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ABSTRACT

3 Sector Help System provides an efficient search of various raw materials and finished products required by farmers, manufacturers and marketers. The project 3SH system is known to be a pilot project that is designed to gather the raw materials sold by the farmer to manufacturer and finished products sold by the manufacturer to marketer from a vast area and to help them undertake their working activities easily so as to connect them under one roof. It maintains a library of the data given and required by the 3 individual sectors i.e., farmers, manufacturers and the marketers. Sometimes the 3 sectors face difficulty in finding the required resource for the respective processes to be undertaken in a given point of time. This project has attempted to provide the answer to the same by taking upon itself the task of collecting volunteering individuals as well as organizations for the cause and care of all the interconnected people in need.

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CHAPTER-1

INTRODUCTION

CHAPTER-1

INTRODUCTION

The 3 sector management system is a user friendly application software in getting faster and more efficient access to the required stock of the respective working sectors. This webpage also provides a platform for individuals or companies volunteering to sell their produce and also to register themselves as their sector accordingly. The 3SH Management System is designed such that it represents the view of a distributed architecture having the database as its centralized storage. The aim is to maintain and provide information regarding individuals ready to sell their produce accordingly.

1.1 Purpose

The 3SH management system is intended to provide information about the availability of raw materials and manufactured products in various weather conditions and maintaining the status of availability based on the requirement and ensuring secure provision and process. The purpose is to meet the challenging requirement of modern day working of the 3 main sectors efficiently under a single roof.

1.2 Scope

- To create a platform for all the three sectors to connect and join hands under a single roof.
- To provide maximum number of trusted farmers an easier and better way to sell their produce
- To help the manufacturers buy raw materials and connect to the marketers to sell their finished products.
- To help the farmers, manufacturers, marketers and dealers to post their details and get involved in their respective activities through buying and selling with the help of a dealer.

1.3 Existing System

- The Existing system involves one-to-one connection with any of the 2 sectors.
- It is sometimes limited to a particular boundary or state and does not cover vast areas.
- The facts and various additional details are seldom known in other softwares.

1.4 Proposed System

- It ensures better quality and service assurance.
- It involves the connection of all the three sectors for better interaction and easier implementation.
- It provides additional details and facts to help them know better about their counterpart.
- It gives better communication medium and avoids confusion as it is mostly undertaken by the administrator.

1.5 Summary

This chapter gives the details about the existing problem and the purpose of our project. It also contains details about the system and the proposed system. It makes us aware about the different terminologies, definition and abbreviation used in the project.

CHAPTERS-2

LITERATURE SURVEY

LITERATURE SURVEY

2.1 Agriculture and Raw Materials from Campden BRI

Good quality products require good quality ingredients. Increasingly, crop raw materials are grown with a specific final product in mind: particular fruit and vegetable varieties are directed to the fresh produce market, whereas others are suitable for canning or freezing.

The way that they are produced is also important - segregation of organically and conventionally grown raw materials has been a major issue for several years, and this has highlighted the need for good traceability systems.

Campden BRI has been closely involved with these food chain issues for over half a century and we are the people to contact with questions on raw material production systems and post-harvest operations, including pesticide issues such as pesticide taint testing, and how the agricultural production and distribution chain should be managed and monitored.

Two Lists of Accepted Agrochemicals for the brewing industry have been developed; one for cereals and one for hops. Additional guidance for using the hop list can be found in the respective official site.

The Accepted List for cereals details the agrochemicals that are accepted for use on malting barley or wheat and, for each active ingredient, lists the EU and Codex Maximum Residue Limits (MRL), EU and UK expiry dates and any limitations of use. The Accepted List for Hops details similar information for hops grown in the UK, hops grown in the EU but outside of the UK and hops imported into the UK from outside the EU.

2.2 How The Fertilizer Industry Works (Business Maps of India)

Fertilizers are substances that supply one or more of the chemicals required for plant growth. Fertilizers can be both organic and inorganic. As per industry experts it is said that there are sixteen elements that are absolutely necessary for plant growth. Out of these sixteen 9 elements are required in large quantities while the other seven are needed in smaller amounts.

Since agriculture is a very important sector it goes without saying that the fertilizer industry is one which the Indian economy cannot do without. The fertilizer industry in India is extremely vital as it manufactures some of the most important raw materials required for crop production. The primary objective of this industry is to ensure the inflow of both primary and secondary elements required for crop production in the desirable quantities.

The success of the agricultural sector in India is largely dependent on the fertilizer industry. The benchmark that the food industry in India has set is mainly due to the many technically competent fertilizer producing companies in the country.

India is home to numerous top class private and government fertilizer companies. Ranging from fertilizers to seeds to fungicides the many fertilizer companies in India are the major reason behind the success story of the sector in India.

In the present scenario, there are more than 57 large and 64 medium and small fertilizer production units under the India fertilizer industry. The main products manufactured by the fertilizer industry in India are phosphate based fertilizers, nitrogenous fertilizers, and complex fertilizers. The fertilizer industry in India with its rapid growth is all set to make a long lasting global impression.

2.3 Microsoft Visual Studio 2015 IDE

Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Presentation Foundation, Windows Store and Microsoft Silverlight. It can produce both native code and managed code.

Visual Studio includes a code editor supporting IntelliSense (the code completion component) as well as code refactoring. The integrated debugger works both as a source-level debugger and a machine-level debugger. Other built-in tools include a code profiler, designer for building GUI applications, web designer, class designer, and database schema designer. It accepts plug-ins that enhance the functionality at almost every level—including adding support for source control systems (like Subversion and Git) and adding new toolsets like editors and visual designers for domain-specific languages or toolsets for other aspects of the software development lifecycle (like the Azure DevOps client: Team Explorer).

Visual Studio supports 36 different programming languages and allows the code editor and debugger to support (to varying degrees) nearly any programming language, provided a language-specific service exists. Built-in languages include C, C++, Visual Basic .NET, C#, JavaScript, TypeScript, XML, XSLT, HTML, and CSS. Support for other languages such as Python, Ruby, Node.js, and M among others is available via plug-ins. Java (and J#) were supported in the past.

The most basic edition of Visual Studio, the Community edition, is available free of charge. The slogan for Visual Studio Community edition is "Free, fully-featured IDE for students, open-source and individual developers".

2.4 C# Language

C# (pronounced see sharp, like the musical note C#, but written with the number sign) is a general-purpose, multi-paradigm programming language encompassing strong typing, lexically scoped, imperative, declarative, functional, generic, object-oriented

(class-based), and component-oriented programming disciplines. It was developed around 2000 by Microsoft as part of its .NET initiative, and later approved as an international standard by Ecma (ECMA-334) and ISO (ISO/IEC 23270:2018). Mono is the name of the free and open-source project to develop a compiler and runtime for the language. C# is one of the programming languages designed for the Common Language Infrastructure (CLI).

2.5 Asp.Net Technology

ASP.NET Web Forms is a web application framework and one of several programming models supported by the Microsoft ASP.NET technology. Web Forms applications can be written in any programming language which supports the Common Language Runtime, such as C# or Visual Basic. Main building blocks of Web Forms pages are server controls, which are reusable components responsible for rendering HTML markup and responding to events. A technique called view state is used to persist the state of server controls between normally stateless HTTP requests.

2.6 Microsoft SQL Server

Microsoft SQL Server is a relational database management system developed by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications—which may run either on the same computer or on another computer across a network (including the Internet).

Microsoft markets at least a dozen different editions of Microsoft SQL Server, aimed at different audiences and for workloads ranging from small single-machine applications to large Internet-facing applications with many concurrent users

Chapter 3

System Analysis

System Analysis

3.1 Purpose

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CHAPTER-4

SOFTWARE REQUIREMENTS

SPECIFICATION

CHAPTER-4

SOFTWARE REQUIREMENTS SPECIFICATION

The software requirement specification is the official statement of what the system developers should implement. It should include both the user requirements for a system and a detailed specification of the system requirements. In some cases, the user and the system requirements may be integrated into single description. In other cases, the user requirements are defined in an introduction to the system requirement specification.

4.1 Operating Environment

This project is implemented in C# with the back-end being Ms SQL Server database. This is executed in Windows environment.

4.1.1 Software requirement

- **Operating System:** Windows
- **Implementation:** ASP.Net using C#
- **Front End:** Visual Studio 2015
- **Back end:** Microsoft SQL Server

4.2 Functional Requirements

Functional requirements are associated with specific functions, tasks or behaviours the system must support. The functional requirements address the quality characteristics of functionality while the other quality characteristics are concerned with various kinds of non-functional requirements. Non-functional requirements tend to be tested in terms of constraints on the results of tasks which are given as functional requirements.

This is the approach taken in this work.

Farmer:

- Farmer registers himself and logs in to sell his crops and display various details about his work.
- Farmer does direct contact with dealer and manufacturer.

- Farmer gets access to farming knowledge base.
- Dealers suggest the farmer which crop is mainly needed in the market.
- Farmer knows what is the demand in market and how much he can full fill the needs of the manufacturer.
- Farmer uploads and updates details about the crops grown by him.

Manufacturer:

- Manufacturer registers himself and logs in; in order to buy or sell his produce.
- He uploads and updates the details about his products, the quantity available, quality, etc.
- The manufacturer sells his products to various marketeers depending on the market and demand and also buys the raw materials from the farmers.
- To contact the respective representatives and undertake buying and selling of the products.

