**MCA-I**

**INDEX**

**CHAPTER 1: INTRODUCTION**

1.1 Client Description

1.2 Existing System and Need for System

1.3 Scope of Work

1.4 Operating Environment – Hardware and Software

1.5 Detail Description of Technology Used

**CHAPTER 2: PROPOSED SYSTEM**

2.1 Proposed System

2.2 Objectives of System

2.3 User Requirements

**CHAPTER 3: ANALYSIS & DESIGN**

3.1 Object Diagram

3.2 Class Diagram

3.3 Use Case Diagrams and Use case description

3.4 Sequence Diagram

3.5 Activity Diagram

3.8 Data Flow Diagram (DFD) (level 0,1 and 2)

**CHAPTER 4: DATABASE SPECIFICATIONS**

4.1 Entity Relationship Diagram (ERD)

4.2 Database Design (Normalized database)

4.3 Data Dictionary

**CHAPTER 5: USER INTERFACE SPECIFICATIONS**

5.1 Menu Tree

5.2 Input Screens

5.3 Reports

**5.4 Test Cases**

**CHAPTER 6: USER MANUAL**

6.1 User manual

**Limitations of the system**

**Proposed Enhancements**

**Conclusion**

**Bibliography**

**CHAPTER 1: INTRODUCTION**

**1.1 Client Description**

The client is the owner of the “Shravan Dairy” namely “Nilesh Sarpale” who runs a dairy providing various dairy products to everyone who walks into the dairy during opening and closing hours on a regular basis throughout the year. Providing specifically mentioned products according to their availability. The Primary Information of System was collected through direct interviews of “Shravan Dairy” owner. The owner told us about the products which he sells offline along with their rates. He told about the delivery process that he can follow.

**1.2 Existing System and Need for System**

**Existing System:**

Existing system is manual everything we have to do manually.

1. Platform Used: Records written in books.
2. Database Used: Books and Register.
3. Features:
   1. In pre-existing system customer goes to dairy and asks for the products.
   2. The Shravan Dairy owner has limited no of customers.

**Need for System :**

1. Maintaining order details and information becomes easy
2. As the system is online therefore there are no limit to the customer.
3. Suffering and searching facility is provided which will make searching of product faster for the customer.
4. Cash on Delivery Facility is provided.

**1.3 Scope of Work**

1. On home Page, “Shravan Dairy” related information will be available.
2. Searching or surfing through given products facility will be provided.
3. Facility of ordering the given product online will be available only.
4. Multiple given products can be selected from the list and will be added to the cart.

1. Customer and Admin will only have login facility.
2. Bill will be generated according to given product being selected as per their rates.
3. Customer and Admin of will have the history of records of orders.

**1.4 Operating Environment – Hardware And Software**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Client | Development | Server |
| Software | Windows or any operating system, Chrome , Firefox, etc. | Operating system, IDE and XAMMP | XAMMP |
| Hardware | At least 500MB RAM. | 4GB RAM | 8Gb RAM 512Mb web hosting space |

**1.5 Detailed Description of Technology Used**

**HTML-5**

**HTML5** is a language that defines the properties and behaviors of [web page](https://en.wikipedia.org/wiki/Web_page) [content](https://en.wikipedia.org/wiki/Web_content) by implementing a [markup](https://en.wikipedia.org/wiki/Markup_language)-based [pattern](https://en.wikipedia.org/wiki/Software_design_pattern) to it.

Some of the elements which we will be using:

Tags used are:

* <html>- element defines the root of HTML and XHTML documents.
* <div>- (short for division) tag is generic container for flow content, which has no default rendering or meaning.
* <h1> to <h6>- heading tags are used to define HTML headings. There are six levels of headings, from <h1> (most important) to <h6> (least important).
* <style>-tag is used to define style rules at a page-level (i.e. within the document).
* <link>-tag defines a link between the current document and an external resource.
* <button>- tag creates a clickable button in an [HTML form](https://www.tutorialrepublic.com/html-tutorial/html-forms.php).
* <body>-element represents the main content of the document. It typically wraps around all of the content that will be displayed on screen, such as headings, paragraphs, hyperlinks, images, forms, tables, lists, videos and so on.
* <form>- tag defines an HTML form that contains interactive controls which enable a user to submit information to a web server.
* <option>- element represents an option in a dropdown list defined by the [<select>](https://www.tutorialrepublic.com/html-reference/html-select-tag.php) element. A dropdown list must contain at least one <option> element.
* <select>- element defines a selection list within a [<form>](https://www.tutorialrepublic.com/html-reference/html-form-tag.php).
* <li>- (short for list item) defines an individual list item within a list. Each list item usually rendered with a bullet (in unordered lists, defined by the [<ul>](https://www.tutorialrepublic.com/html-reference/html-ul-tag.php) tag) or a number or letter (in the case of ordered lists, defined by the [<ol>](https://www.tutorialrepublic.com/html-reference/html-ol-tag.php) tag).
* <ul> -(short for unordered list) element defines an unordered list of items. Each list item is defined by a [<li>](https://www.tutorialrepublic.com/html-reference/html-li-tag.php) element.
* <ol>- (short for ordered list) tag defines an ordered list of items. Each list item is defined by a [<li>](https://www.tutorialrepublic.com/html-reference/html-li-tag.php) tag.
* <table>- tag is used to represents data in a grid-like fashion (in rows and columns).<th>,<tr>,<td> are elements used in table.
* <img>- (short for image) tag defines an image in an HTML document. Images are not directly inserted into the document; they are linked to the HTML pages.

