Table of Contents

Topic	Page
	No.
Abstract	01
Introduction (SDLC)	01
Tools/Platform, Hardware and Software Requirement specifications	03
Goals of Implementation	04
Data Model	05
Software engineering Paradigm Applied Data	06
Functional Requirements	09
Non Functional Requirements	09
Feasibility Study	11
Planning (Scheduling)	12
Project Planning	13
Database design	14
User Interface Design	16
Coding	22
Testing	50
System Security measures	55
Future scope and further enhancement of the Project	56
Bibliography	57
Appendix	57

Abstract

This project aims to develop a web application is for ONLINE MULTCUSINE SYSTEM. This is an online restaurant where multiple users can view and information of the foods. This project, once implemented, will enable people to get access to an online restaurant. The main object of this application is to make it interactive and its ease of use. It would make searching, viewing and search of a food easier. It contains a sophisticated search engine for users to search for products specific to their needs. The search engine provides an easy and convenient way to search for foods, where a user can search for a product interactively and the search engine would refine the different foods available based on the user's input.

1. Introduction (SDLC)

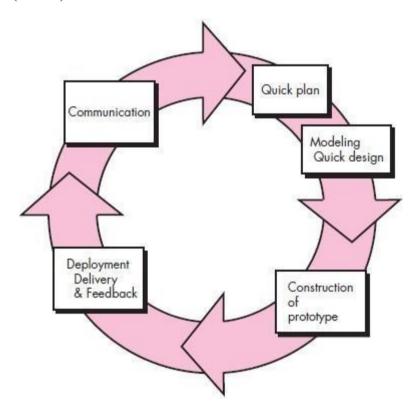


Fig (1): This is SDLC process of online restaurant system

Often, a customer defines a set of general objectives for software but does not identify detailed input, processing, or output requirements. In other cases, the developer may be unsure of the efficiency of an algorithm, the adaptability of an operating system, or the form that human/machine interaction should take. In these, and many other situations, a prototyping paradigm may offer the best approach.

The prototyping paradigm begins with requirements gathering. Developer and customer meet and define the overall objectives for the software, identify whatever requirements are known, and outline areas where further definition is mandatory. A "quick design" then occurs. The quick design focuses on a representation of those aspects of the software that will be visible to the customer/user (e.g., input approaches and output formats). The quick design leads to the construction of a prototype. The prototype is evaluated by the customer/user and used to refine requirements for the software to be developed. Iteration occurs as the prototype is tuned to satisfy the needs of the customer, while at the same timeenabling the developer to better understand what needs to be done Ideally, the prototype serves as a mechanism for identifying software requirements. If a working prototype is built, the developer attempts to use existing program fragments or applies tools (e.g., report generators, window managers) that enable working programs to begenerated quickly. Ideally, the prototype is built, the developer attempts to use existing program fragments or applies tools (e.g., report generators, window managers) that enable working program fragments or applies tools (e.g., report generators, window managers) that enable working programs to begenerated quickly.

2. Tools/Platform, Hardware and Software Requirement specifications.

Tools

Dreamweaver CS6

Via tool

Ms-Office

Platform

Microsoft Windows 7/8

Hardware Requirement Specification

Client Machi	ne	Ser	ver Machine
HDD	200 MB	HDD	320 GB
Processor	Pentium 4 or newer processor that supports SSE2	Processor	Dual Core or newer processor
Memory	512 MB	Memory	2 GB

Software Requirement Specification

Client Machine		Server Machine	
Browser	Any standard browser with Javascript interpreter	Software	Apache
Client side mark up /scripting languages	HTML, Javascript	Database Management System Software	MySQL
		Specification	MySQL-4.1

3. Goals of Implementation

- **Increased Visibility and Reach:** An online restaurant system allows the restaurant to establish a digital presence, making it more accessible to a larger audience. This can attract new customers, especially those who prefer to browse menus and place orders online.
- Improved Customer Experience: Implementing an online system can enhance the overall customer experience. Features like easy online ordering, personalized recommendations, and order tracking can make the process more convenient and enjoyable for customers.
- Efficient Order Management: An online restaurant system streamlines the order management process, reducing manual errors and improving order accuracy. This can help avoid miscommunication and enhance operational efficiency.
- **Expanded Revenue Streams:** Online systems open up opportunities for additional revenue streams, such as online delivery, takeout, or even catering services. Diversifying revenue sources can contribute to increased profitability.
- Customer Loyalty and Retention: By offering features like loyalty programs, discounts, and personalized promotions, an online restaurant system can encourage customer loyalty and repeat business.

4. Data Model

ER Diagram

Entity relationship of the online restaurant system is –

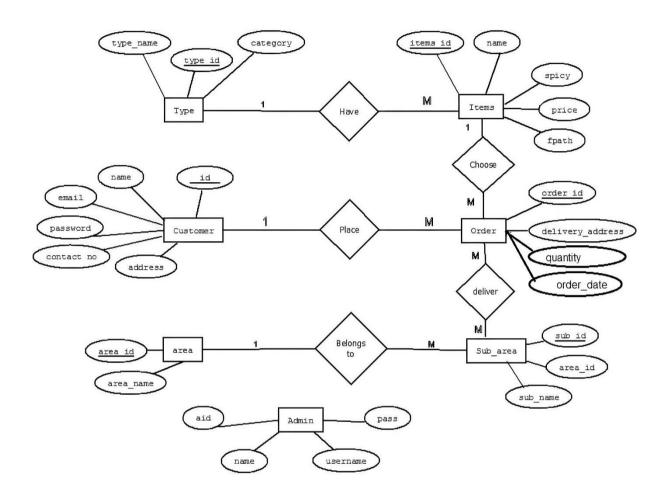


Fig (2): This is ER diagram of online restaurant system

5. Software Engineering Paradigm Applied Data

Flow Diagrams

Flow diagram of the online restaurant system is –

Level 0

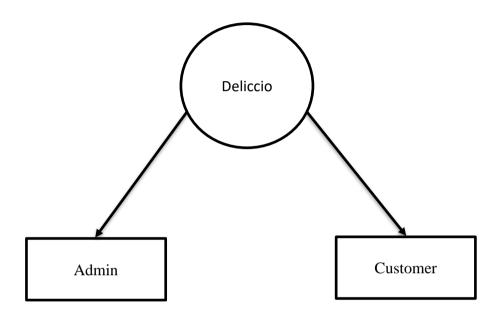


Fig (3): This is level 0 DFD of online restaurant system

LEVEL 1 DIAGRAM FOR (CUSTOMER)

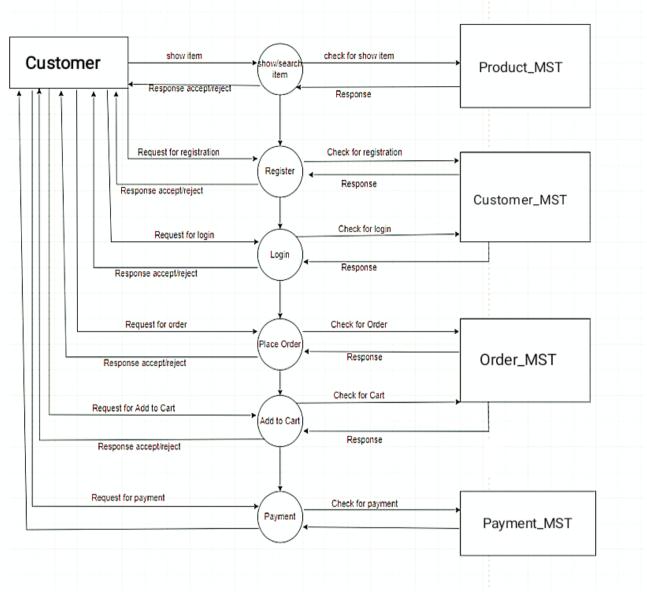


Fig (4): This is level 1 DFD of online restaurant system

LEVEL 1 DIAGRAM FOR (ADMIN)