Marketeer:

- The similar process of registering and logging in is followed by the marketeer.
- It can upload and update his details to the web-page in order to gain exposure from different manufacturers.
- It can place orders as per the demand of products by the consumers.

4.3 Non Functional requirements

- Availability:** The system will be available at any point in time with all the functionality as the data is loaded in the database and it can be viewed or updated by authorized personnel at any time and any place.
- Robust:** The system ensures robustness by reducing the time of searching for the various requirements as the details are already uploaded and available easily.
- Correctness:** Ensures the correctness in the system by updating the data as and when needed.
- Accurate and Non-Tedious:** The data is relevant and trustworthy and is non-tedious as everything is connected under one roof so the work is not hectic.
- Security:** User authentication i.e., user name and password is provided and the data cannot be used by everyone without authentication.

4.4 User Characteristics

The four main users of the system are:

- Farmer
- Manufacturer
- Marketeer
- Field Agent

Farmer: The role of the farmer is to register to the system and he does so by filling the complete and correct details and sells his produce as raw materials to different manufacturers.

Manufacturer: The role of the manufacturer is to register to the system and also complete the process by filling the correct details. Once registered, it has to keep updating the manufactured products availability and also the demand of various raw materials needed from the farmer accordingly.

Marketeer: The role of the marketeer will be to search any finished product according to his requirement and convenience and also inform the manufacturer about various demands made by the consumers.

Field Agent: The role of field agent is help the inexperienced farmer with the production of crops and understanding of various farming prospects.

4.5 Application of System

- The system can be applied for various business activities to help get a better exposure.
- It is also helpful for various farmers, factories and service sector related people.

4.6 Advantages of system

- It provides an opportunistic approach for various sectors to expand their work to a macro-view concept.
- It is user friendly providing different facts and information for better results.
- The system makes the overall 3SH system more advanced, easier and flexible.

4.7 Summary

This chapter gives the detail about the various hardware and software requirements i.e., details about the various hardware and software equipment used in this project. It also gives the details about the functional and non-functional requirements of our project. It provides information about the various characteristics of the user too.

CHAPTER-5

SYSTEM DESIGN

CHAPTER-5

SYSTEM DESIGN

5.1 Introduction

The purpose of this system design chapter is to add the necessary details to the current project description to represent a suitable, model for coding. The system design documentation presents the structure of the system such as the architecture and data flow diagram.

5.2 Development Strategy

The system is designed using 'The Waterfall Model'. The waterfall model was the first structured approach to systems development. The waterfall model is just a time ordered list of activities to be performed to obtain a system.

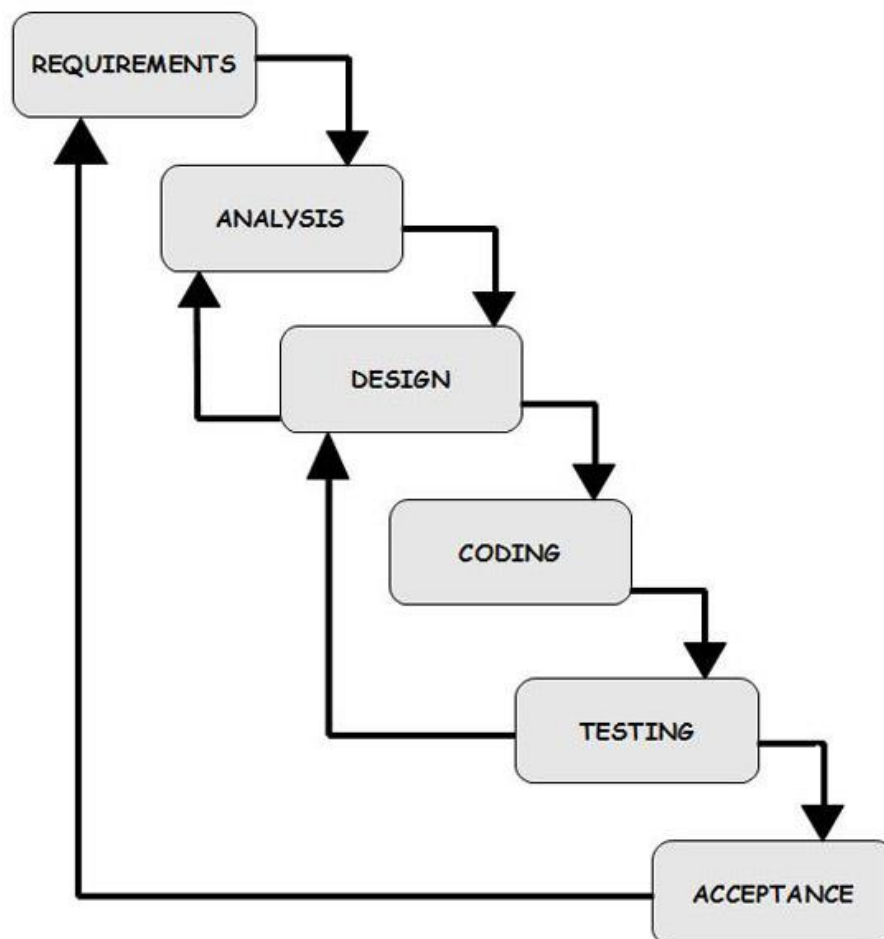


Fig 3.1 Waterfall Model Activities

The activities in waterfall model are:

5.2.1 System Analysis

This step refers to the gathering of system requirements with the goal of determining how these requirements will be integrated in the system. Extensive communication between the customer and the development team is essential. During system analysis feasibility studies are also carried out.

5.2.2 System Design

Once the requirements have been collected and analysed, it is necessary to identify in detail how the system will be constructed to perform the necessary tasks.

5.2.3 Coding

Also known as programming, this step involves the creation of the system software. Requirements and system specification are translated into computer code.

5.2.4 Testing

As the software is created and added to the developing system, testing is performed to ensure that it is working correctly and efficiently.

5.2.5 Implementation

After the code is tested, if it meets all the system requirements, it is handed over to the customers.

5.2.6 Maintenance

Inevitably the system will need maintenance. Software will definitely undergo change once it is delivered to the customer. Change could happen because of some unexpected input values to the system.

5.3 System Architecture

An architecture description is a formal description and implementation of a system, organized in a way that supports reasoning about the structure of the system which comprises

system components, the externally visible properties of those components, the relationship between them, and provides a plan from which products can be produced, and systems can be developed, that will work together to implement the overall system.

5.4 Data Flow Diagram

Data Flow Diagram is a graphical representation of the flow of data that provides an overview of data flow in system, transformations done on the data, files used and flow of results. It is a documentation used by both programmers and non-programmers.

5.5 Summary

This chapter provides details about the various functionality of our system. The system architecture and the dataflow diagram at different levels is also mentioned here., it provides a brief description about the architecture of the system and about the goals and constraints of the system. The assumptions and dependencies are also mentioned.

CHAPTER-6

DETAILED DESIGN

CHAPTER-6

DETAILED DESIGN

The system design documentation provides the structure of the system such as the activity diagram, use case diagram, ER diagram and sequence diagram.

6,1 Activity Diagram

Activity diagrams are graphical representations of the step wise activities and actions with support for choice and iteration.

