems that are adapted to your managerial requirements.

It is hard for restaurant owner to get the Human Resources, And people want to enjoy a lavish dinner not sitting in their home but at a place where they have ambience they need. To overcome this employee gap and make the ordering process more efficient we have created this system.

The system being developed is Restaurant Management using MySQL for Database Management and HTML/CSS/Javascript at its front end and ODBC i.e PHP for the connection. It is real time developed software for the manager or the owner of the restaurant as per their needs. It performs operation such ordering, Data Management and Data Insights. This Software also provides the graphical representation of order summary with the help of pictorial representation.

ACKNOWLEDGEMENT

With immense pleasure, we are presenting this project report as a part of the curriculum of Information Technology. We wish to thank all the people who gave us unending support right from the stage the idea was conceived.

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Akshay Kale

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1. Introduction

Every organization, whether big or small, has human resource challenges to overcome. Every organization has different employee management needs, therefore we design exclusive restaurant management systems that are adapted to your managerial requirements. It is hard for restaurant owner to get the Human Resources, And people want to enjoy a lavish dinner not sitting in their home but at a place where they have ambience they need. To overcome this employee gap and make the ordering process more efficient we have created this system.

1.1: PURPOSE OF THE SYSTEM

Now a day's people want to have nice dinner at fancy restaurants and it's hard for the owner to find the Human Resource. Our System eliminates the need of Human Resource and Helps the manager to digitalize the entire restaurant records. Our system also has the Charts, Pictorial representation of the data.

1.2: BENEFITS OF THIS SYSTEM:-

This system will reduce the complexity of Restaurant Management system.

- By using this system we can easily maintain all the record of orders placed by different customers.
- It will reduce the operating cost of the restaurant.
- It can be easily handled by the person who have elementary knowledge of computer because it provides an user friendly environment.
- It's hardware and Software configuration is not very costly that means the hardware and software requirement for this software/project are not very costly.

1.3: OBJECTIVES:-

- To Improve the Usability of the System
- Make It User-Friendly
- Eliminate Human Resource
- Efficient Management of the data of Restaurant
- Reduce the complexity of ordering process

1.4: LIMITATIONS:-

- Customer must have digital knowledge
- Hardware Requirements

Chapter-2

2.System Requirement

System analysis basically deals with determination of system requirements. The determination of requirements means studying the existing system and collection details about it to find out what these parameters are.

2.1 FUNCTIONAL REQUIREMENTS

- Ubuntu 10 and above or Windows 8 or above
- PHP
- Visual Studio Code
- Xampp
- MySQL

2.2 NON-FUNCTIONAL REQUIREMENTS:-

There are three main activities that are performed in requirement analysis.

2.2.1 REQUIREMENT ANTICIPATION:

It means the study done by the system analyst. In this case system analyst raised the question and applies methods to solve that question based on his/her past experiences.

2.2.2 REQUIREMENT INVESTIGATION:

This method is related with finding and investing more features of the system. We have collected information about our system by using fact finding methods like observation and questioning clients.

2.2.3 REQUIREMENT SPECIFICATION:

A Requirement Specification is an agreement between the developer and the user. The clients specified their requirements to us and we selected a strategy in which he tries to fulfill their requirements.