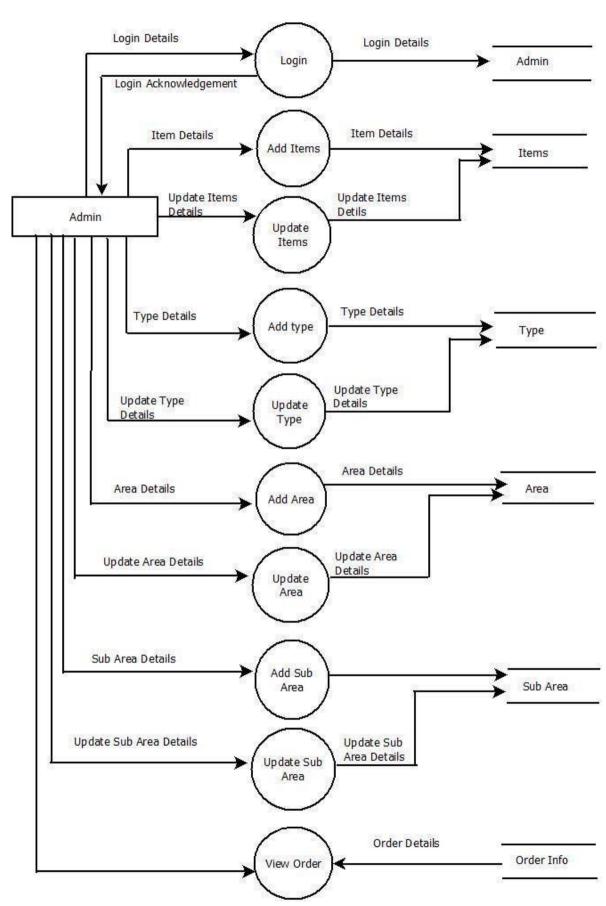


Fig (5): This is level 2 DFD of online restaurant system

6. Functional Requirements

Functional Requirements are those that refer to the functionality of the system, i.e., what services it will provide to the user. Nonfunctional (supplementary) requirements pertainto other information needed to produce the correct system and are detailed separately.

7. Non Functional Requirements

In addition to the obvious features and functions that you will provide in your system, there are other requirements that don't actually DO anything, but are important characteristics nevertheless. These are called "non-functional requirements" or sometimes "Quality Attributes." For example, attributes such as performance, security, usability, compatibility. aren't a "feature" of the system, but are a required characteristic. You can't write a specific line of code to implement them; rather they are "emergent" properties that arise from the entire solution. The specification needs to describe any such attributes the customer requires. You must decide the kind of requirements that apply to your project and include those that are appropriate.

Each requirement is simply stated in English. Each requirement must be objective and quantifiable; there must be some measurable way to assess whether the requirement has been met.

Often deciding on quality attributes requires making tradeoffs, e.g., between performance and maintainability. In the APPENDIX you must include an engineering analysis of any significant decisions regarding tradeoffs between competing attributes.

Here are some examples of non-functional requirements:

Performance requirements

Requirements about resources required, response time, transaction rates, throughput, benchmark specifications or anything else having to do with performance. For better performance the application will restrict the document size to 5 MB.

Operating constraints

List any run-time constraints. This could include system resources, people, needed software, The application must run without any manual intervention.

Platform constraints

Discuss the target platform. Be as specific or general as the user requires. If the user doesn't care, there are still platform constraints.

Since the application will be developed in PHP it is platform independent.

Accuracy and Precision

Requirements about the accuracy and precision of the data. (Do you know the difference?) Beware of 100% requirements; they often cost too much.

Modifiability

Requirements about the effort required to make changes in the software. Often, themeasurement is personnel effort (person- months).

Minimal

Portability

The effort required to move the software to a different target platform. The measurement is most commonly person-months or % of modules that need changing.

Minimal

Reliability

Requirements about how often the software fails. The measurement is often expressed in MTBF (mean time between failures). The definition of a failure must be clear. Also, don't confuse reliability with availability which is quite a different kind of requirement. Be sure to specify the consequences of software failure, how to protect from failure, a strategy for error detection, and a strategy for correction.

Security

One or more requirements about protection of your system and its data. The measurement can be expressed in a variety of ways (effort, skill level, time, ...) to break into the system. Donot discuss solutions (e.g. passwords) in a requirements document.

Only secured users can access the application.

No one can go to any independent page without logging in.

Usability

Requirements about how difficult it will be to learn and operate the system. The requirements are often expressed in learning time or similar metrics.

Legal

There may be legal issues involving privacy of information, intellectual property rights, export of restricted technologies, etc.

8. Feasibility Study

You should provide a feasibility report in the following format:

- Product: A general statement of the product; give a brief description of what the proposed system will do, highlighting where the proposed system meets the specified business requirements of the organization.
 Technical Feasibility: Will the proposed system perform to the required specification? Outline technical systems options you propose to use, which will give a technical solution satisfying the requirements and constraints of the system, as outlined in the terms of reference.
 Social Feasibility: Consideration of whether the proposed system would prove acceptable to the people who would be affected by its introduction. Describe the effect on users from the introduction of the new system; consider whether there willbe a need for retraining the workforce. Will there be a need for relocation of some ofthe workforce? Will some jobs become deskilled? Will the current workforce be able to perform effectively any new tasks introduced by the proposed system? Describe how you propose to ensure user co-operation before changes are introduced.
- **Economic Feasibility:** Consider the cost/benefits of the proposed system. Detail the costs that will be incurred by the organization adopting the new system; consider development costs and running costs. Detail benefits that the new system will bring, direct economic benefits such as reduced costs, and indirect benefits, such as improved management information and better customer service. Illustrate the

cost/benefit of the new system by applying a suitable cost/benefit analysis method such as the payback method.
☐ Market Research: A comprehensive market research identifying a need for the product. Detail all market research you carried out, listing sources of information. Justify any conclusions you have drawn from your research. Identify the potential customer base for your product, together with evidence of customer need for the product. Describe how you propose to compete with similar products on the market.
Alternative Solution: Consideration of alternative solutions should be documented. At least two alternative business or technical systems options should be considered. Detail the differences between these options and the proposed system. Justify your choice of the proposed system and the reasons for rejecting the alternative options.
At this point, all of the planning for the project has been done and if the feasibility study has shown that the project is likely to succeed within its constraints, then it only remains for us to start the requirements analysis and thus proceed with the project.
9. Planning (Scheduling)
Project planning is concerned with identifying the following for every project: Activities Milestones Deliverables
A plan must be drawn up to guide the development towards the project goal. A plan is drawn up at the start of a project. This plan should be used as the driver for the project. The initial plan is not static, and must be modified as the project progresses.
Planning is required for development activities from specification through to delivery of the

system.

10. Project Planning

Project Scheduling of the online restaurant system is -

GANTT chart

Task	Person(s) Responsible	Week 1	Week 2	Week 3	Week 4
Communication					
Quick Plan					
Modeling Quick Design					
Construction of Prototype					
Deployment, Delivery and Feedback					

11. Database Design

Database design of the online restaurant system is –

Customer Table

Name of Attributes	Data type	Key
Id	INT	Primary
c_name	VARCHAR	
email	VARCHAR	
password	VARCHAR	
Contact_no	VARCHAR	
address	VARCHAR	

Order Table

Name of Attributes	Data type	key
order_id	INT	Primary
quantity	INT	
Items_id	INT	Foreign (Items)
Id	INT	Foreign (Customer)
Sub_id	INT	Foreign (Sub_area)
Contact_no	VARCHAR	
delivery_address	VARCHAR	
order_date	Date	

Admin Table

Name of Attributes	Data type	Key
Aid	INT	Primary
name	VARCHAR	
username	VARCHAR	
pass	VARCHAR	

Items Table

Name of Attributes	Data type	Key
Items_id	INT	Primary
Name	VARCHAR	
Spicy	VARCHAR	
Price	VARCHAR	
Fpath	VARCHAR	
type_id	INT	Foreign