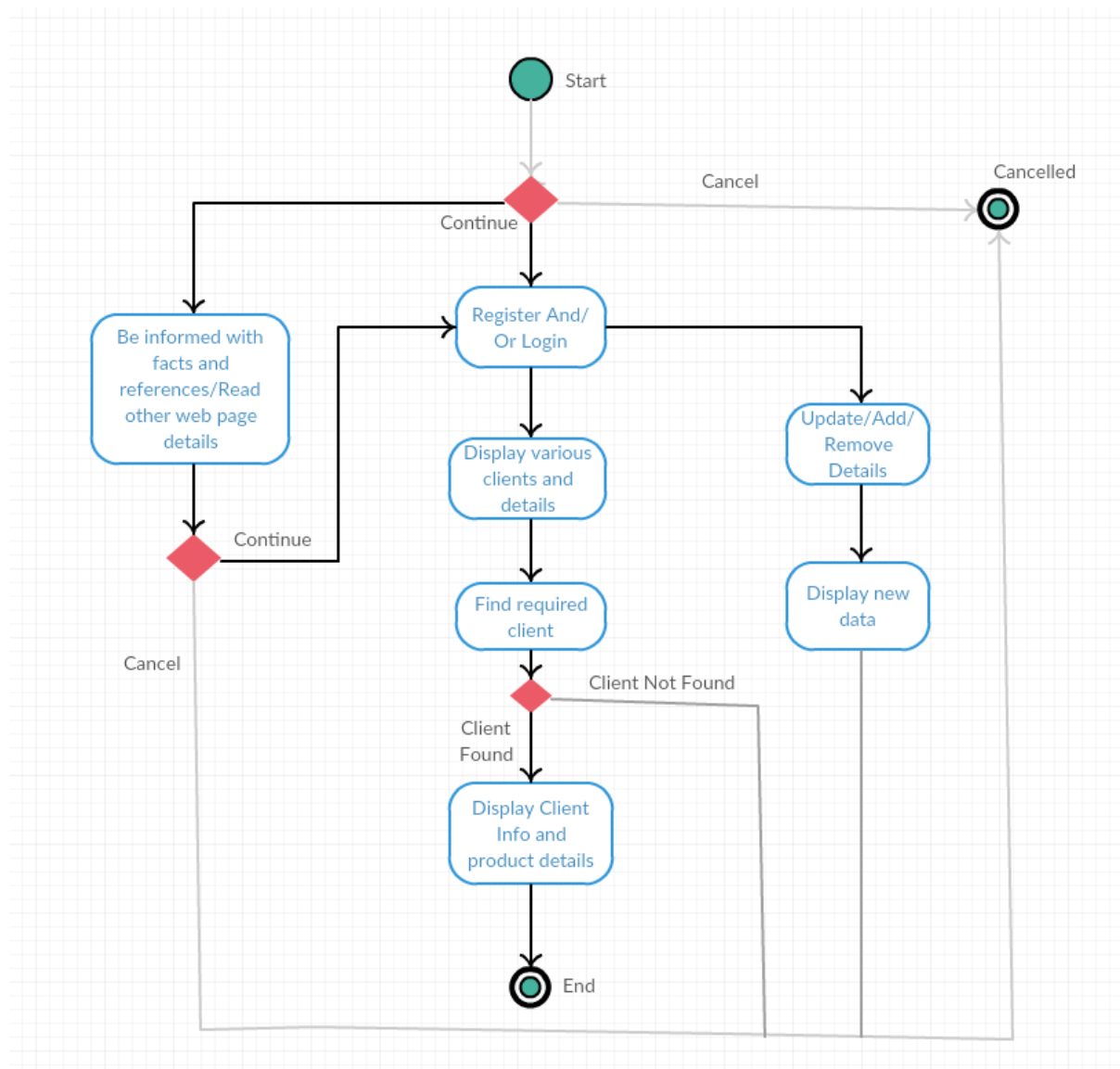


Fig 6.1 Activity Diagram

6.2 Use Case Diagram

Use case diagram is a diagram defined by and created from a Use-Case analysis. Its purpose is to present a graphical overview of the functionality provided by a system.

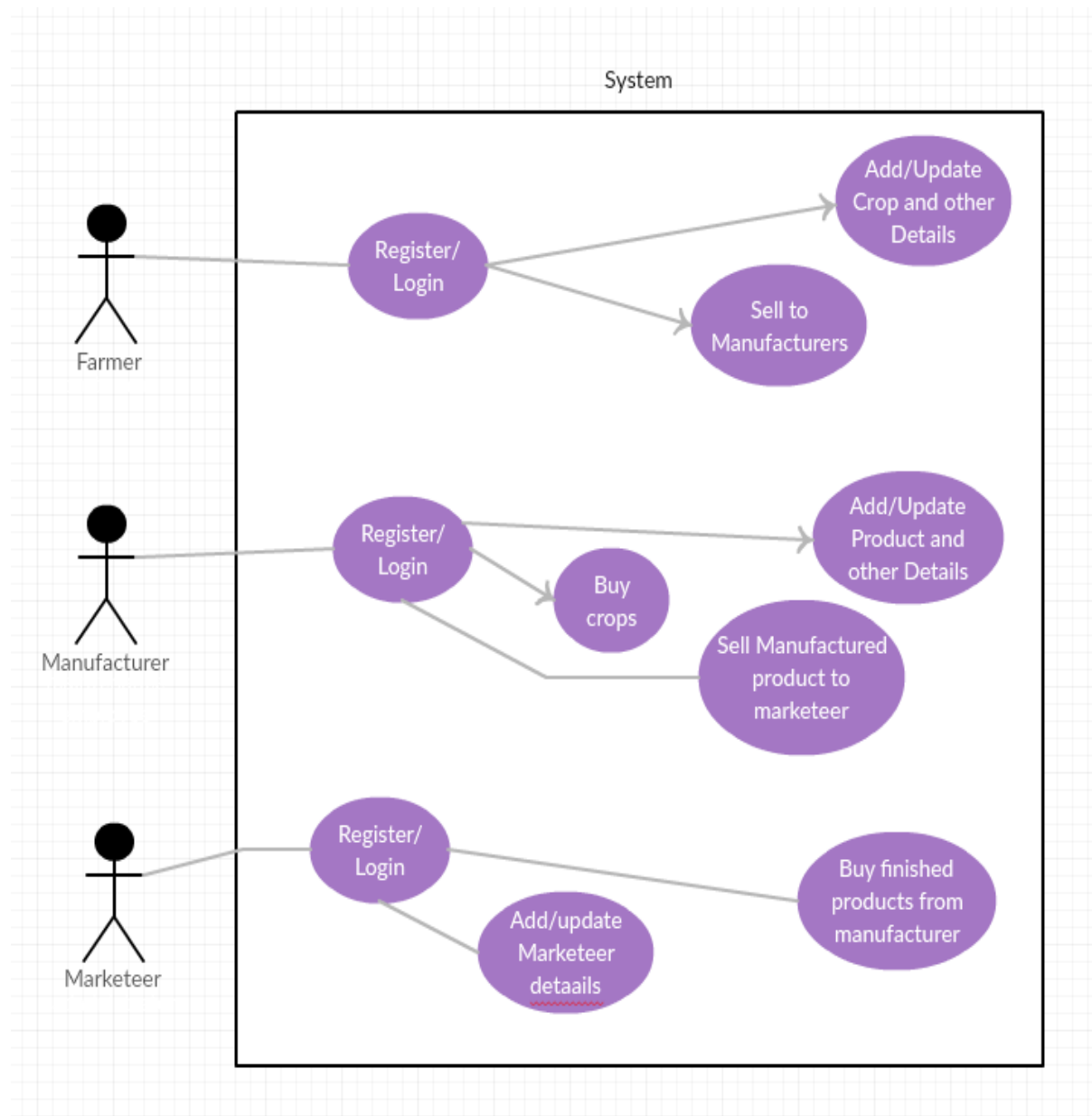


Fig 6.2 Use case Diagram

6.3 Sequence Diagram

A sequence diagram is an interaction diagram that shows how processes operate with one another and what is their order. A sequence diagram shows object interactions arranged in time sequence.

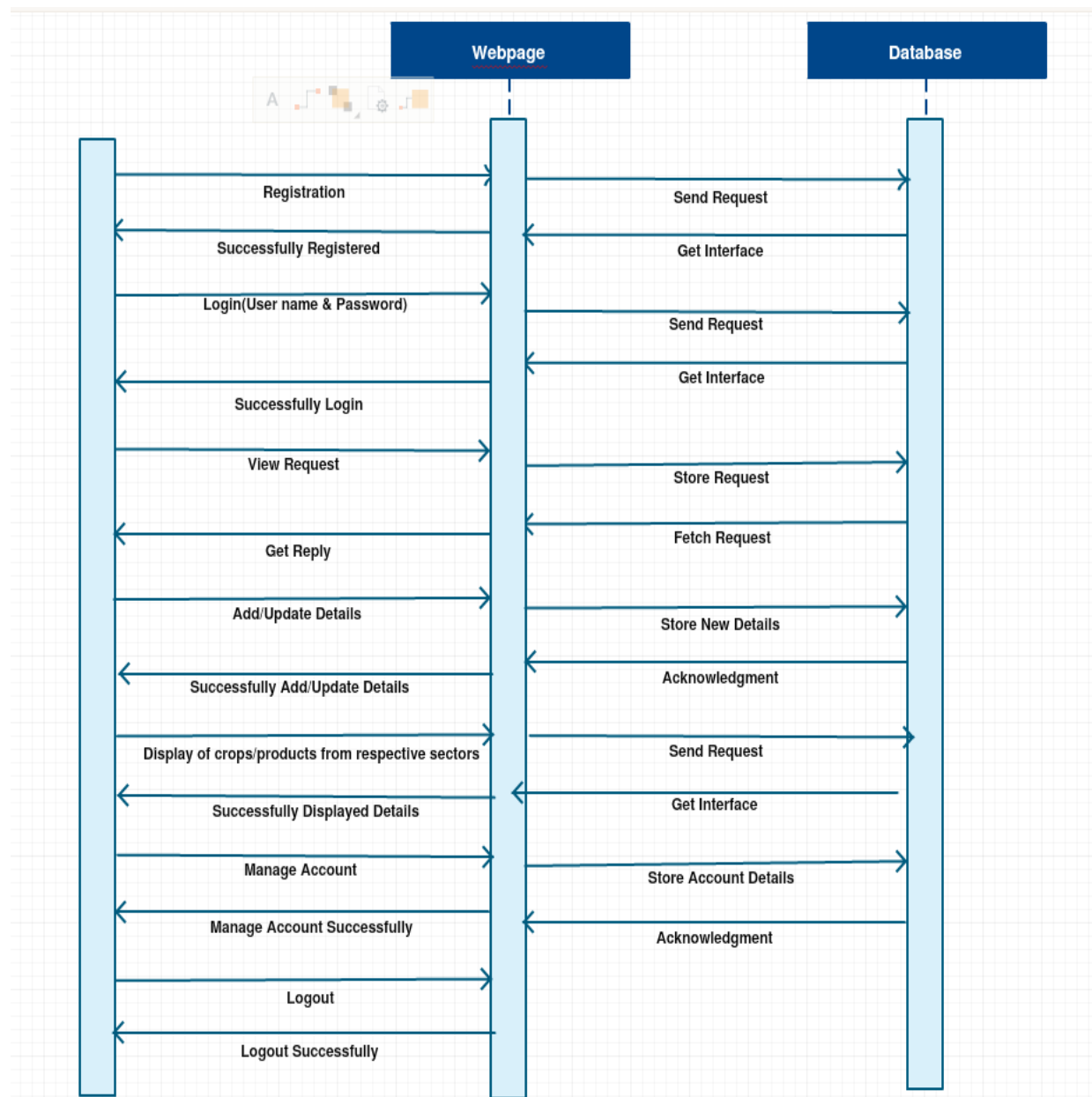


Fig 6.3 Sequence Diagram

6.4 ER Diagram

ER Diagram stands for Entity Relationship Diagram. it is a visual representation of data that describes how data are related to each other.