**BOOTSTRAP-4**

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation and other interface components.

## **Bootstrap 4 CDN**

If you don't want to download and host Bootstrap 4 yourself, you can include it from a CDN (Content Delivery Network).

MaxCDN provides CDN support for Bootstrap's CSS and JavaScript. You must also include jQuery:

MaxCDN:

<!-- Latest compiled and minified CSS -->  
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css">  
  
<!-- jQuery library -->  
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>  
  
<!-- Popper JS -->  
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js"></script>  
  
<!-- Latest compiled JavaScript -->  
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.4.1/js/bootstrap.min.js"></script>

Bootstrap 4 Classes:

Classes is the important element in bootstrap.

All we have to include it in div tag. Eg:<div class=”.navbar”>

Some of the the classes used are: .active, .navbar, .bg-secondary, .bg-primary.etc.

Some of the elements used for are:

* Grid System-Bootstrap's grid system is built with flexbox and allows up to 12 columns across the page.

If you do not want to use all 12 columns individually, you can group the columns together to create wider columns.

Grid classes: col-,. col-sm-,.col-md-,.col-lg-,.col-xl-

* Color-Bootstrap 4 has some contextual classes that can be used to provide "meaning through colors".The classes for text colors are: .text-muted, .text-primary, .text-success, .text-info, .text-warning, .text-danger, .text-secondary, .text-white, .text-dark, .text-body (default body color/often black) and .text-light
* Table- A basic Bootstrap 4 table has a light padding and horizontal dividers.

The. table class adds basic styling to a table.

* Image-Tag used for inserting image:<img src="paris.jpg" class="float-left">
* Buttons: Different types of button are-

Basic, Primary, Secondary, Success, Info, Warning, Danger, Dark Light.

* navigation bar -is a navigation header that is placed at the top of the page.
* Bootstrap provides two types of form layouts:

Stacked (full-width) form.

Inline form.

**CSS 3**

Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language. CSS3 is a latest standard of CSS earlier versions (CSS2).

CSS can be implemented using 3 types:-

Inline CSS: -

E.g.- <p style=”color:sienna;margin-left:20px”>This is example</p> .

External CSS: -

In this type CSS file is external and is included in html file in <head> tag <link rel=”spreadsheet” type=”text/css” href=”mystyle.css”>.

Internal CSS: -

In this type CSS is written between <head> tag and <style> tag.

Some of the properties used in this are: -

|  |  |
| --- | --- |
| Property | Description |
| background | Defines a variety of background properties within one declaration. |
| background-attachment | Specify whether the background image is fixed in the viewport or scrolls. |
| background-clip | Specifies the painting area of the background. |
| background-color | Defines an elements background color |
| background-image | Defines an elements background image |
| border | Sets the width, style and color for all four sides of elements border. |
| border-radius | Defines the shape of the border corners of an element. |
| color | Specify the color of the text of an element. |
| opacity | Specifies the transparency of an element. |
| font-family | Defines a list of fonts for element. |
| font-stretch | Select a normal, condensed or expanded face from a font. |

**PHP 7**

**PHP** is a [general-purpose programming language](https://en.wikipedia.org/wiki/General-purpose_programming_language) originally designed for [web development](https://en.wikipedia.org/wiki/Web_development). It was originally created by [Rasmus Lerdorf](https://en.wikipedia.org/wiki/Rasmus_Lerdorf) in 1994, the PHP [reference implementation](https://en.wikipedia.org/wiki/Reference_implementation) is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the [recursive initialism](https://en.wikipedia.org/wiki/Recursive_initialism) PHP: Hypertext Pre-processor.