Area Table

Name of Attributes	Data type	Key
area_id	INT	Primary
area_name	VARCHAR	

Sub_area Table

Name of Attributes	Data type	Key
sub_id	INT	Primary
Area_id	INT	Foreign
Sub_name	VARCHAR	

12. User Interface Design:

User Interface of the online restaurant system is -

Home Page



Fig (6): This is home page user interface of online restaurant system

Menu Page

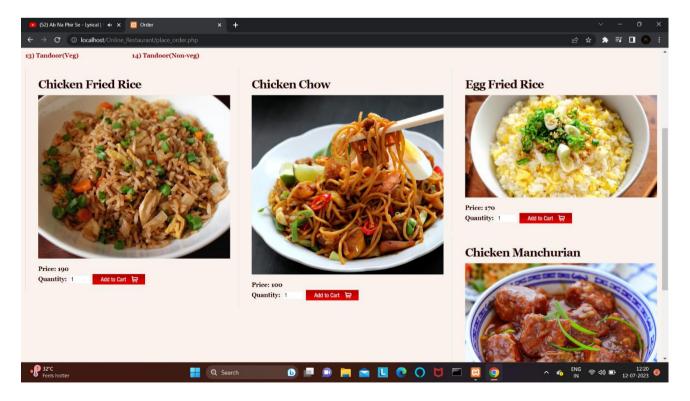


Fig (7): This is menu page user interface of online restaurant system

Customer Login

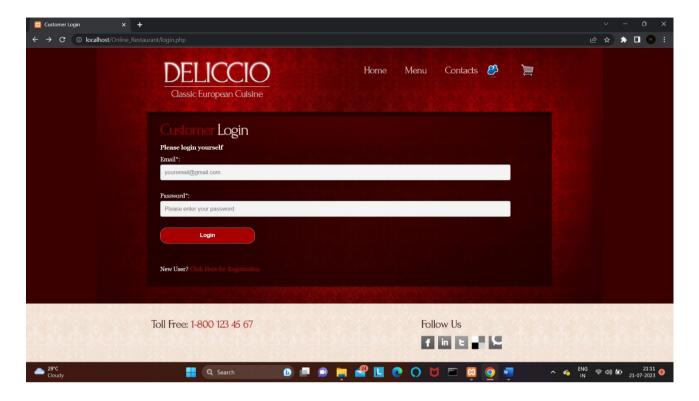


Fig (8): This is customer login user interface of online restaurant system

Customer Registration



Fig (9): This is customer registration user interface of online restaurant system