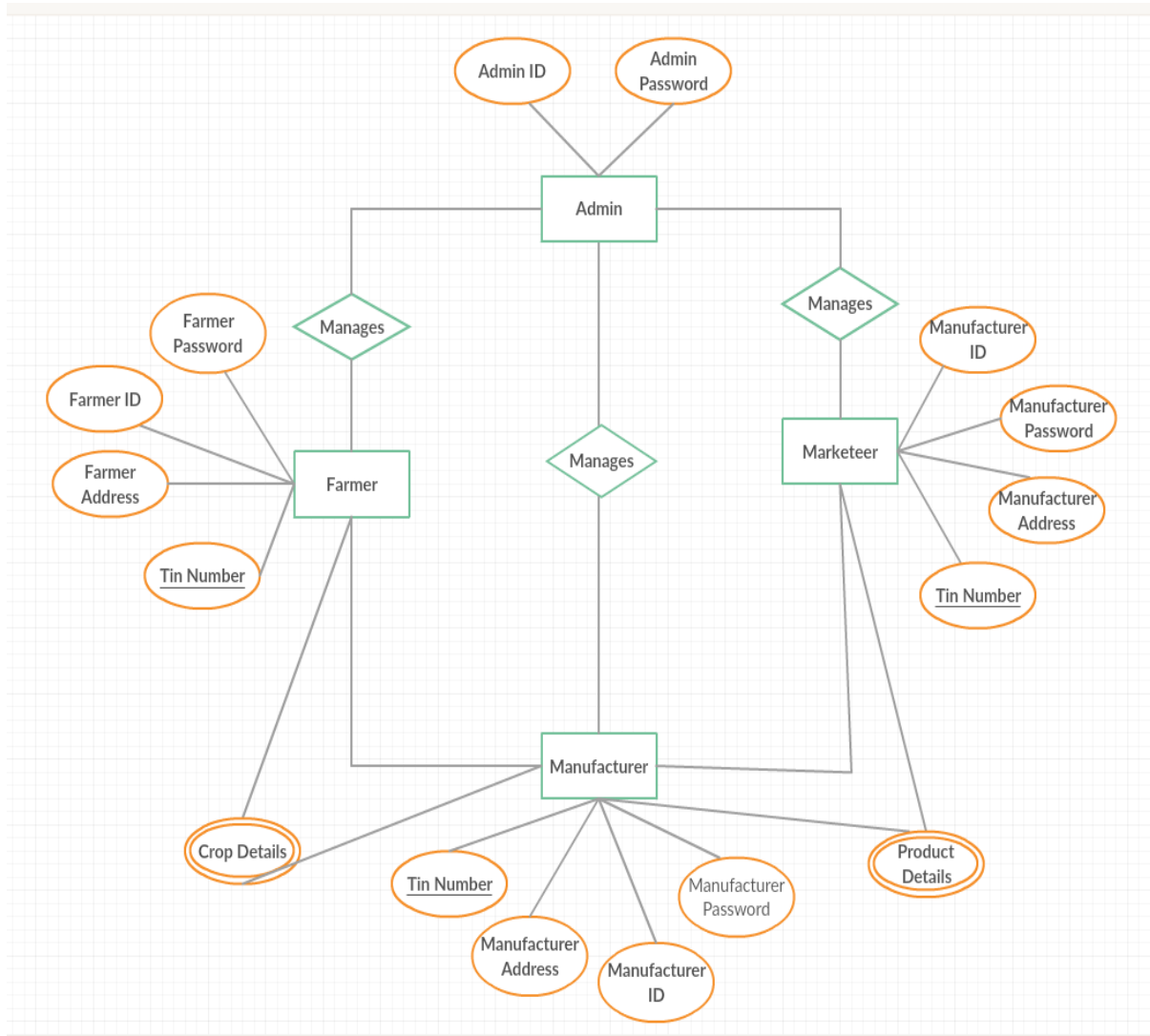


Fig 6.4 ER Diagram

6.5 DATABASE DESIGN:

A database is an organized mechanism that has the capability of storing information through which a user can retrieve stored information in an effective manner. The data is the purpose of any database and must be protected.

The database design is a two level process. In the 1st step, user requirements are gathered together and a database is designed which will meet these requirements as clearly as possible. This step is called information level design and it is taken independent of any individual database management system (DBMS).

In the 2nd step, this information level design is transferred into a design for the specific DBMS that will be used to implement the system in question. This step is called physical level design concerned with the characteristics of the specific DBMS that will be used. A database design runs parallel with the system design. The organization of the data in the database is aimed to achieve the following two major objectives.

- Data integrity
- Data independence

NORMALIZATION:

Database normalization is the process of removing redundant data from the tables to improve storage efficiency, data integrity, and scalability. In the relational model, methods exist for qualifying how efficient a database is. These classifications are called normal forms (or NF), and there are algorithms for converting a given database between them.

Normalization generally involves splitting existing table into multiple ones, which must be re-joined or linked each time a query is issued.

- It is the process of efficiently organizing data in the data base
- There are two goals of normalization process.
- Eliminating redundant data (for example: storage of same data in more than one table).
- Ensuring data dependencies make sense(only storing related data in the table).

FIRST NORMAL FORM (1NF):

It states that the domain of an attribute must include only atomic values and that the value of any attribute in a table must be a single value from the domain of that attribute. 1NF disallows “relations within relations”. The only values permitted by 1NF are single atomic values.

- First normal form sets the very basic rules for an organized database
- Eliminates duplicative columns from the same table.
- Creates separate tables for each group of related data and identity.
- Each row with unique column or set columns (the primary key).

SECOND NORMAL FORM(2NF):

A table in 2NF is only if it is in 1NF and every non-key attribute is fully functionally dependent on the whole of the primary key.

Tables are said to be in 2NF when

- ✓ the tables meet the criteria for 1NF.
- ✓ If the primary key is a composite of attributes that, the non key attributes must depend on the whole key.
- ✓ Our project supports both 1NF and 2NF.
- ✓ The primary key in our project is Email


4.4 Tables Structures

Update		Script File: <input type="text" value="dbo.login.sql"/>			
	Name	Data Type	Allow Nulls	Default	Length
	email	nvarchar(50)	<input type="checkbox"/>		50
	password	nvarchar(50)	<input type="checkbox"/>		50
	typ	nvarchar(50)	<input type="checkbox"/>		50
	Question	nvarchar(MAX)	<input type="checkbox"/>		MAX
	Answer	nvarchar(50)	<input type="checkbox"/>		50
			<input type="checkbox"/>		


Login table structure

Update		Script File: <input type="text" value="dbo.FormarDetails.sql"/>			
	Name	Data Type	Allow Nulls	Default	Length
	f_id	nvarchar(50)	<input type="checkbox"/>		50
	name	nvarchar(MAX)	<input type="checkbox"/>		MAX
	dob	date	<input type="checkbox"/>		
	phone	numeric(11,0)	<input type="checkbox"/>		
	address	nvarchar(MAX)	<input type="checkbox"/>		MAX
	pin	numeric(7,0)	<input type="checkbox"/>		
	city	nvarchar(50)	<input type="checkbox"/>		50
	state	nvarchar(50)	<input type="checkbox"/>		50
	crop	nvarchar(50)	<input checked="" type="checkbox"/>		50
	email	nvarchar(50)	<input type="checkbox"/>		50




Former Details table

	Name	Data Type	Allow Nulls	Default	Length
	Mm_id	nvarchar(50)	<input type="checkbox"/>		50
	name	nvarchar(50)	<input type="checkbox"/>		50
	email	nvarchar(50)	<input type="checkbox"/>		50
	c_name	nvarchar(50)	<input type="checkbox"/>		50
	t_num	nvarchar(50)	<input type="checkbox"/>		50
	address	nvarchar(50)	<input type="checkbox"/>		50
	pin	numeric(8,0)	<input type="checkbox"/>		
	type	nvarchar(50)	<input checked="" type="checkbox"/>		50


Manufacturer Details table

	Name	Data Type	Allow Nulls	Default	Length
	mknum	nvarchar(50)	<input type="checkbox"/>		50
	name	nvarchar(50)	<input type="checkbox"/>		50
	shop	nvarchar(50)	<input type="checkbox"/>		50
	tin	nvarchar(50)	<input type="checkbox"/>		50
	email	nvarchar(50)	<input type="checkbox"/>		50
	address	nvarchar(MAX)	<input type="checkbox"/>		MAX
	pin	numeric(18,0)	<input type="checkbox"/>		
	deales	nvarchar(50)	<input checked="" type="checkbox"/>		50

Marketer details table

	Update	Script File: dbo.CropDetails.sql			
	Name	Data Type	Allow Nulls	Default	Length
	email	varchar(50)	<input type="checkbox"/>		50
	cropType	nvarchar(50)	<input type="checkbox"/>		50
	Quantity	nvarchar(50)	<input type="checkbox"/>		50
	RatePerQ	money	<input type="checkbox"/>		
	Quality	nchar(10)	<input type="checkbox"/>		10
	A_period	date	<input checked="" type="checkbox"/>		
	id_crop	nvarchar(50)	<input type="checkbox"/>		50
			<input type="checkbox"/>		

Crop details table

	Name	Data Type	Allow Nulls	Default	Length
	 Mm_id	nvarchar(50)	<input type="checkbox"/>		50
	name	nvarchar(50)	<input type="checkbox"/>		50
	rate	numeric(18,0)	<input type="checkbox"/>		
	quality	nvarchar(50)	<input type="checkbox"/>		50
	quantity	nvarchar(50)	<input type="checkbox"/>		50
	period	date	<input type="checkbox"/>		
	details	nvarchar(100)	<input type="checkbox"/>		100

Manufacturer Products table

6.5 Summary

This chapter summarizes the activity diagram, the use-case diagram, the ER diagram and the sequence diagram of the system.