Chapter-3

3.System Design

3.1: E-R DIAGRAM:-

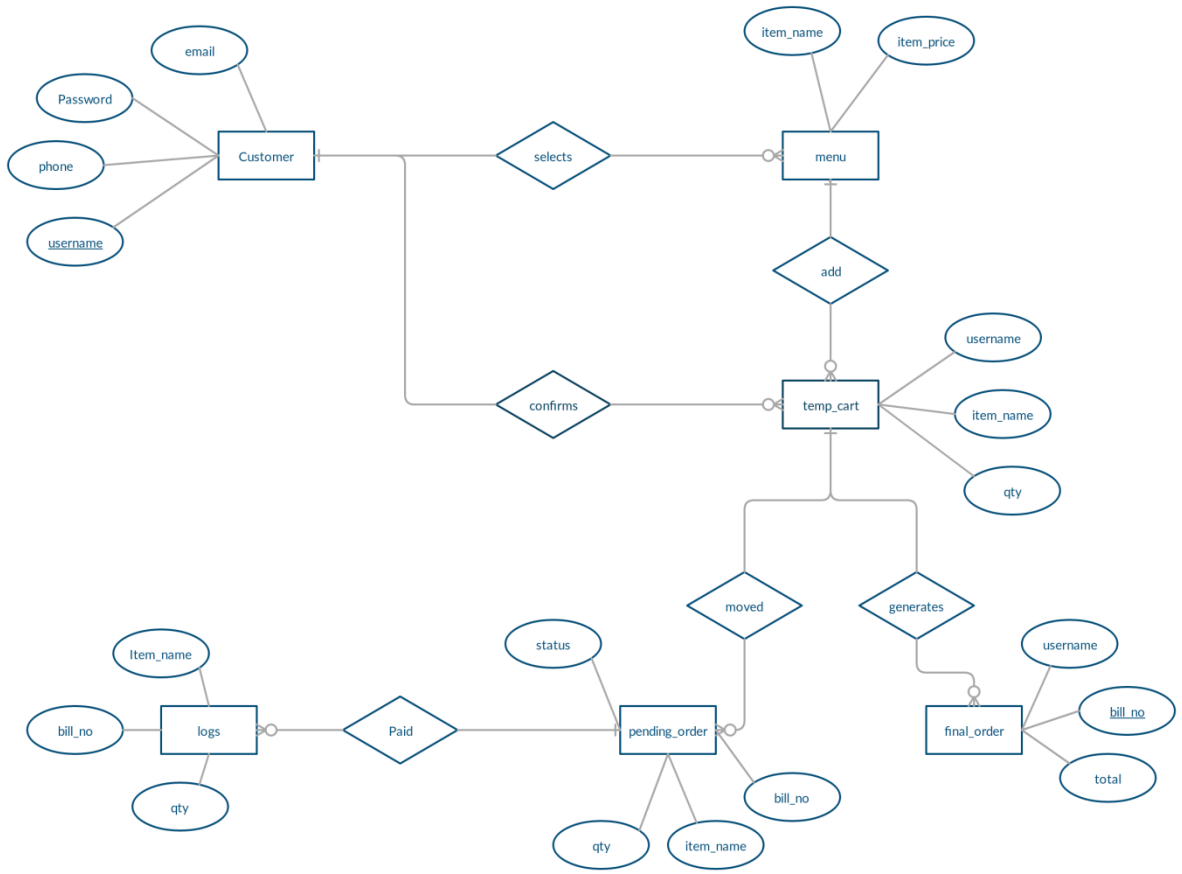

Fig 3.1: ER diagram

3.2: NORMALIZED LOGICAL SCHEMA:-

The Database is already normalized and is in 3rd NF.

CUSTOMER :

Field	Type	Null	Key	Default	Extra
username	varchar(20)	NO	PRI	NULL	
password	varchar(256)	NO		NULL	
phone	bigint(20)	NO		NULL	
email	varchar(20)	NO		NULL	

Table 3.1: Customer Table

FINAL_ORDER :

Field	Type	Null	Key	Default	Extra
username	varchar(20)	NO	MUL	NULL	
bill_no	int(11)	NO	PRI	NULL	auto_increment
total	int(11)	NO		NULL	

Table 3.2: Final_Order Table

LOGS :

Field	Type	Null	Key	Default	Extra
bill_no	int(11)	NO	MUL	NULL	
item_name	varchar(50)	NO	MUL	NULL	
qty	int(11)	NO		NULL	
date_time	datetime	NO		current_timestamp()	

Table 3.3: Logs Table

MANAGER :

Field	Type	Null	Key	Default	Extra
m_name	varchar(20)	NO	PRI	NULL	
m_pass	varchar(50)	NO		NULL	

Table 3.4: Manager Table

MENU :

Field	Type	Null	Key	Default	Extra
item_name	varchar(50)	NO	PRI	NULL	
price	int(11)	NO		NULL	

Table 3.5: Menu Table

PENDING_ORDER :

Field	Type	Null	Key	Default	Extra
bill_no	int(11)	NO	MUL	NULL	
item_name	varchar(50)	NO	MUL	NULL	
qty	int(11)	NO		NULL	
status	varchar(20)	NO		Preparing	

Table 3.6: Pending_Order Table

TEMP_CART :

Field	Type	Null	Key	Default	Extra
username	varchar(20)	NO	MUL	NULL	
item_name	varchar(50)	NO	MUL	NULL	
qty	int(11)	NO		NULL	

Table 3.7: Temp_Cart Table

Chapter-4

4. Implementation

4.1: GUI (Screen Shots):-

This chapter documents the current user interface and the various elements needed to fulfil the user requirements .The images of the user interface pages are included to demonstrate the application's look and feel.