Contact Us



Fig (10): This is contact us user interface of online restaurant system

Cart Items

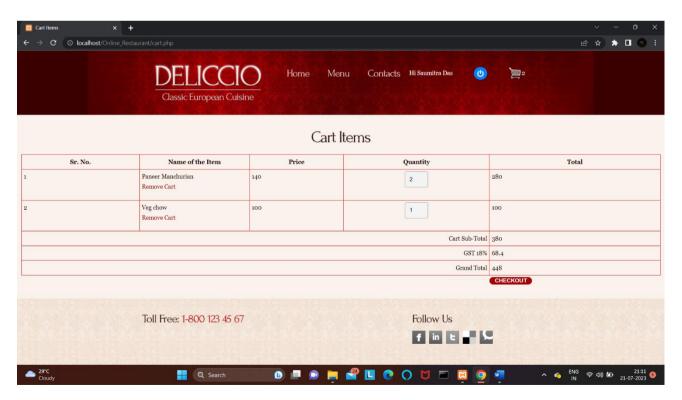


Fig (11): This is cart items user interface of online restaurant system

Place Order

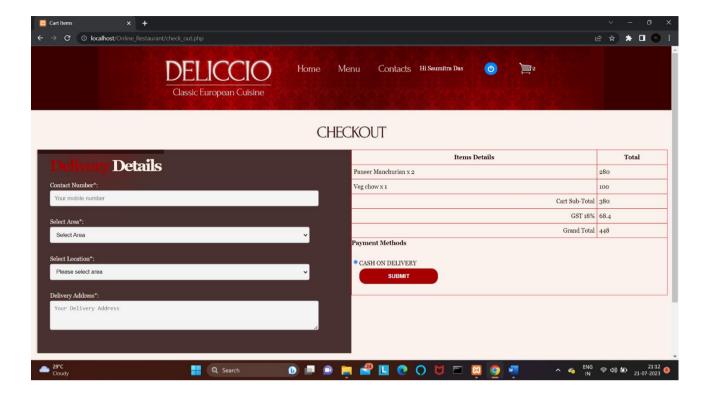


Fig (12): This is place order user interface of online restaurant system

Admin Login

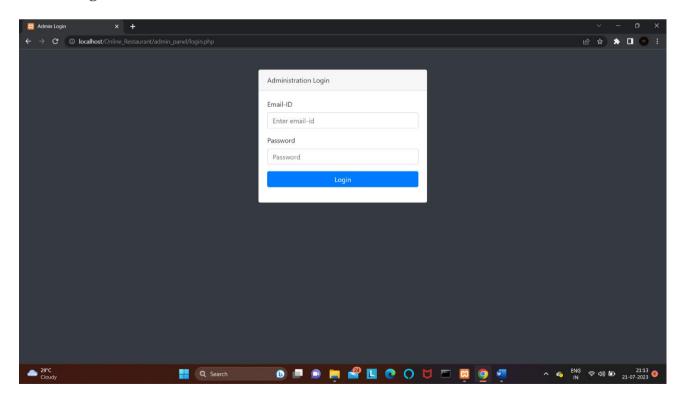


Fig (13): This is admin login user interface of online restaurant system

Add New Items

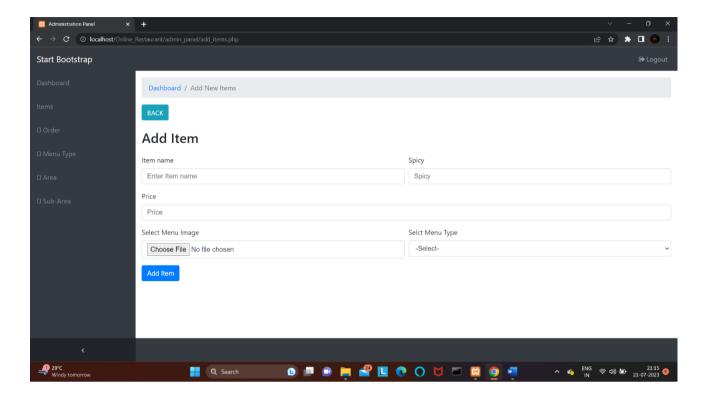


Fig (14): This is add new items user interface of online restaurant system

Add Area

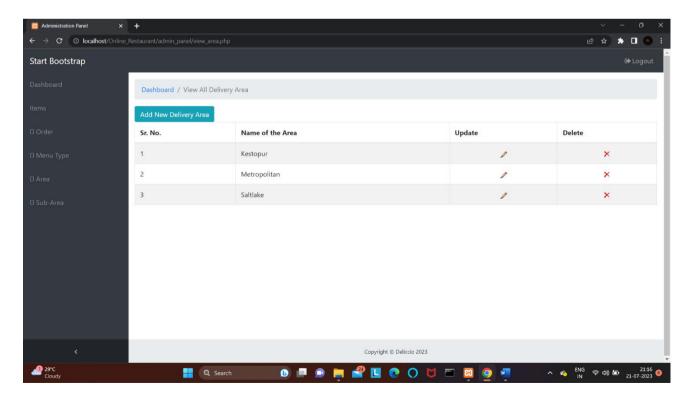


Fig (15): This is add area user interface of online restaurant system

Add Sub Area

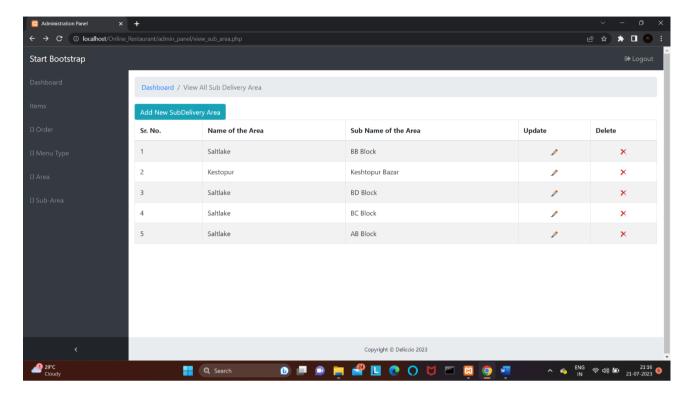


Fig (16): This is add sub area user interface of online restaurant system

Ordered Food

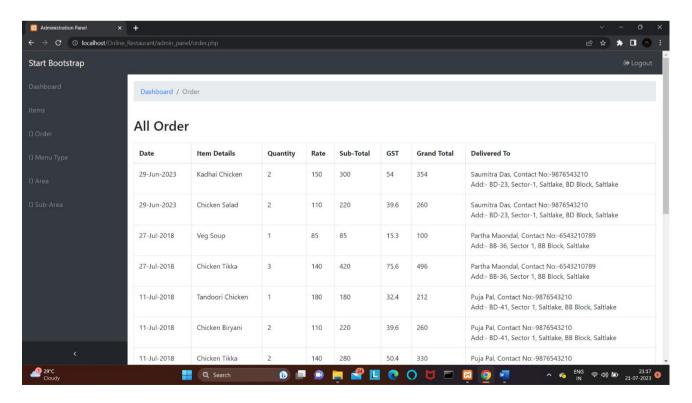


Fig (17): This is ordered food user interface of online restaurant system

13. Coding:

Coding of the online restaurant system is -

Home Page:

```
<?php require('config.php')?>
<!DOCTYPE html>
<html lang="en">
<head>
<title>Restaurant</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1,maximum-scale=1">
            rel="stylesheet"
                                        href="css/reset.css"
link
                                                                         type="text/css"
media="all">
link
                                       href="css/layout.css"
           rel="stylesheet"
                                                                         type="text/css"
media="all">
                                        href="css/style.css"
link
            rel="stylesheet"
                                                                         type="text/css"
media="all">
link
          rel="stylesheet"
                                     href="css/zerogrid.css"
                                                                         type="text/css"
media="all">
k rel="stylesheet" href="css/responsive.css" type="text/css"media="all">
<link rel="stylesheet" href="css/responsiveslides.css" />
<script type="text/javascript" src="js/jquery-1.6.js" ></script>
<script type="text/javascript" src="js/cufon-yui.js"></script>
<script type="text/javascript" src="js/cufon-replace.js"></script>
<script type="text/javascript" src="js/Forum_400.font.js"></script>
<script
                                                               type="text/javascript"
src="js/jquery.easing.1.3.js"></script>
<script type="text/javascript" src="js/tms-0.3.js"></script>
<script type="text/javascript" src="js/tms_presets.js"></script>
<script type="text/javascript" src="js/script.js"></script>
<script type="text/javascript" src="js/atooltip.jquery.js"></script>
<script
                           type="text/javascript"
                                                                           src="js/css3-
mediaqueries.js"></script>
<script src="js/responsiveslides.js"></script>
<script>
       $(function () {
          $("#slidez").responsiveSlides({
```

```
auto: true, pager:
              false, nav: true,
              speed: 500,
              maxwidth: 960,
              namespace: "centered-btns"
          });
       });
</script>
<!--[if lt IE 9]>
       <script type="text/javascript" src="js/html5.js"></script>
       <style type="text/css">
              .slider_bg {behavior:url(js/PIE.htc)}
       </style>
<![endif]-->
<!--[if lt IE 7]>
       <div style='clear:both;text-align:center;position:relative'>
                           href="http://www.microsoft.com/windows/internet-
explorer/default.aspx?ocid=ie6_countdown_bannercode"><img
src="http://storage.ie6countdown.com/assets/100/images/banners/warning_bar_0000_us.jpg"
border="0" alt="" /></a>
       </div>
<![endif]-->
</head>
<body id="page1">
<div class="body6">
       <div class="body1">
              <div class="body5">
                      <div class="main zerogrid">
<!-- header -->
          <?php require("user_menu.php") ?>
<!-- / header -->
<!-- content -->
                          <article id="content"><div class="slider_bg"><div class="slider"><ul
                          class="items">
```

```
>
                                                           <img
src="images/img1.jpg" alt="">
                                                           <div
class="banner">
      <strong>Indian<span>Thinks</span></strong>the
                                                                 <b>Quotes
                                                                               of
Day</b>
                                                                 <span>"One cannot think well, love well, sleep well, if one hasnot dined
well."</span>
                                                                 </div>
                                                    <
                                                           <img
src="images/img2.jpg" alt="">
                                                           <div
class="banner">
      <strong>succulent<span>meat</span></strong>the
                                                                 <b>Quotes
                                                                               of
Day</b>
```