CHAPTER-7

IMPLEMENTATION

CHAPTER-7

IMPLEMENTATION

Implementation of any software is always preceded by important decisions regarding selection of the platform, the language used, etc. these decisions are often influenced by several factors such as the real environment in which the system works, the speed that is required, security concerns, other implementation specific details etc.

A software product implementation method is a blueprint to get users and/or organizations running with a specific software product. The method is a set of rules and views to cope with the most common issues that occur when implementing a software product business alignment from the organizational view and acceptance from the human view.

7.1 Coding

Home.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Home.aspx.cs" Inherits="Home"
%>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

    <head>
        <meta charset="UTF-8">
        <!-- circle icon -->
        <link rel="apple-touch-icon" sizes="57x57" href="img/circle/apple-icon-
57x57.png">
        <link rel="apple-touch-icon" sizes="60x60" href="img/circle/apple-icon-60x60.png">
        <link rel="apple-touch-icon" sizes="72x72" href="img/circle/apple-icon-72x72.png">
        <link rel="apple-touch-icon" sizes="76x76" href="img/circle/apple-icon-76x76.png">
        <link rel="apple-touch-icon" sizes="114x114" href="img/circle/apple-icon-
114x114.png">
        <link rel="apple-touch-icon" sizes="120x120" href="img/circle/apple-icon-
120x120.png">
        <link rel="apple-touch-icon" sizes="144x144" href="img/circle/apple-icon-
144x144.png">
        <link rel="apple-touch-icon" sizes="152x152" href="img/circle/apple-icon-
152x152.png">
        <link rel="apple-touch-icon" sizes="180x180" href="img/circle/apple-icon-
180x180.png">
        <link rel="icon" type="image/png" sizes="192x192" href="img/circle/android-icon-
192x192.png">
        <link rel="icon" type="image/png" sizes="32x32" href="img/circle/favicon-32x32.png">
        <link rel="icon" type="image/png" sizes="96x96" href="img/circle/favicon-96x96.png">
        <link rel="icon" type="image/png" sizes="16x16" href="img/circle/favicon-16x16.png">
        <link rel="manifest" href="img/circle/manifest.json">
```

```
<meta name="msapplication-TileColor" content="#ffffff">
<meta name="msapplication-TileImage" content="img/circle/ms-icon-144x144.png">
<meta name="theme-color" content="#ffffff">
<!-- end of icon -->

    <meta name="viewport" content="width=device-width" />
    <title>3SH Home</title>
    <link rel="stylesheet" href="style/components.css">
    <link rel="stylesheet" href="style/responsee.css">
    <link rel="stylesheet" href="owl-carousel/owl.carousel.css">
    <link rel="stylesheet" href="owl-carousel/owl.theme.css">
    <!-- CUSTOM STYLE -->
    <link rel="stylesheet" href="style/template-style.css">
    <link
href='http://fonts.googleapis.com/css?family=Open+Sans:400,300,600,700,800&subset=lat
in,latin-ext' rel='stylesheet' type='text/css'>
    <script type="text/javascript" src="script/jquery-1.8.3.min.js"></script>
    <script type="text/javascript" src="script/jquery-ui.min.js"></script>
    <script type="text/javascript" src="script/modernizr.js"></script>
    <script type="text/javascript" src="script/responsee.js"></script>
    <script type="text/javascript" src="script/template-scripts.js"></script>

</head>
<body class="size-1140">
    <!-- TOP NAV WITH LOGO -->
    <header>
        <div id="topbar">
            <div class="line">
                <div class="s-12 m-6 l-6">
                    <p>CONTACT US: <strong>080 4400 0440</strong> </p>
                </div>
                <div class="s-12 m-6 l-6">
                    <div class="social right">
                        <p><strong>3sectorhelp.contact@gmail.com</strong></p>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <nav>
        <div class="line">
            <div class="s-12 l-2">
                <p class="logo"><strong>SH</strong></p>
            </div>
            <div class="top-nav s-12 l-10">
                <p class="nav-text">Custom menu text</p>
                <ul class="right">
                    <li class="active-item"><a href="#carousel">Home</a></li>
                    <li><a href="#features">Features</a></li>
                    <li><a href="#about-us">About Us</a></li>
                    <li><a href="#our-work">Login</a></li>
                    <li><a href="#contact">Contact</a></li>
                </ul>
            </div>
        </div>
    </nav>
</header>
<section>
    <!-- CAROUSEL -->
    <div id="carousel">
        <div id="owl-demo" class="owl-carousel owl-theme">
            <div class="item">
```

```

<div class="line">
  <div class="text hide-s">
    <div class="line">
      <div class="prev-arrow hide-s hide-m">
        <i class="icon-chevron_left"></i>
      </div>
      <div class="next-arrow hide-s hide-m">
        <i class="icon-chevron_right"></i>
      </div>
    </div>
    <h2>We help a farmer</h2>
    <p>A wider platform to sell your produce. <br/> We connect you
to the manufacturers out there. </p>
  </div>
</div>
<div class="item">
  
  <div class="line">
    <div class="text hide-s">
      <div class="line">
        <div class="prev-arrow hide-s hide-m">
          <i class="icon-chevron_left"></i>
        </div>
        <div class="next-arrow hide-s hide-m">
          <i class="icon-chevron_right"></i>
        </div>
      </div>
      <h2>We help a manufacturer</h2>
      <p>You decide what you need! We help you get it!<br/> And sell
what you manufacture!</p>
    </div>
  </div>
</div>
<div class="item">
  
  <div class="line">
    <div class="text hide-s">
      <div class="line">
        <div class="prev-arrow hide-s hide-m">
          <i class="icon-chevron_left"></i>
        </div>
        <div class="next-arrow hide-s hide-m">
          <i class="icon-chevron_right"></i>
        </div>
      </div>
      <h2>We help a marketeer</h2>
      <p>We help you get the products you need <br/> With
uncompromised quality</p>
    </div>
  </div>
</div>
</div>
<!-- FIRST BLOCK -->
<div id="first-block">
  <div class="line">
    <h1>Welcome To The 3 Sector Help System</h1>
```

```

        <p>A platform for all the three sectors to join hands under a single
roof</p> <div class="s-12 m-4 l-2 center"><a class="white-btn"
href="info.aspx"><strong>Care For Some Facts?</strong></a></div>
    </div>
</div>
<!-- FEATURES -->
<div id="features">
    <div class="line">
        <div class="margin">
            <div class="s-12 m-6 l-3 margin-bottom">
                <i class="icon-tablet icon3x"></i>
                <h2>Robust</h2>
                <p><strong>Updated regularly</strong> keeping all your needs in
mind. A strong and healthy system for efficient work experience.</p>
            </div>
            <div class="s-12 m-6 l-3 margin-bottom">
                <i class="icon-isight icon3x"></i>
                <h2>Security</h2>
                <p>Your data is confidential and secure with us; And <strong>we
are trustworthy!</strong></p>
            </div>
            <div class="s-12 m-6 l-3 margin-bottom">
                <i class="icon-star icon3x"></i>
                <h2>Effortless</h2>
                <p>Important data is displayed and you are just some clicks away
from your <strong>best work experience</strong>.</p>
            </div>
            <div class="s-12 m-6 l-3 margin-bottom">
                <i class="icon-heart icon3x"></i>
                <h2>Totally free</h2>
                <p>You register, communicate, collaborate and contribute to each
other's development. And guess what? <strong>It's totally free.</strong></p>
            </div>
        </div>
    </div>
</div>
<!-- ABOUT US -->
<div id="about-us">
    <div class="s-12 m-12 l-6 media-container">
        <a href="about.html"></a>
    </div>
    <article class="s-12 m-12 l-6">
        <h2>Ditch<br/> The<br/> Brokers</h2>
        <p>The Farmers, Manufacturers and Marketeers come together to undertake
their respective activities without a broker here. and yes, if we are to be called as
brokers? <br/>Then we don't charge.
        </p>
        <div class="about-us-icons">
            <i class="icon-paperplane_ico"></i> <i class="icon-trophy"></i> <i
class="icon-clock"></i>
        </div>
    </article>
</div>
<!-- OUR WORK -->
<div id="our-work">
    <div class="line">
        <h2 class="section-title">Our Work</h2>
        <div class="tabs">
            <div class="tab-item tab-active">
                <a class="tab-label active-btn">LogIn</a>
                <div class="tab-content">

```

