

A Project report on

FARMER'S CAFE

A Dissertation submitted to JNTU Hyderabad in partial fulfillment of the academic requirements for the award of the degree.

Bachelor of Technology
in
Computer Science and Engineering

Submitted by

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CERTIFICATE

This is to certify that the Mini Project-II report entitled "**Farmer's Cafe**" being submitted by **Ora Alekhya(19H51A0552)**, **M.Prasoona(19H51A0578)**, **D.Ajay kumar(19H51A05D1)** in partial fulfillment for the award of **Bachelor of Technology in Computer Science and Engineering** is a record of Bonafide work carried out his/her under my guidance and supervision.

The results embody in this project report have not been submitted to any other University or Institute for the award of any Degree.

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ABSTRACT

This Farmer's Cafe is a web application which focuses on agriculture. It covers maximum details about farming, crops, seasons, programmes and schemes. It also accesses the user location and gives weather details. Various analysis like temperature requirement, water, soil type suitable for crop, newly updated insurance schemes and policies.

The main features of our website are Weather forecast , Location based crop suggestions, Favourable conditions for cultivation of some crops, Details about Risk Management, Programs and Schemes, Insurance, Price Support and Contract farming, Details about Fruit Cultivation, Soils and their types. this application will helps the beginners and farmers and gives total information about the agriculture and poultry form.

CHAPTER 1

INTRODUCTION

Indian farmers are second to none in production and productivity despite of fact that millions are marginal and small farmers. They adopt improved agriculture technology as efficiently as farmers in developed countries. It is felt that provision of timely and adequate inputs such as fertilizers, seeds, pesticides, agricultural credit /crop insurance, Indian farmers are going to ensure food and nutritional security to the Nation.

It is envisaged to make available relevant information and services to the farming community and private sector through the use of information and communication technologies, to supplement the existing delivery channels provided for by the department. Farmers' Cafe is an endeavour in this direction to create one stop shop for meeting all informational needs relating to Agriculture, Animal Husbandry of an Indian farmer. With this Indian Farmer will not be required to sift through maze of websites created for specific purposes.

Once in the Farmers' cafe, a farmer will be able to get all relevant information on specific subjects. This information will be delivered in the form of text.

Identifies, educates, and supports immigrants with agricultural experience by helping them become local farmers and establish small farms for citizens.

1.1 DESCRIPTION :-

Various functions that allow management of a database and its data which can be classified into four main functional groups

- **Data definition** – Creation, modification and removal of definitions that define the organization of the data.
- **Update** – Insertion, modification, and deletion of the actual data.
- **Retrieval** – Providing information in a form directly usable or for further processing by other applications. The retrieved data may be made available in a form basically the same as it is stored in the database or in a new form obtained by altering or combining existing data from the database.
- **Administration** – Registering and monitoring users, enforcing data security, monitoring performance, maintaining data integrity dealing with concurrency control, and recovering information that has been corrupted by some event such as an unexpected system failure.

1.2 Objective

- To give farmers a one stop solution about farming.
- Save their Time.
- Save money and time.

CHAPTER 2

BACKGROUND WORK

2.1 Introduction

Indian farmers are second to none in production and productivity despite of the fact that millions are marginal and small farmers. They adopt improved agriculture technology as efficiently as farmers in developed countries. It is felt that provision of timely and adequate inputs such as fertilizers, seeds, pesticides, agricultural credit /crop insurance, Indian farmers are going to ensure food and nutrition security to the Nation.

2.2 Literature survey

There are several websites which provide info about agriculture but none of them gives complete details. So, we wanted to develop a one stop shop for farmers. The advantage of our website is people don't have to Visit 10 websites for 10 different topic. All information is present in our website. It saves the time of the user. The features that can be included in this application are as follows: User database management, Weather Forecast, Farmers' cafe database management ,Major Crops, Risk management ,Major functions.

2.3 Existing solutions

1 .Plant me Agro solutions

In line with the state government's objective to provide healthy and toxic-free food to the public, PlantMe Agro Solutions, have been helping individuals, cafes, resorts, and commercial farmers with a promise of high-quality organic food produce in commercial agriculture. They would be guided and supported at every step by the consultants at Plant Me to find the right solutions for their needs. Despite nutrient-rich soil, the heat, unpredictable rainfalls and recurrent floods have caused extensive damage to the crop yields over the past years.