Good food and a warm kitchen are what makes a house a home.
dr> I always tried to make my home like my mother's, because Mom was magnificent at stretching a buck when it came to decorating and food. Like a true Italian, she valued beautification in every area of her life, and I try to do the same.

```
</div>
```

```
<img
  src="images/img3.jpg" alt="">
                                                             <div
  class="banner">
         <strong>Indian<span>Taste</span></strong>the
                                                                    <b>Quotes
                                                                                  of
  Day</b>
                                                                    >
         <span>"You don't need a silver fork to eat good food."</span>
                                                                    </div>
                                                      </div>
                                          <div class="slider-response">
                                                <div
  class="rslides_container">
                                                                  class="rslides"
                                                       ul
  id="slidez">
                                                             <img
  src="images/chicken tandoori.jpg" alt="">
<img
  src="../items pics/kadhai chicken.jpg" alt="">
                                                             <img
  src="../items pics/Chicken-Manchurian.jpg" alt="">
                                                       </div>
                                 </div>
                                   </div>
                                   <div class="wrap">
                                          <section
                                                            class="col-1-3"><div
  class="wrap-col">
                                                <div class="box">
                                                       <div>
```

```
<h2>Welcome
<span>to Us!</span></h2> src="images/page1_img1.jpg"
                                                              <figure><img
alt=""></figure>
                                                              <p
class="pad_bot1"><a
                                    href="https://customers.ai/blog/welcome-greeting-
message#:~:text=Welcome%20to%20our%20company!,have%20you%20as%20our%
20customer.." class="list_1"></a> Welcome to our Deliccio! where every dish is a delicious.
We're so excited to have you as part of our team. We're glad you've chosen us, and we want to
show our appreciation by giving you a special incentive.
                                                       </div>
                                                </div>
                                         </div></section>
                                         <section
                                                             class="col-1-3"><div
class="wrap-col">
                                                <div class="box">
                                                       <div>
                                                              <h2>About
<span>Us</span></h2> src="images/page1_img2.jpg" alt=""
                                                              <figure><img
></figure>
                                                              <p
class="pad_bot1"><a href="https://149842033.v2.pressablecdn.com/wp-
content/uploads/2018/11/restaurant-website-templates.jpg" class="list_1"></a> Daliccio is
a restaurant on Haldia. We haveawesome recipes and the most telented chefs in
town. All ouringredients are sourced from local producers to ensure quality and
freshness.
                                                       </div>
                                                </div>
                                         </div></section>
                                         <section
                                                             class="col-1-3"><div
class="wrap-col">
                                                <div class="box">
                                                       <div>
```

```
<h2>Our
  <span>Services</span></h2> src="images/page1_img3.jpg"
                                                              <figure><img
  alt=""></figure>pad_bot1">
                                                                       class="list1
                                                              ul
  href="#">Delievery within 30 minutes.</a>
                                                                     <a
  href="#">Available 24×7.</a>
                                                                     <a
                                                                     <a
  href="#">We provide better services to customers.</a>
                                                                     <a
  href="#">We
                                           feedback
                   take
                                                                              improve
                            customers
                                                        and
                                                                try
                                                                       to
  services.</a>
</div>
                      </div>
                      </div></section>
     </div>
                             </article>
                      </div>
               </div>
         </div>
  </div>
  <div class="body3">
               <div class="main zerogrid">
  <!-- footer -->
                      <?php require("footer.php") ?>
<!-- / footer -->
</div>
  </div>
  <script type="text/javascript"> Cufon.now(); </script>
  <script>
```

```
$(document).ready(function($){
        var url = window.location.href;
$('#menu li a[href="'+url+"']').addClass('active');
//$('#menu li a[href="'+url+"']').addClass('active');
          //alert(url)
          search_cart(<?php echo $_SESSION['usr_info']['id'] ?>)
  });
  function search_cart(info){
          $.ajax({
             type: 'POST',
             url: 'search_cart.php',data:
             {info:info},
             success: function (response) {
                   $("#show_cart").html(response);
             }
        });
   }
  </script>
  </body>
  </html>
  Menu Page:
  <?php require_once("config.php") ?>
  <!DOCTYPE html>
  <html lang="en">
  <head>
  <title>View Menu</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1,maximum-scale=1">
                                          href="css/reset.css"
  link
               rel="stylesheet"
                                                                          type="text/css"
  media="all">
              rel="stylesheet"
                                         href="css/layout.css"
  link
                                                                          type="text/css"
  media="all">
```

```
link
            rel="stylesheet"
                                       href="css/style.css"
                                                                         type="text/css"
media="all">
link
           rel="stylesheet"
                                     href="css/zerogrid.css"
                                                                         type="text/css"
media="all">
link rel="stylesheet" href="css/responsive.css" type="text/css"media="all">
<script type="text/javascript" src="js/jquery-1.6.js" ></script>
<script type="text/javascript" src="js/cufon-yui.js"></script>
<script type="text/javascript" src="js/cufon-replace.js"></script>
<script type="text/javascript" src="js/Forum_400.font.js"></script>
<script type="text/javascript" src="js/atooltip.jquery.js"></script>
 <script
                            type="text/javascript"
                                                                           src="js/css3-
mediaqueries.js"></script>
<!--[if lt IE 9]>
       <script type="text/javascript" src="js/html5.js"></script>
       <style type="text/css">
              .slider_bg {behavior:url(js/PIE.htc)}
       </style>
<![endif]-->
<!--[if lt IE 7]>
       <div style='clear:both;text-align:center;position:relative'>
                           href="http://www.microsoft.com/windows/internet-
explorer/default.aspx?ocid=ie6_countdown_bannercode"><img
src="http://storage.ie6countdown.com/assets/100/images/banners/warning_bar_0000 us.jpg"
border="0" alt="" /></a>
       </div>
<![endif]-->
</head>
<body id="page4">
<div class="body6">
       <div class="body1">
              <div class="main zerogrid">
<!-- header -->
          <?php require("user_menu.php") ?>
<!-- / header -->
<!-- content -->
```

```
</div>
       </div>
</div>
<div class="body2">
       <div class="main zerogrid" style="width:100%">
              <article id="content2">
              <section>
                            <div class="wrapper">
            <div class="col-full"><div class="wrap-
col">
                   style="text-align:center">View
            <h2
Menu</h2>
                                   </div></div>
                            </div>
                     </section>
              <section>
                     <div class="wrapper">
                    <?php
                                   $rs=mysqli_query($con,"SELECT
`menu`");
                                                                            FROM
                                   if(mysqli_num_rows($rs)>0){
                                          $i=1;
       while($rec=mysqli_fetch_assoc($rs)){
                                                 $m_id[$i]=$rec['menu_id'];
                                                 ?>
                                          <div
                                                                    class="col-1-6"
style="float:left"><div class="wrap-col">
```

```
}
                                       else{
                                              ?>
                                              <div
                                                                   class="col-1-6"><div
  class="wrap-col">
                                              <h3>No Menu Found</h3
                                       ></div></div>
                             <?php
                                       }
                              ?>
</div>
</section>
                        <section>
            <div id="items"></div>
                        </section>
                 </article>
  <!-- / content -->
         </div>
  </div>
  <div class="body3">
                 <div class="main zerogrid">
  <!-- footer -->
                        <?php require("footer.php") ?>
<!-- / footer -->
</div>
  </div>
  <script type="text/javascript"> Cufon.now(); </script>
  <script>
  function search_items(menu){
         //alert(item)
          $.ajax({
                 type:"POST",
                 url:"search_items.php",
                 data:{menu:menu}
```

```
}).done(function(resp){
                  $("#items").html(resp)
          });
   }
   </script>
   <script>
   $(document).ready(function() {
        $.s_item=function(d){
                  $.ajax({
                  type: "POST",
                  url: "search_items.php",
                  data:{menu:d}
                  }).done(function(resp){
                         $("#items").html(resp)
                  });
          $.s_item(<?php echo $m_id[1] ?>)
   });
   </script>
   <script>
   /*$(document).ready(function($){ var url =
        window.location.href;
$('#menu li a[href="'+url+"']').addClass('active');
//$('#menu li a[href="'+url+"']').addClass('active');
          //alert(url)
          //search_cart(<?php //echo $_SESSION['usr_info']['id'] ?>)
   });*/
   function search_cart(info){
          $.ajax({
              type: 'POST',
              url: 'search_cart.php',data:
              {info:info},
              success: function (response) {
```

```
$("#show_cart").html(response);
          }
     });
}
</script>
</body>
</html>
Customer Registration:
<!DOCTYPE html>
<html lang="en">
<head>
<title>Customer Registration</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1,maximum-</pre>
scale=1">
k rel="stylesheet" href="css/reset.css" type="text/css"media="all">
k rel="stylesheet" href="css/layout.css" type="text/css"media="all">
k rel="stylesheet" href="css/style.css" type="text/css"media="all">
k rel="stylesheet" href="css/zerogrid.css" type="text/css"media="all">
link rel="stylesheet" href="css/responsive.css" type="text/css"media="all">
k rel="stylesheet" href="css/contactform.css" type="text/css"media="all">
<script type="text/javascript" src="js/jquery-1.6.js" ></script>
<script type="text/javascript" src="js/cufon-yui.js"></script>
<script type="text/javascript" src="js/cufon-replace.js"></script>
<script type="text/javascript" src="js/Forum_400.font.js"></script>
<script type="text/javascript" src="js/atooltip.jquery.js"></script>
<script type="text/javascript" src="js/css3-</pre>
mediaqueries.js"></script>
<script type="text/javascript" src="js/jquery.validate.js"></script>
```

```
<script type="text/javascript" src="js/reg_validation.js"></script>
  <!--[if lt IE 9]>
          <script type="text/javascript" src="js/html5.js"></script>
          <style type="text/css">
                 .slider bg {behavior:url(js/PIE.htc)}
          </style>
  <![endif]-->
  <!--[if lt IE 7]>
          <div style='clear:both;text-align:center;position:relative'>
                 <a href="http://www.microsoft.com/windows/internet-
  explorer/default.aspx?ocid=ie6 countdown bannercode"><img
  src="http://storage.ie6countdown.com/assets/100/images/banners/warning_bar_0000_us.jpg"
  border="0" alt="" /></a>
          </div>
  <![endif]-->
  </head>
  <body id="page5">
  <div class="body6">
          <div class="body1">
                 <div class="main zerogrid">
  <!-- header -->
                 <?php require("user_menu.php"); ?>
  <!-- / header -->
  <!-- content -->
<article id="content">
                                <div class="wrap">
                    <div class="box">
<div>
                                                      <h2 class="letter_spacing">Customer
  <span>Registration</span></h2>
                                                      <div id="contact form">
                                                             <strong>Please Register
  yourself</strong>
                                                             <form name="reg"
  id="reg" method="post" action="registration_action.php">
```

```
<label>
First Name*:
        <span id="invalid-f_name"></span>
                                                              <input type="text"
  placeholder="Please enter your first name" name="f_name" id="f_name">
                                                              </label>
                                              <label>