```

        <div class="margin">
            <div class="s-12 m-6 l-3"><a class="our-work-container lightbox
margin-bottom" href="LoginF.aspx"><div class="our-work-text"><h4>Login as
Farmer</h4><p></p></div></a></div>
            <div class="s-12 m-6 l-3"><a class="our-work-container lightbox
margin-bottom" href="LoginF.aspx"><div class="our-work-text"><h4>Login as
Manufacturer</h4><p></p></div></a></div>
            <div class="s-12 m-6 l-3"><a class="our-work-container lightbox
margin-bottom" href="LoginF.aspx"><div class="our-work-text"><h4>Login as
Marketeer</h4><p></p></div></a></div>
            <div class="s-12 m-6 l-3"><a class="our-work-container lightbox
margin-bottom" href="LoginF.aspx"><div class="our-work-text"><h4>Login as Field
Agent</h4><p></p></div></a></div>
        </div>
    </div>
<div class="tab-item">
    <a class="tab-label">Register</a>
    <div class="tab-content">
        <div class="margin">
            <div class="s-12 m-6 l-3"><a class="our-work-container lightbox
margin-bottom" href="RegFormar.aspx"><div class="our-work-text"><h4>Register as
Farmer</h4><p></p></div></a></div>
            <div class="s-12 m-6 l-3"><a class="our-work-container lightbox
margin-bottom" href="RegManufacture.aspx"><div class="our-work-text"><h4>Register as
Manufacturer</h4><p></p></div></a></div>
            <div class="s-12 m-6 l-3"><a class="our-work-container lightbox
margin-bottom" href="RegMakter.aspx"><div class="our-work-text"><h4>Register as
Marketeer</h4><p></p></div></a></div>
        </div>
    </div>
</div>
</div>
</div>
</div>
</div>
</div>
<!-- SERVICES -->

<!-- CONTACT -->
<div id="contact">
    <div class="line">
        <h2 class="section-title">Contact Us</h2>
        <div class="margin">
            <div class="s-12 m-12 l-3 hide-m hide-s margin-bottom right-align">
                
            </div>
            <div class="s-12 m-12 l-4 margin-bottom right-align">
                <h3>CMV Technologies Ltd.</h3>
                <address>
                    <p><strong>Address:</strong> #100, 1km before Electronic City,
Bengaluru-560100</p>
                    <p><strong>Country:</strong> Karnataka - India</p>
                    <p><strong>E-mail:</strong> info@cmvtech.com</p>
                </address>
                <br />
                <h3>Social</h3>
                <p><i class="icon-facebook icon"></i> <a
href="http://www.theuselessweb.com/">The Web</a></p>

```

```

        </div>
        <div class="s-12 m-12 l-5">
            <h3>Contact Form</h3>
            <form class="customform" runat="server">
                <div class="s-12"><input runat="server" name="email"
placeholder="Your e-mail" title="Your e-mail" type="text" id="email" /></div>
                <div class="s-12"><input runat="server" name="name"
placeholder="Your name" title="Your name" type="text" id="name" /></div>
                <div class="s-12"><textarea runat="server" placeholder="Your
message" name="message" rows="5" id="mssg"></textarea></div>
                <div class="s-12 m-12 l-4">
                    <button class="color-btn" runat="server"
onserverclick="Button1_Click">Submit Button</button></div></div>
            </form>
        </div>
    </div>
</div>
<!-- MAP -->
<div id="map-block">
    <style>
        #map {
            height: 400px;
            width: 100%;
        }
    </style>
</head>
<body>
    <div id="map"><a href="Home.aspx">Home.aspx</a></div>
    <script>
        function initMap() {
            var uluru = { lat: 12.954259, lng: 77.586685 };
            var map = new google.maps.Map(document.getElementById('map'), {
                zoom: 17,
                center: uluru
            });
            var marker = new google.maps.Marker({
                position: uluru,
                map: map
            });
        }
    </script>
    <script async defer
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyBJGDd1lJ7Jh8Z8dGqFZVLn4v-
qt3Lu6oU&callback=initMap">
    </script>
</body>
</div>
</section>
<!-- FOOTER -->
<footer>
    <div class="line">
        <div class="s-12 l-6">
            <p>Non-Copyright. But still the rights are reserved. </p>
            <p>The images are sourced from the internet but edited by us. </p>
        </div>
        <div class="s-12 l-6">
            <font class="right" color="#ff0893">Design and coding<br> by Moin Alam
Qureshi</font>
        </div>
    </div>

```

```
</div>
</footer>
<script type="text/javascript" src="owl-carousel/owl.carousel.js"></script>
<script type="text/javascript">
    jQuery(document).ready(function($) {
        var theme_slider = $("#owl-demo");
        $("#owl-demo").owlCarousel({
            navigation: false,
            slideSpeed: 300,
            paginationSpeed: 400,
            autoPlay: 6000,
            addClassActive: true,
            // transitionStyle: "fade",
            singleItem: true
        });
        $("#owl-demo2").owlCarousel({
            slideSpeed: 300,
            autoPlay: true,
            navigation: true,
            navigationText: ["&#xf007", "&#xf006"],
            pagination: false,
            singleItem: true
        });