* PHP 7 is much faster than the previous popular stable release (PHP 5.6)
* PHP 7 has improved Error Handling
* PHP 7 supports stricter Type Declarations for function arguments
* PHP 7 supports new operators (like the spaceship operator: <=>)

In this project PHP7 is used only for server side, And used to process the data and connect to database.

**MYSQL 8.0**

MySQL is an [open-source](https://en.wikipedia.org/wiki/Open-source_software) [relational database management system](https://en.wikipedia.org/wiki/Relational_database_management_system) (RDBMS). Its name is a combination of "My", the name of co-founder [Michael Widenius](https://en.wikipedia.org/wiki/Michael_Widenius)'s daughter, and "[SQL](https://en.wikipedia.org/wiki/SQL)", the abbreviation for [Structured Query Language](https://en.wikipedia.org/wiki/Structured_Query_Language).

In this project mysql is used to store data.

Data is stored using connection of php and mysql.

<?php  
$servername= "localhost";  
$username= "username";  
$password= "password";   
$conn= new mysql($servername,$username,$password);?>

This is the code for connection of php with database.

In database data is inserted deleted and select query is used

**JavaScript**

JavaScript is the programming language of HTML and the Web.

JavaScript is easy to learn.

This tutorial will teach you JavaScript from basic to advanced.

In HTML, JavaScript code must be inserted between <script> and </script> tags.

JavaScript can "display" data in different ways:

* Writing into an HTML element, using innerHTML.
* Writing into the HTML output using document.write().

JavaScript provides a way to validate form's data on the client's computer before sending it to the web server. Form validation generally performs two functions.

* **Basic Validation** − First of all, the form must be checked to make sure all the mandatory fields are filled in. It would require just a loop through each field in the form and check for data.
* **Data Format Validation** − Secondly, the data that is entered must be checked for correct form and value. Your code must include appropriate logic to test correctness of data.

**Input Events**

[onblur - When a user leaves an input field](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_onblur).

[onchange - When a user changes the content of an input field](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_onchange).

[onchange - When a user selects a dropdown value](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_dropdown).

[onfocus - When an input field gets focus](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_onfocus).

[onselect - When input text is selected](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_onselect).

onsubmit - When a user clicks the submit button.

[onreset - When a user clicks the reset button](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_onreset).

**Click Events**

[onclick - When button is clicked](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_onclick).

[ondblclick - When a text is double-clicked](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_ondblclick)

**Load Events**

[onload - When the page has been loaded](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_body_onload).

[onload - When an image has been loaded](https://www.w3schools.com/js/tryit.asp?filename=tryjs_events_img_onload).

**CHAPTER 2: PROPOSED SYSTEM**

**2.1 PROPOSED SYSTEM:**

This system is a bunch of benefits from various point of views. As this online system of "Shravan Dairy" enables the end users to register to the system online, surf through the product list of their choice from the menu list, and order products online.

Payment can be made through COD and home delivery depending upon the customer’s choice and convenience. The selection of product made by the customers will be available online to the owner of dairy or to the person handling the system in shop.

As soon as the owner receives the product order later person the delivery persons is assigned with the address of customer.

Multiple products can be ordered online at a time and it will be added to the cart. The system will be taking orders only when shop is open.The system will be more secure as each time when the users tries to login he should provide credentials to the system. The system will maintain the information of customers and about their orders in database

With this system the work load of the dairy owner and the customer is reduced or in some situations the work is abolished.

One of the various benefits of this is system from customer point of view is that the customer saves his/her time and can get fresh products.

As the bill is generated online customer as well as owner will be known of bill within few seconds of selection of product and both can view their order list.

This system is more flexible for customer as well owner as it is user-friendly, time consuming and helpful.

**2.2 OBJECTIVE OF PROJECT**

1. To provide facility to customers for surfing or searching through products.
2. To provide facility of ordering product online.
3. To provide facility of selection of multiple products at a time and will be added to cart.
4. To provide Registration and Login facility.
5. To provide facility to generate bill after ordering of multiple products.
6. Order history will be provided to both admin and end-user.

**2.3 User Requirements: -**

1. User Requested that the orders will be taken when the shop is open only.
2. User requested that delivery person will be assigned only when the person is available.
3. User requested that the delivery of milk will be only in morning times.
4. User requested that the milk order will be accepted before the day it is delivered.
5. User requested that some products will have extra rate, charges accordingly will be displayed.
6. User is interested in COD (Cash on Delivery).