                                                              Last Name*:  
      <span id="invalid-l_name"></span>
                                                              <input type="text"</pre>
  placeholder="Please enter your last name" name="l_name" id="l_name">
                                                              </label>
                                                              <label>
                                                              Email*:
                                                                          
     <span id="e_error"></span><span id="invalid-email_id"></span>
                                                              <input
  type="email" placeholder="youremail@gmail.com" name="email_id"id="email_id"
  onBlur="check_email(this.value)">
</label>
                                                              <label> Password*:
                                                               
      <span id="invalid-password"></span>
                                                              <input
  type="password" placeholder="Please enter your password"
  name="password" id="password">
                                                              </label>
<label>
                                                              Contact Number *:
        <span id="invalid-contact_no"></span>
                                                              <input type="text"
  placeholder="Please enter your contact number" name="contact_no" id="contact_no">
                                                      </label>
                     <label>
```

```
Address *:  
      <span id="invalid-address"></span>
                                                                    <input type="text"</pre>
  placeholder="Please enter your address" name="address" id="address">
</label>
                                                                   <input class="sendButton"</pre>
  type="submit" name="Submit" value="Register">
                                                           </form>
<label>
                                                                   <?php
  if(isset($_GET['msg'])){
                                                                           echo
  $_GET['msg'];
                                                                    ?>
                                                                    </label>
</div>
</div>
                                      </div>
                              </div>
                       </article>
                 </div>
         </div>
  </div>
  <div class="body3">
                <div class="main zerogrid">
  <!-- footer -->
```

```
<?php require("footer.php"); ?>
<!-- / footer -->
              </div>
</div>
<script type="text/javascript"> Cufon.now(); </script>
<script type="text/javascript">
function check_email(str) {
     $.ajax({
          type: 'POST',
          url: 'search_email.php', data:
           {email_id:str}, success: function
          (response) {
                     $("#e_error").html(response)
          }
     });
</script>
</body>
</html>
Customer Login:
<!DOCTYPE html>
<html lang="en">
<head>
<title>Customer Login</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1,maximum-</pre>
scale=1">
k rel="stylesheet" href="css/reset.css" type="text/css"media="all">
link rel="stylesheet" href="css/layout.css" type="text/css"media="all">
link rel="stylesheet" href="css/style.css" type="text/css"media="all">
```

```
k rel="stylesheet" href="css/zerogrid.css" type="text/css"media="all">
  link rel="stylesheet" href="css/responsive.css" type="text/css"media="all">
  k rel="stylesheet" href="css/contactform.css" type="text/css"media="all">
  <script type="text/javascript" src="js/jquery-1.6.js" ></script>
  <script type="text/javascript" src="js/cufon-yui.js"></script>
  <script type="text/javascript" src="js/cufon-replace.js"></script>
  <script type="text/javascript" src="js/Forum 400.font.js"></script>
  <script type="text/javascript" src="js/atooltip.jquery.js"></script>
  <script type="text/javascript" src="js/css3-</pre>
  mediaqueries.js"></script>
  <!--[if lt IE 9]>
          <script type="text/javascript" src="js/html5.js"></script>
          <style type="text/css">
                 .slider_bg {behavior:url(js/PIE.htc)}
          </style>
  <![endif]-->
  <!--[if lt IE 7]>
          <div style='clear:both;text-align:center;position:relative'>
                 <a href="http://www.microsoft.com/windows/internet-
  explorer/default.aspx?ocid=ie6_countdown_bannercode"><img
  src="http://storage.ie6countdown.com/assets/100/images/banners/warning_bar_0000_us.jpg"
  border="0" alt="" /></a>
          </div>
  <![endif]-->
  </head>
  <body id="page5">
  <div class="body6">
          <div class="body1">
                 <div class="main zerogrid">
  <!-- header -->
                 <?php require("user_menu.php"); ?>
  <!-- / header -->
  <!-- content -->
<article id="content">
       <div class="wrap">
                    <div class="box">
```

```
<div>
                                                   <h2 class="letter_spacing">Customer
  <span>Login</span></h2>
                                                   <div id="contact_form">
                                                          <strong>Please login
  yourself</strong>
                                                          <form name="form1"
  id="ff" method="post" action="login_action.php">
                                                                  <label>
                                                                  Email*:
                                                                  <input
  type="email" placeholder="youremail@gmail.com" name="email_id"id="email_id"
  required></label><label> Password*:
  <inputtype="password" placeholder="Please enter your password"
  name="password" id="password" required></label>
  <input class="sendButton" type="submit" name="Submit" value="Login">
                                                </form>
                <?php
  if(isset($_GET['msg'])){
                                                                         echo
  $_GET['msg'];
                                                                  }
                                                                  ?>
                                                                  </label><br>
<label>
                                                                  New User?
                                                                  <a
  href="registration.php">Click Here for Registration</a>
                                                                  </label>
```

```
</div>
                    </div>
     </div>
                        </div>
                        </article>
                 </div>
         </div>
  </div>
  <div class="body3">
                 <div class="main zerogrid">
  <!-- footer -->
                        <?php require("footer.php"); ?>
<!-- / footer -->
</div>
  </div>
  <script type="text/javascript"> Cufon.now(); </script>
  </body>
  </html>
  Contact Us:
  <?php require_once("config.php") ?>
  <!DOCTYPE html>
  <html lang="en">
  <head>
  <title>View Menu</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1,maximum-</pre>
  scale=1">
  k rel="stylesheet" href="css/reset.css" type="text/css"media="all">
  k rel="stylesheet" href="css/layout.css" type="text/css"media="all">
  k rel="stylesheet" href="css/style.css" type="text/css"media="all">
```

```
link rel="stylesheet" href="css/zerogrid.css" type="text/css"media="all">
  link rel="stylesheet" href="css/responsive.css" type="text/css"media="all">
  <script type="text/javascript" src="js/jquery-1.6.js" ></script>
  <script type="text/javascript" src="js/cufon-yui.js"></script>
  <script type="text/javascript" src="js/cufon-replace.js"></script>
  <script type="text/javascript" src="js/Forum 400.font.js"></script>
  <script type="text/javascript" src="js/atooltip.jquery.js"></script>
    <script type="text/javascript" src="js/css3-</pre>
  mediaqueries.js"></script>
  <!--[if lt IE 9]>
          <script type="text/javascript" src="js/html5.js"></script>
          <style type="text/css">
                 .slider_bg {behavior:url(js/PIE.htc)}
          </style>
  <![endif]-->
  <!--[if lt IE 7]>
          <div style='clear:both;text-align:center;position:relative'>
                 <a href="http://www.microsoft.com/windows/internet-
  explorer/default.aspx?ocid=ie6_countdown_bannercode"><img
  src="http://storage.ie6countdown.com/assets/100/images/banners/warning_bar_0000_us.jpg"
  border="0" alt="" /></a>
</div>
<![endif]-->
  </head>
  <body id="page4">
  <div class="body6">
          <div class="body1">
                 <div class="main zerogrid">
  <!-- header -->
             <?php require("user_menu.php") ?>
  <!-- / header -->
  <!-- content -->
                 </div>
          </div>
```

```
</div>
  <div class="body2">
        <div class="main zerogrid" style="width:100%">
              <article id="content2">
              <section>
                          <div class="wrapper">
                                 <div class="col-full"><div class="wrap-
  col">
                                       <h2 style="text-
  align:center">Contact us</h2>
           </div></div>
                           </div>
                    </section>
              <section>
                    <div class="wrapper">
  <div class="body3">
              <div class="main zerogrid">
          <h3>Contact us :-
  +91 8956349875 / +91 6297895291</h3>
          <h3>Email us :-
  deliccio@gmail.com</h3>
  </div><!-- end of form class -->
  </body>
  </html>>
  <!-- footer -->
                    <?php require("footer.php") ?>
<!-- / footer -->
</div>
```

```
</div>
<script type="text/javascript"> Cufon.now(); </script>
<script>
function search_items(menu){
       //alert(item)
       $.ajax({
               type: "POST",
               url: "search_items.php",
               data:{menu:menu}
       }).done(function(resp){
               $("#items").html(resp)
       });
$(document).ready(function() {
     $.s_item=function(d){
$.ajax({
               type: "POST",
               url: "search_items.php",
               data:{menu:d}
               }).done(function(resp){
                      $("#items").html(resp)
               });
       $.s_item(<?php echo $m_id[1] ?>)
});
$(document).ready(function($){
     var url = window.location.href;
       $('#menu li a[href="'+url+"']').addClass('active');
     //$('#menu li a[href="'+url+"']').addClass('active');
       //alert(url)
       search_cart(<?php echo $_SESSION['usr_info']['id'] ?>)
});
```

```
function search_cart(info){
       $.ajax({
          type: 'POST',
          url: 'search_cart.php',data:
          {info:info},
          success: function (response) {
                $("#show_cart").html(response);
          }
     });
}
</script>
</body>
</html>
Admin Profile:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-</pre>
to-fit=no">
  <meta name="description" content="">
  <meta name="author" content="">
  <title>Administration Panel</title>
  <!-- Bootstrap core CSS-->
  k href="vendor/bootstrap/css/bootstrap.min.css"rel="stylesheet">
  <!-- Custom fonts for this template-->
  k href="vendor/font-awesome/css/font-awesome.min.css"rel="stylesheet"
type="text/css">
  <!-- Custom styles for this template-->
  <link href="css/sb-admin.css" rel="stylesheet">
```

```
<script src="https://pro-</pre>
staging.fontawesome.com/releases/v5.0.7/js/all.js"></script>
  <link rel="stylesheet" href="https://static.fontawesome.com/css/fontawesome-</pre>
app.css">
</head>
<body class="fixed-nav sticky-footer bg-dark" id="page-top">
  <!-- Navigation-->
  <?php require('admin_menu.php') ?>
  <div class="content-wrapper">
    <div class="container-fluid">
       <!-- Breadcrumbs-->
       <a href="index.html">Dashboard</a>
         Blank Page
       <div class="row">
         <div class="col-12">
            <h1>Blank</h1>
            This is an example of a blank page that you can use as a starting point for
creating new ones.
         </div>
       </div>
    </div>
    <!--/.container-fluid-->
    <!--/.content-wrapper-->
    <footer class="sticky-footer">
       <div class="container">
         <div class="text-center">
            <small>Copyright © Deliccio 2023</small>
         </div>
       </div>
    </footer>
    <!-- Scroll to Top Button-->
    <a class="scroll-to-top rounded" href="#page-top">
```

```
<i class="fa fa-angle-up"></i>
        </a>
        <!-- Logout Modal-->
        <div class="modal fade" id="exampleModal" tabindex="-1"role="dialog"</pre>
  aria-labelledby="exampleModalLabel" aria- hidden="true">
          <div class="modal-dialog" role="document">
             <div class="modal-content">
<div class="modal-header">
                  <h5 class="modal-title" id="exampleModalLabel">Ready to
  Leave?</h5>
                  <button class="close" type="button" data-dismiss="modal"
  aria-label="Close">
                     <span aria-hidden="true">×</span>
                  </button>
                </div>
                <div class="modal-body">Select "Logout" below if you areready to end
  your current session.</div>
                <div class="modal-footer">
                  <button class="btn btn-secondary" type="button" data-
  dismiss="modal">Cancel</button>
                  <a class="btn btn-primary" href="login.html">Logout</a>
                </div>
             </div>
          </div>
        </div>
        <!-- Bootstrap core JavaScript-->
        <script src="vendor/jquery/jquery.min.js"></script>
        <script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
        <!-- Core plugin JavaScript-->
        <script src="vendor/jquery-</pre>
  easing/jquery.easing.min.js"></script>
        <!-- Custom scripts for all pages-->
        <script src="js/sb-admin.min.js"></script>
     </div>
  </body>
```

```
</html>
Add New Items:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-</pre>
to-fit=no">
  <meta name="description" content="">
  <meta name="author" content="">
  <title>Administration Panel</title>
  <!-- Bootstrap core CSS-->
  k href="vendor/bootstrap/css/bootstrap.min.css"rel="stylesheet">
  <!-- Custom fonts for this template-->
  k href="vendor/font-awesome/css/font-awesome.min.css"rel="stylesheet"
type="text/css">
  <!-- Custom styles for this template-->
  <link href="css/sb-admin.css" rel="stylesheet">
  <script src="https://pro-</pre>
staging.fontawesome.com/releases/v5.0.7/js/all.js"></script>
  k rel="stylesheet" href="https://static.fontawesome.com/css/fontawesome-
app.css">
</head>
<body class="fixed-nav sticky-footer bg-dark" id="page-top">
  <!-- Navigation-->
  <?php require('admin_menu.php') ?>
  <div class="content-wrapper">
     <div class="container-fluid">
       <!-- Breadcrumbs-->
```