        // Custom Navigation Events
        $(".next-arrow").click(function() {
            theme_slider.trigger('owl.next');
        })
        $(".prev-arrow").click(function() {
            theme_slider.trigger('owl.prev');
        })
    });
</script>
</body>
</html>
```


CHAPTER-8

SOFTWARE TESTING

CHAPTER-8

Webpage Development

The system development life cycle also referred to as the application development life cycle, is a term used in systems engineering, information systems and software engineering to describe a process for planning, creating, testing and deploying information system.

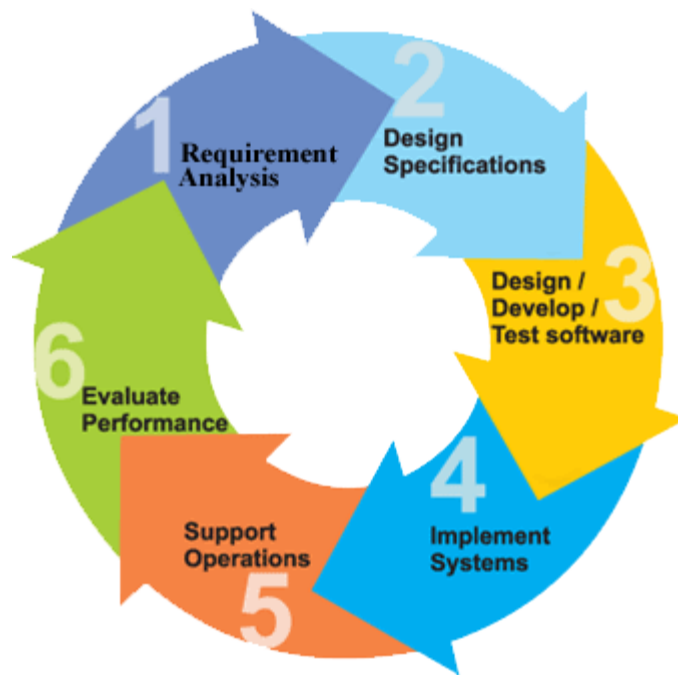


Fig 8.0 Webpage Development

The SDLC applies to a range of hardware and software configurations, as a system can be composed of hardware only, software only, or combination of both.

8.1 Software Testing

The purpose of testing is to discover errors. Testing is the process of trying to find every fault and weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies and/or finished product. It is the process of exercising the product with the intent of ensuring the software system meets the requirements.

and user expectations. There are several types of testing each addressing one kind of testing requirement.

8.2 Test Strategy and approach

Field testing will be performed manually and functional tests will be written in detail.

8.2.1 Test Objectives

- All field entries must work properly
- Pages must be activated from the identified link.
- The entry screen, messages and responses must not be delayed.

8.2.2 Features to be tested

- Verify that the entries are of the correct format.
- All buttons are working.
- Check proper data is being transferred.

8.3 Unit Testing

Unit testing involves design of test cases that validate that the internal program logic is functioning properly, and that the program inputs produce valid outputs. All decision branches and internal code flow should be validated. It is the testing of individual software units of the application. It is done after the completion of an individual unit before integration.

This is a structural testing, that relies on the knowledge of construction and is invasive. Unit tests perform basic tests at component level and test is specific business process, application, and/or system configuration. Unit tests ensure that each unique path of a business process forms accurately to the documented specifications and contains clearly defined inputs and expected results.

8.4 Integration Testing

Integration tests are designed to test integrated software components to determine if they actually run as one program. Testing is even driven and is more concerned with the basic outcome of fields or screens. Integration tests demonstrate although the components are individually satisfactory as shown by successful unit testing, the combination of components is correct and consistent.

8.5 Test Cases

8.5.1 Unit Testing of modules

Unit test case 1: Test case for registration

Name of the test	Test case for registration
Test Description	A test for a user to register
Sample Input	All required field in a registration form
Expected Output	The system will validate all the details entered and save the details in database.
Actual result/Remarks	As expected
Passed(?)	Yes

Unit test case 2: Test case for user login

Name of the test	Test case for User Login
Test Description	The user must provide valid username and password