Home Page**:**

The home page is the core page which provides all the functionalities of the project. As mentioned in the project overview, there are various functionalities mentioned in the top division. A.I. Restaurant is the demo name of our Restaurant with a logo. The default functionality page is the home page which is displayed in the main frame. Customer and Manager Login are provided separately. Observe the diagram…

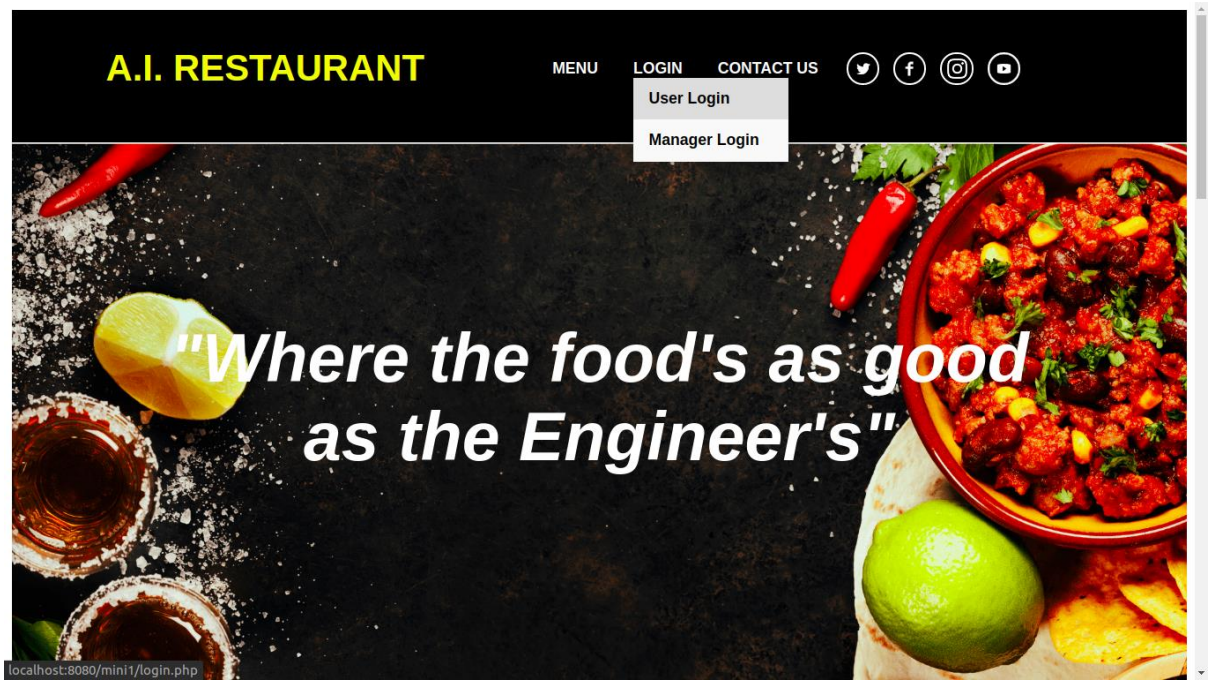

Fig 4.1: Home Page

The Login page:

The home screen will contain the login option (See Figure). Once logged in the software will be redirected to menu page.

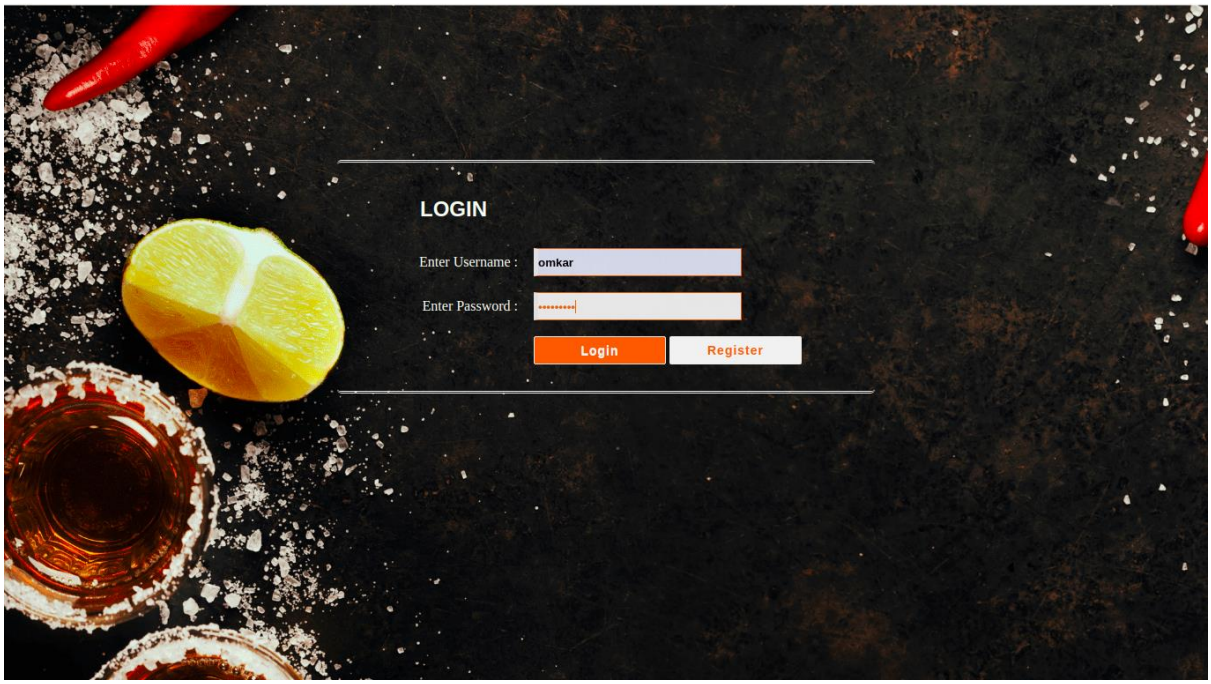

Fig 4.2: Login Page

4.2 SOURCE CODE:-

CODE:

Connection with MySQL Database using PHP

```
<?php
$severname="localhost";
$username="root";
$password="";
$dbname="ai";

$conn=mysqli_connect($severname,$username,$password,$dbname);
?>
```

Logout Using Session Destroy

```
<?php
session_start();
if (isset($_SESSION['username']))
{
```

```
   session_unset();
    session_destroy();
}
echo"<script>window.location=\"http://localhost:8080/mini1/home.html\"</script>";
?>
```

Chapter-5

5. Testing

5.1: INTRODUCTION:

The Testing phase forms an important part of the software development life cycle. Any software product has to be tested thoroughly before it is delivered to the end customer. Well tested software with limited features is certainly better than the one having many features with only a few of them working. This document provides a general overview of the testing strategy adopted for testing our product.

5.2: GOALS AND OBJECTIVES:

The software testing involves verification and validation of the software produced. Testing is a process of executing of program with the intent of finding an error. A good test is one where there is high probability of finding an error. A successful test is one which uncovers and as yet undiscovered errors. Our objective of testing is systematically uncovering different classes of errors and to do so with minimum efforts and amount of time and effort. The data collected in the test provides a good indication of the software reliability and some indication of software quality as a whole. The results of testing will not only help to know which parts of system are working below average but also helps to make the system more user friendly. Testing is considered as an unavoidable part of any responsible effort to develop a software system.

5.3: TEST PLAN:-

5.3.1: TESTING STRATEGY

A good testing strategy is one using which a lot of errors can be easily found. The testing which is to be carried out is divided into number of modules for a proper judgment of the quality of the software. The testing strategy mainly carried out was Module Testing.

Test cases are plotted considering the above categories and correct functionality of various parts of code is ensured.

5.3.2: UNIT TESTING

This involves testing of individual modules. Here we have tested Individual modules written for various operations,

1. Module for Insert Record
2. Module for Update Record
3. Module for Delete Record
4. Module for Search Record
5. Module for Show Order Record

5.3.3: INTEGRATION TESTING

The system as a whole is tested here. The system is said to be operating correctly if it passes these tests. After the different modules have been developed and tackled, all the modules are integrated and tested during the Integration testing. TEST CASE TEMPLATE

A test case can have the following elements. Note, however, that normally a test management tool is used by companies and the format is determined by the tool used.

5.4: TEST CASES :

Test Case Summary	The summary / objective of the test case.
Prerequisites	Any prerequisites or preconditions that must be fulfilled prior to executing the test.
Test Data	The test data, or links to the test data, that are to be used while conducting the test.
Expected Result	The expected result of the test.
Actual Result	The actual result of the test; to be filled after executing the test.
Status	Available or Unavailable.

Table 5.1: Test Case Sample

TEST CASE 1 :-

Test Case Summary	To verify that If the username & password is valid, then successfully log in into Admin Home Page.
Prerequisites	1. User is authorized.
Test Procedure	1. Enter the username and password in the username and password field. 2. Click on Log in button.

Test Data	1. Username : manager Password:Manager@123
Expected Result	1. If the specified credential is valid, then successfully log in into Manager Home Page.
Actual Result	1. If the specified credential is valid, then successfully log in into the system. 2. If the specified credential is invalid, nothing happens ,the expected message is invalid user name & password displayed on same page.

Table 5.2: Login Test Case

Chapter-6

6. Conclusion and Future Scope

6.1: FUTURE SCOPE:

Currently our system has only a pair of the devices connected, we can implement a system in which each table has an individual computing device (like a tablet) and customers can place their order from their table itself which will be more efficient and user friendly.

Further we can also develop mobile application to reduce hardware requirements. We can scale up our system for chain restaurants. We can also add home delivery options.

6.2: CONCLUSION:

As, considering our system, we conclude that using our system we can maintain all the records and perform operations like Inserting of data, Updating our data, perform search operation, display previous record and display next record. The system can be effectively used by Restaurant Owners.

When our system starts it performs many different types of tasks and operations accessing the database defined by the creator and can perform updating and deletion in the database easily and effectively reflect it.

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