cli class="breadcrumb-item">

```
<a href="index.html">Dashboard</a>
             cli class="breadcrumb-item active">Add New Items
          </01>
          <div class="row">
             <div class="col-12">
             <a href="view_items.php" class="btn btn-info">BACK</a>
               <h1>Add Item</h1>
               <form name="area" id="item" method="post" action="add_items_code.php"
  enctype="multipart/form-data">
<div class="form-group">
<div class="form-row">
                     <div class="col-md-6">
                       <label for="name">Item name</label>
                       <input class="form-control" id="name" type="text"aria-</pre>
  describedby="Item name" name="name" placeholder="Enter Item name">
                     </div>
                     <div class="col-md-6">
                       <label for="spicy">Spicy</label>
                       <input class="form-control" id="spicy" type="text"aria-</pre>
  describedby="Spicy" name="spicy" placeholder="Spicy">
                     </div>
                  </div>
               </div>
               <div class="form-group">
                  <label for="price">Price</label>
                  <input class="form-control" id="price" type="text" aria-</pre>
  describedby="Price" name="price" placeholder="Price">
               </div>
               <div class="form-group">
                  <div class="form-row">
                     <div class="col-md-6">
                  <label for="menu_image">Select Menu Image</label>
                       <input class="form-control" id="ff" type="file"</pre>
  name="ff"placeholder="menu_image" img src="<?php echo
  $row['fpath'] ?>">
```

```
</div>
                  <div class="col-md-6">
                  <?php
                       $menu_src="SELECT * FROM `menu`";
                       $menu_rs=mysqli_query($con,$menu_src)or
die(mysqli_error($con));
                       //echo var_dump($menu_rs);
                       ?>
                    <label for="type">Selct Menu Type</label>
                    <select name="menu_id" class="form-control">
                    <option value="" selected>-Select-</option>
                    <?php
       while($menu_rec=mysqli_fetch_assoc($menu_rs)){
                                          echo '<option
value="'.\menu_rec['menu_id']."">'.\menu_rec['menu_name'].'['.\menu_
rec['category'].']</option>';
                                   }
                            ?>
                    </select>
                  </div>
               </div>
             </div>
              <div class="form-group">
                  <input type="submit" name="ok" value="Add Item"class="btn</pre>
btn-primary">
                  </div>
          </form>
          </div>
       </div>
     </div>
     <!--/.container-fluid-->
     <!--/.content-wrapper-->
     </body>
```