Sample In[put	The user must provide valid username and password
Expected Output	The system will check for the validity of the user and display the user homepage
Actual; results/remarks	As Expected
Passed(?)	Yes

Unit test case 3: Test case for searching

Name of the test	Test Case to display the crops blood available
Test Description	The user is to be displayed with the crops available on the page.
Sample Input	Enters the crop name to search.
Expected Output	A list of crops with the same search name
Actual result/remarks	As expected
Passed(?)	Yes

Unit test case 4: Test case to update the blood bank database

Name of the test	Test case to update the details of various crop details.
Test description	The registered farmer logs into its account and updates the availability of different crops.
Sample Input	Updation of crop details according to their availability
Expected Output	Redirection to the main form indication successful updation.
Actual Result/remarks	As expected
Passed(?)	Yes

CHAPTER-9

SNAPSHOTS

CHAPTER-9

SNAPSHOTS

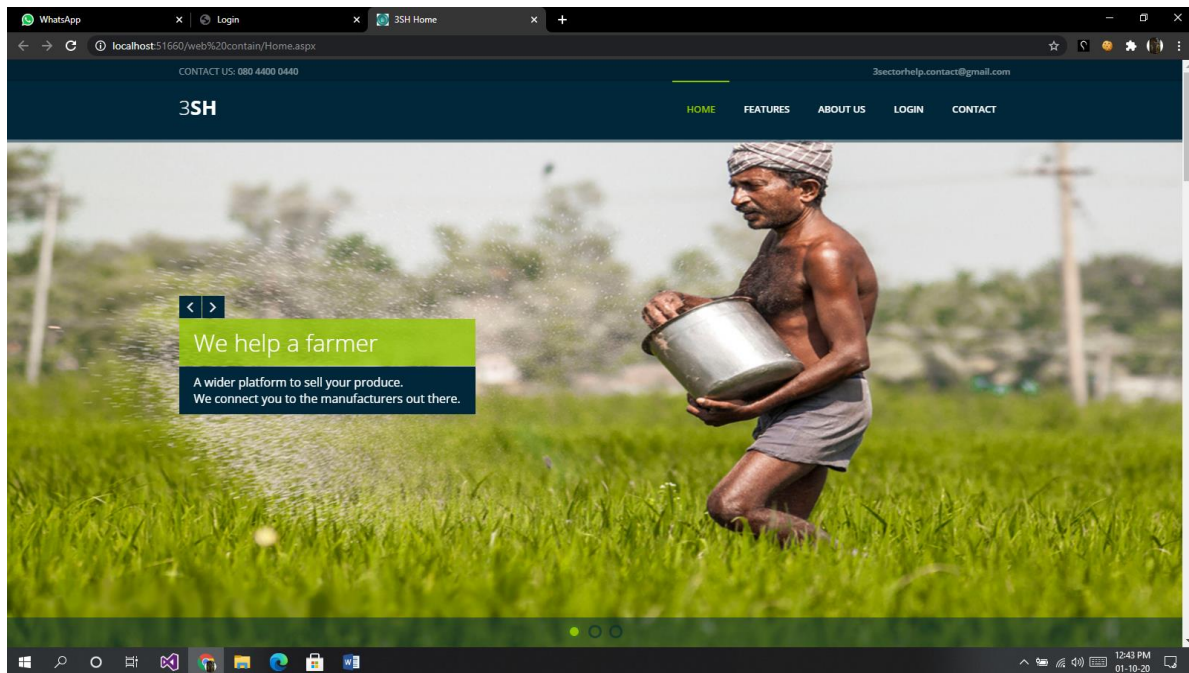


Fig 9.1 Home Form

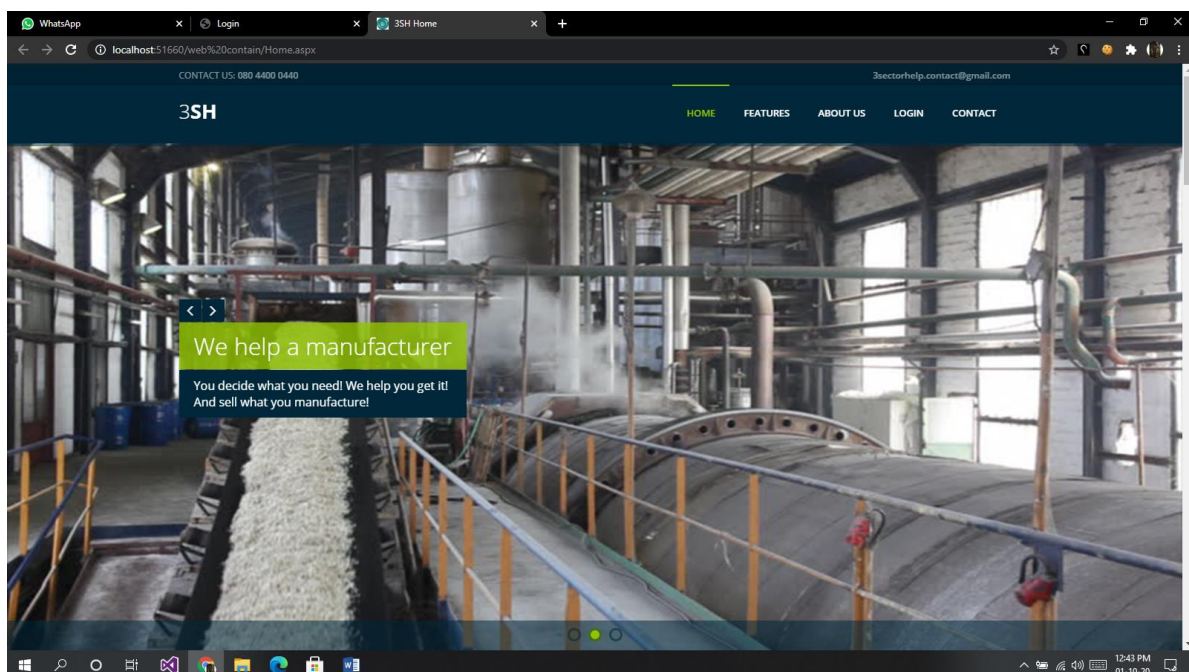


Fig 9.2 Home Form

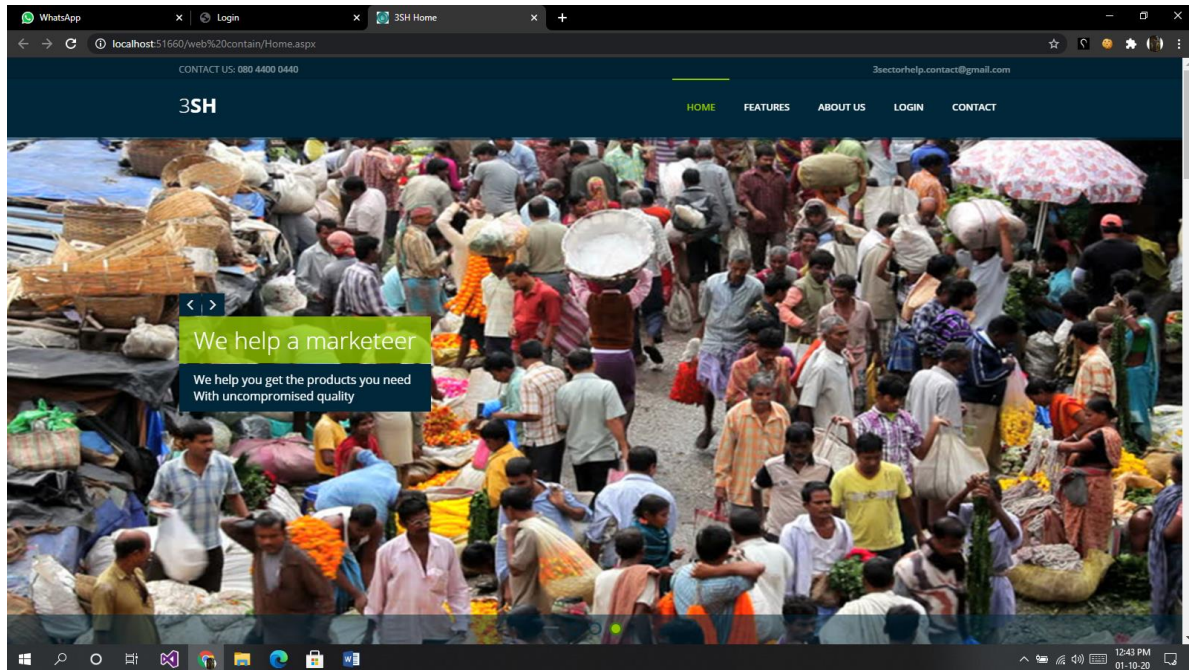


Fig 9.2 Home Form

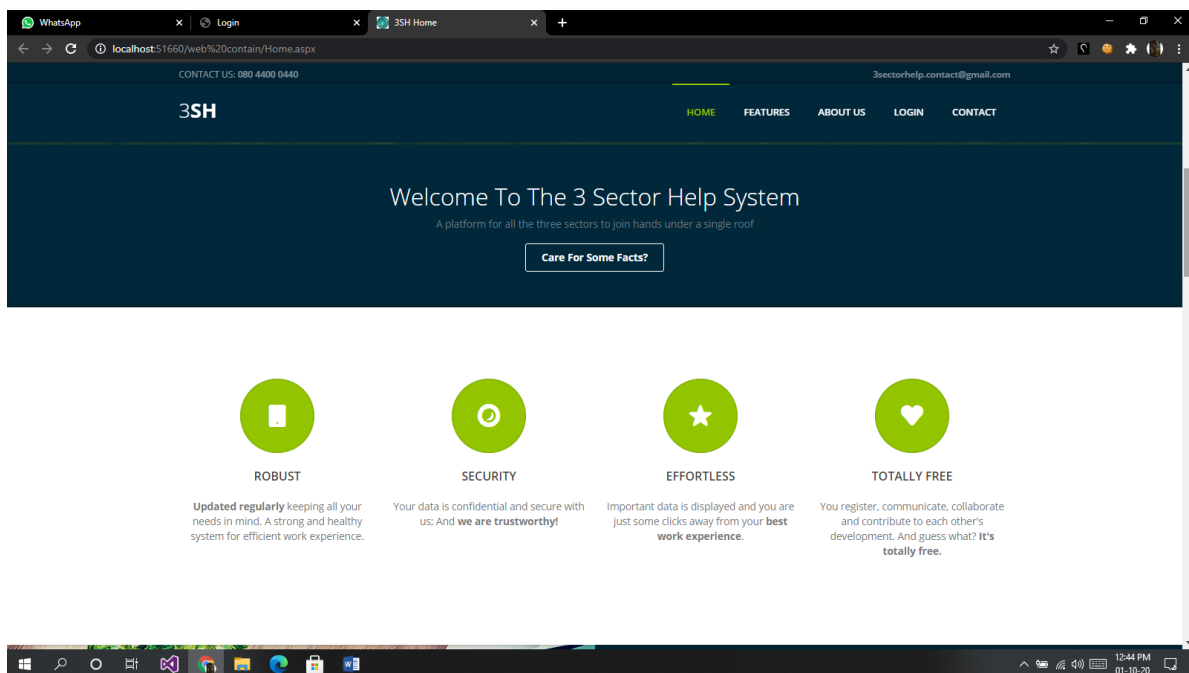


Fig 9.2 Home Form

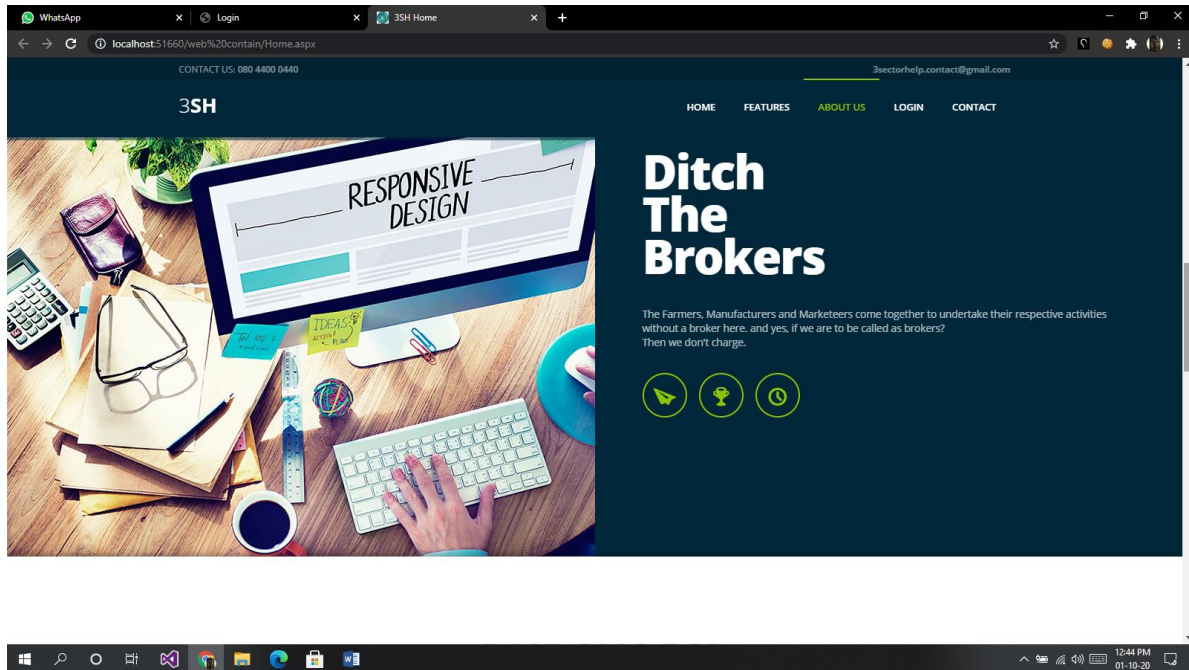


Fig 9.2 Home Form

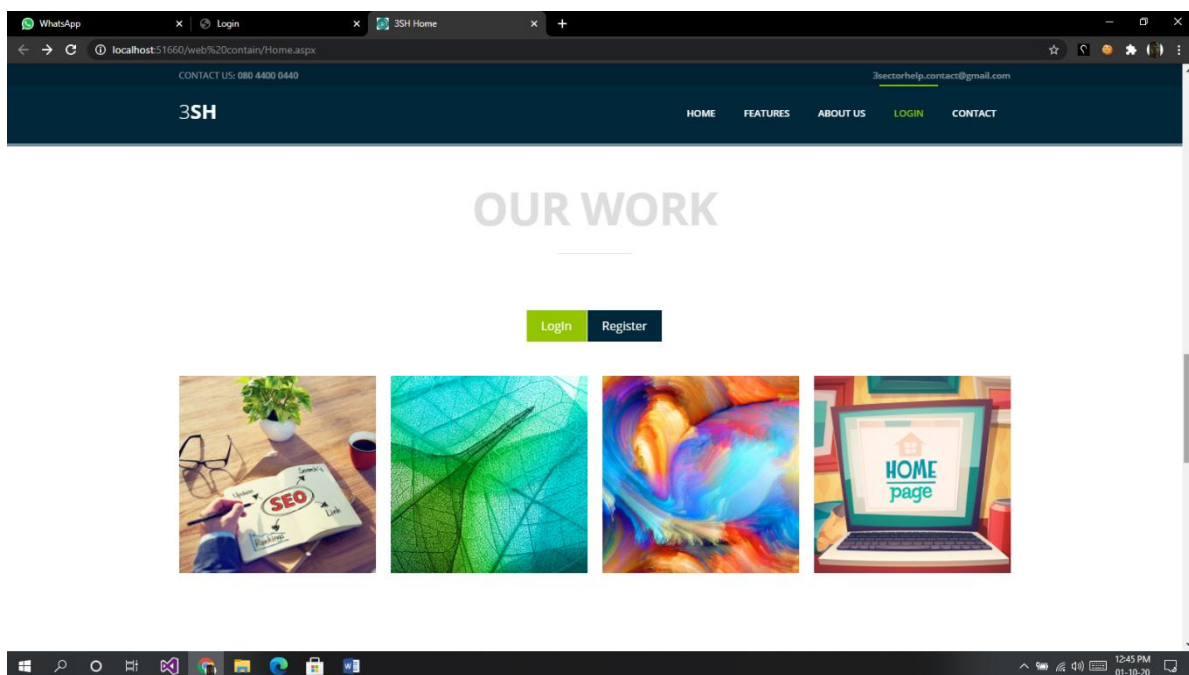


Fig 9.2 Home Form

WhatsApp Login 3SH Home

localhost:51660/web%20contain/Home.aspx


CONTACT US: 080 4400 0440

3sectorhelp.contact@gmail.com

3SH

HOME FEATURES ABOUT US LOGIN CONTACT

CONTACT US



CMV TECHNOLOGIES LTD.
Address: #100, 1km before Electronic City, Bengaluru-560100
Country: Karnataka - India
E-mail: info@cmvtech.com

SOCIAL
The Web

CONTACT FORM
Your e-mail
Your name
Your message
Submit Button

Windows Taskbar: 12:46 PM 01-10-20

Fig 9.2 Contact Form

LOGIN PAGE

UserName

Password

Log Me In

[Forgot password?](#)

Fig 9.8 Login page

CHAPTER-10

CONCLUSION

CHAPTER-10

CONCLUSION

10.1 Conclusion

The main motive of developing this project is to provide efficient and trustworthy data querying, hence ensuring faster access to available crops and products. The project incorporates a search for crops and products thereby making it easier for the requestor to get access to it as soon as possible. When a requestor searches for its respective requirement, system returns a list of crops/products and farmers/manufacturers with the given search name. Thus with this project, both efficiency and accuracy is achieved.

10.2 Future Enhancements

As for implementation of additional features,

- We will implement a more secure system to ensure that the 3SH (3Sector Help System) registered to the system are genuine and thereby, making the system completely trustworthy.

REFERENCES

REFERENCES

- [1] <https://www.campdenbri.co.uk/services/agriculture-rawmaterials.php>
- [2] <http://creately.com>
- [3] <http://www.cubrid.org/blog/dev-platform/20-minutes-to-understanding-spatial-database/>
- [4] <http://business.mapsofindia.com/national-fertilizers/>
- [5] http://agritech.tnau.ac.in/agricultural_marketing/agrimark_Fertilizer%20companies.html
- [6] <https://www.iso.org/ics/65.080/x/>
- [7] http://agmarknet.nic.in/agm_std1.htm
- [8] <http://www.agmarknet.nic.in/lstcm1937.htm>
- [9] <https://www.iso.org/committee/52376/x/catalogue/>
- [10] <https://www.campdenbri.co.uk/services/manufacturing-processing.php>