As a result, the state has been unable to produce enough agricultural products to meet its own needs. Hydroponic Vertical farms can grow nutritious and fresh produce in locations where traditional agricultural methods are impossible. Also, there's no exposure to the hazards of traditional farming

, such as bugs, diseases, pesticides and weather. We can help you grow lettuce, kale, mint, tomatoes, capsicum, strawberries etc using advanced techniques throughout the year in limited space, hence giving you better return on investment.

2 . Poultry Farming

Raising birds commercially or domestically for meat, eggs, and feathers. Chickens, ducks, and geese are the birds of primary commercial importance. Guinea fowl and squabs are chiefly of local interest. Though chickens have been domesticated for at least 4,000 years, their meat and eggs have been mass-production commodities only since c. 1800.

3. Weather Forecast

Weather forecasting is the prediction of atmospheric conditions based on location and time. Every location will have its weather projections, making it relatively simple for farmers to know how and when to move. As a result of the interaction between weather and agriculture, precise weather forecasting is required for farmers to make informed decisions that will not result in losses. Temperature, sunlight, and rainfall all have a significant impact on crops. Temperatures, as well as proper water and food, are critical for animals. In simple words, weather forecasting can be roughly understood as a prediction or a statement indicating how and what will be the weather likely to be the next day or the next few days.

Weather forecasting helps to determine the future climatic changes which are about to take place so that individuals can be prepared for that change. Say if the weather forecast for tomorrow predicts that it is going to be a sunny hot day, keeping that in mind we are most likely to keep ourselves hydrated and avoid going out in hot weather conditions.

4 .The Nature Conservancy

We envision a vibrant and healthy India that is guided by sound science to manage its natural resources. Our global mission is to conserve the lands and waters on which all life depends. Our global vision is a world where the diversity of life thrives, and people act to conserve nature for its own sake and its ability to fulfill our needs and enrich our lives.

We are supporting national conservation priorities by applying our expertise in science and global experience, as well as our ability to take initiatives to scale and collaborate.

2.1 DISADVANTAGES

- Limited only for a particular use of field such as weather forecast , temperature requirement.
- Most of them are paid apps.
- Contains a lot of advertisements and not secure.
- It takes time to get required data .

CHAPTER 3

PROPOSED SYSTEM

3.1 Introduction

This section presents the research methodology used in the study, the research design, and the datacollection process.

3.1.1 Hardware Requirements

	Windows requirements	Mac requirements	Linux requirements
Operating system	Windows 8 or later	macOS Sierra 10.12 or later	64-bit Ubuntu 14.04+, Debian 8+, openSUSE 13.3+, or Fedora Linux 24+
Processor	Intel Pentium 4 or later	Intel	Intel Pentium 4 or later
Memory	2 GB minimum, 4 GB recommended		
Screen resolution	1280x1024 or larger		
Application window size	1024x680 or larger		
Internet connection	Required		