</html>

14. Testing

Team Interaction

The following describes the level of team interaction necessary to have a successful product.

- The Test Team will work closely with the Development Team to achieve a high quality
 design and user interface specifications based on customer requirements. The Test Teamis
 responsible for visualizing test cases and raising quality issues and concerns during
 meetings to address issues early enough in the development cycle.
- The Test Team will work closely with Development Team to determine whether or not the
 application meets standards for completeness. If an area is not acceptable for testing, the
 code complete date will be pushed out, giving the developers additional time to stabilize
 the area.
- Since the application interacts with a back-end system component, the Test Team will need to include a plan for integration testing. Integration testing must be executed successfully prior to system testing.

Test Objective

The objective our test plan is to find and report as many bugs as possible to improve the integrity of our program. Although exhaustive testing is not possible, we will exercise a broad range of tests to achieve our goal. We will be testing a Binary Search Tree Application utilizing a pre-order traversal format. There will be eight key functions used to manage our application: load, store, clear, search, insert, delete, list in ascending order, and list in descending order. Our user interface to utilize these functions is designed to be user-friendly and provide easy manipulation of the tree. The application will only be used as a demonstration tool, but we would like to ensure that it could be run from a variety of platforms with little impact on performance or usability.

Process Overview

The following represents the overall flow of the testing process:

- 1. Identify the requirements to be tested. All test cases shall be derived using the current Program Specification.
- 2. Identify which particular test(s) will be used to test each module.
- 3. Review the test data and test cases to ensure that the unit has been thoroughly verified and that the test data and test cases are adequate to verify proper operation of the unit.
- 4. Identify the expected results for each test.
- 5. Document the test case configuration, test data, and expected results.
- 6. Perform the test(s).
- 7. Document the test data, test cases, and test configuration used during the testing process. This information shall be submitted via the Unit/System Test Report (STR).
- 8. Successful unit testing is required before the unit is eligible for component integration/system testing.
- 9. Unsuccessful testing requires a Bug Report Form to be generated. This document shall describe the test case, the problem encountered, its possible cause, and the sequence of events that led to the problem. It shall be used as a basis for later technical analysis.
- 10. Test documents and reports shall be submitted. Any specifications to be reviewed, revised, or updated shall be handled immediately.

Testing Process

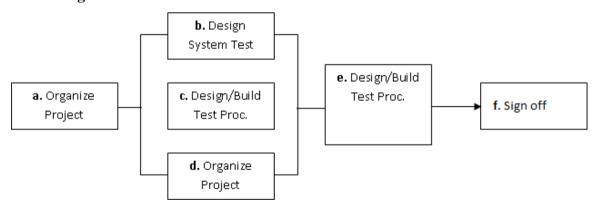


Fig (18): This is testing process of online restaurant system

The diagram above outlines the Test Process approach that will be followed.

- **a. Organize Project -** involves creating a System Test Plan, Schedule & Test Approach, and assigning responsibilities.
- b. Design/Build System Test involves identifying Test Cycles, Test Cases, Entrance & Exit Criteria, Expected Results, etc. In general, test conditions/expected results will be identified by the Test Team in conjunction with the Development Team. The Test Team will then identify Test Cases and the Data required. The Test conditions are derived from the Program Specifications Document.
- c. Design/Build Test Procedures includes setting up procedures such as Error Managementsystems and Status reporting.
- **d. Build Test Environment -** includes requesting/building hardware, software and data setups.
- **e.** Execute System Tests The tests identified in the Design/Build Test Procedures will be executed. All results will be documented and Bug Report Forms filled out and given to the Development Team as necessary.
- **f. Signoff -** Signoff happens when all pre-defined exit criteria have been achieved.

Testing Strategy

The following outlines the types of testing that will be done for unit, integration, and system testing. While it includes what will be tested, the specific use cases that determine how the testing is done will be detailed in the Test Design Document. The test cases that will be used for designing use cases is shown in Figure 2.1 and onwards

Test Cases:

Tested By:							
Test Type	Unit Testing						
Test Case Number	1						
Test Case Name	se Name User Identification						
that he/she can will check the a		l enter his/ her accurate userid and password so able to go for the further options. The testcase pplication for the same since a user can only orrect userid, password.					
Item(s) to be tested							
1 Verification of	Verification of the userid and password with the record in the database.						
Specifications							
		Expected					
Input		Output/Result					
1) Correct User id and password		1) Successful login					
2) Incorrect Id or Passw	ord	2) Failure Message					

Tested By: Pintu Bhunia							
Test Type Unit Testing							
Test Case Number 2							
Test Case Name Add User Detail			ls				
Test Case Description The User must a			add details.				
Item(s) to be tested							
1	Check whether	all the mandatory	ds are filled up.				
Sp	ecifications						
			Expected				
Input			Output/Result				
Trying to submit without filling themandatory fields.			1)	A message asks the user to fill the form			
			correctly				
2) Check the valid data for all form fields.			2) Return an error message.				

Unit Testing

Unit Testing is done at the source or code level for language-specific programming errors such as bad syntax, logic errors, or to test particular functions or code modules. The unit test cases shall be designed to test the validity of the programs correctness.

White Box Testing

In white box testing, the UI is bypassed. Inputs and outputs are tested directly at the code level and the results are compared against specifications. This form of testing ignores the function of the program under test and will focus only on its code and the structure of that code. Test case designers shall generate cases that not only cause each condition to take on all possible values at least once, but that cause each such condition to be executed at least once. To ensure this happens, we will be applying Branch Testing. Because the functionality of the program is relatively simple, this method will be feasible to apply.

Each function of the binary tree repository is executed independently; therefore, a program flow for each function has been derived from the code.

Black Box Testing

Black box testing typically involves running through every possible input to verify that it results in the right outputs using the software as an end-user would. We have decided to perform Equivalence Partitioning and Boundary Value Analysis testing on our application.

System Testing

The goals of system testing are to detect faults that can only be exposed by testing the entire integrated system or some major part of it. Generally, system testing is mainly concerned with areas such as performance, security, validation, load/stress, and configuration sensitivity. But in our case well focus only on function validation and performance. And in both cases we will use the black-box method of testing.

15. System Security measures

☐ Only authorized users are allowed.

Without signing in users are not allowed to go an intermediate page by typing an URL. For all such efforts, users will be redirected to the home page

16. Database/Data security

- ☐ Database is present in remote machine.
- ☐ PHP's default securities are applied.

17. Creation of User profiles and access rights

- ☐ The admin must create users manually
- ☐ The admin can create more admins

18. Cost Estimation of the Project along with Cost Estimation Model

Analogous estimate of effort or cost

Used for Early Estimate or Individual Activity Estimate Sample example shown below is for two major deliverables of a software project. You use a previous project as a benchmark for analogous estimation. Using your experience you will estimate a multiplier.

Multipliers:

1. Prototyping: 0.75.

2. Testing: 0.5

3. Deployment: 0.5

Finally, if you want to convert to cost, you would use current rates for the resource.

WB S ID	Previou s Similar Project Activity	Previou sEffort	Curren t Project Estimat e	Multiplie r	Effort (Previou sEffort * 0.75)	Cos t (Rs. 500/hr.)
1	Prototyping	40 Work- Hours	Prototyping	0.75	30 Work-hours	Rs. 15000/-
2	Testing	20 Work- Hours	Testing	0.50	10 Work- Hours	Rs. 5000/-
Total					40 Work- Hours	Rs. 20000/-

Note: Effort is also called Size and unit of estimation is called either Work-Hour, person-hours.

19. Future scope and further enhancement of the Project

Online Multicuisne system has lot of enhancement options. Like online order, purchase online, category wise divided food and search

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21. Appendix

DFD conventions, guidelines, and common errors

Although DFDs are simple to understand and draw, students and practitioners alike encounter similar types of problems while modelling software problems using DFDs. While learning from experience is powerful thing, it is an expensive pedagogical technique in the business world. It is therefore helpful to understand the different types of mistakes that users usually make while constructing the DFD model of systems.

- Many beginners commit the mistake of drawing more than one bubble in the context diagram. A context diagram should depict the system as a single bubble.
- Many beginners have external entities appearing at all levels of DFDs. All external entities interacting with the system should be represented only in the context diagram. The external entities should not appear at other levels of the DFD.
- Many beginners leave different levels of DFD unbalanced.
- A common mistake committed by many beginners while developing a DFD model is attempting to represent control information in a DFD. It is important to realize that a DFD is

the data flow representation of a system, and it does not represent control information. For an example mistake of this kind:

o Consider the following example. A book can be searched in the library catalog by inputting its name. If the book is available in the library, then the details of the book are displayed. If the book is not listed in the catalog, then an error message is generated. While generating the DFD model for this simple problem, many beginners commit the mistake of drawing an arrow (as shown in fig. 1) to indicate the error function is invoked after the search book. But, this is a control information and should not be shown on the DFD.