3.1.2 Software Requirements

- Software VS Code
- Xampp
- Chrome browser

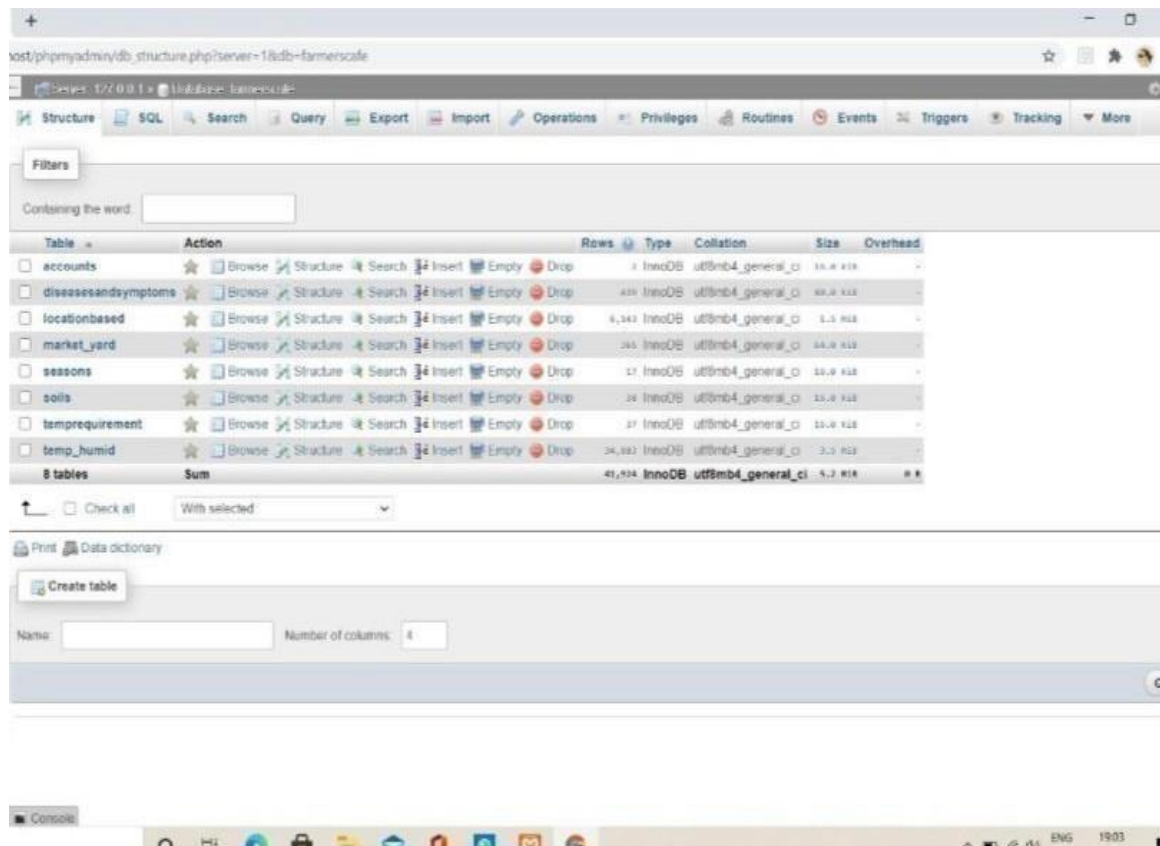
3.3 ADVANTAGES

- 1) Easy to use and free.
- 2)Covers all the fields like weather forecast, types of soils, temperature, recommendation of crops.
- 3) No Advertisements and harmful API s.

CHAPTER 4

DESIGNING

4.1 DATABASE IN FARMER'S CAFE :-



4.2 WEATHER FORECAST IN FARMER'S CAFE :-

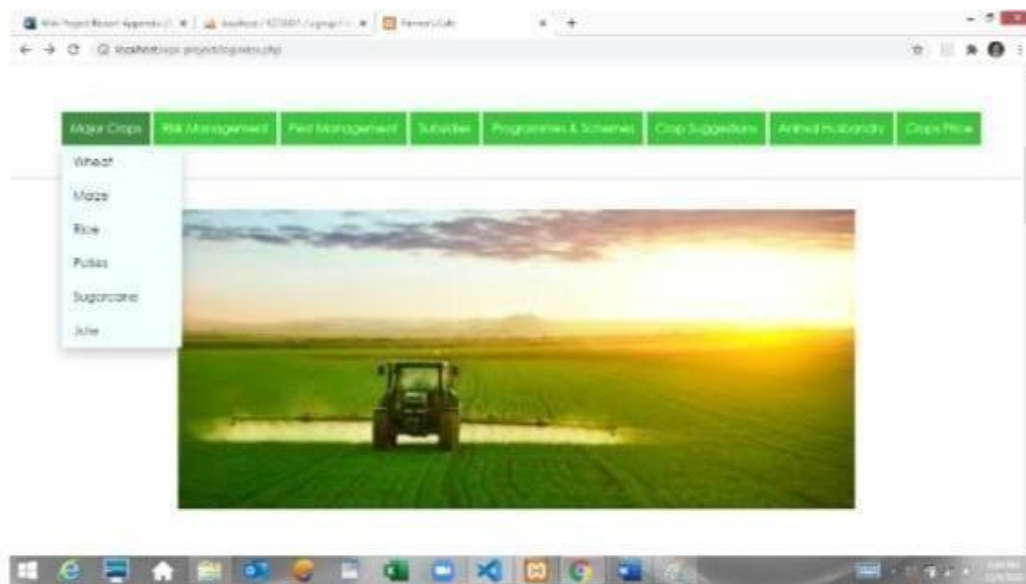


Weather forecasting is the prediction of atmospheric conditions based on location and time. every location will have its weather projections, making it relatively simple for farmers to know how and when to move. As a result of the interaction between weather and agriculture, precise weather forecasting is required for farmers to make informed decisions that will not result in losses. Temperature, sunlight, and rainfall all have a significant impact on crops. Temperatures, as well as proper water and food, are critical for animals. In simple words, weather forecasting can be roughly understood as a prediction or a statement indicating how and what will be the weather likely be the next day or the next few days.

Types of weather forecasting

- 1.Short-range weather forecasting
- 2.Medium range weather forecasting
- 3.Extended range weather forecasting

4.3 MAJOR FEATURES OF FARMER'S CAFE :-



Agriculture in India is an important topic in Indian geography. 49% of the population in India is dependent on agriculture. In the total geographical area in India, 141 million hectares is the net sown area while 195 million hectares is the gross cropped area.

Agriculture in India contributes to 14% of the GDP and the distribution of income and wealth. It provides essential amenities like food for the people and fodder for the animals. It also provides a major source of raw materials to the agro-based industries in India.

The vast relief of the country, varied climate, and soil conditions cause the provision of a variety of crops. All tropical, subtropical and temperate crops are grown in India but predominantly food crops are cultivated in 2/3rd of the total cropped area.

4.4 MAJOR CROPS IN FARMER'S CAFE :-



Agriculture, with its allied sectors, is the largest source of livelihoods in India. 70 percent of its rural households still depend primarily on agriculture for their livelihood, with 82 percent of farmers being small and marginal. In 2017-18, total food grain production was estimated at 275 million tonnes (MT). India is the largest producer (25% of global production), consumer (27% of world consumption) and importer (14%) of pulses in the world. India's annual milk production was 165 MT (2017-18), making India the largest producer of milk, jute and **pulses**, and with world's second-largest cattle population 190 million in 2012. It is the second-largest producer of rice, wheat, sugarcane, cotton and groundnuts, as well as the second-largest fruit and vegetable producer, Accounting for 10.9% and 8.6% of the world fruit and vegetable production, respectively.

4.5 SOILS AND CROPS :-

Soils and crops



Search here for more Details

Soil	Crops
Black Soil	Ground Nut
Black Soil	Mustards
Black Soil	Oilseeds
Black Soil	Cotton
Black Soil	SugarCane
Black Soil	Brassica

These soils are formed when lava rocks weather away. Rich in magnesium, iron, aluminum, and lime. Poor in nitrogen, phosphorus, and organic matter. Black soils get sticky when fully wet. They develop Cracks when fully dry. The soils attain black color due to deposits of humus and salts during their formation. They moisture excellently.

Soil is the most important aspect for our life. The economy based sectors include soil in India. India is a land of vast dimensions with different conditions of geology, relief, climate and vegetation. Here, you can get different types of soil cultivation. Therefore, India has a large diversity of soil groups which include different types of soil. All the Soils are markedly different from each other. Various criteria have been applied to classify Indian soils like Geology, relief, fertility, chemical composition and physical composition and so on. Soil formation is so good in a particular climate that each climate type has its own soil.

CHAPTER 5: RESULTS AND DISCUSSION

5.1 Implementation:

5.1.1 Main Code

CONSOLE

```
<?php
session_start();
if(!isset($_SESSION['username']))
{
echo "you are logged out";
header('location:login.php');
}
?>

<!doctype html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>Farmer's Cafe</title>
<link rel="stylesheet" type="text/css" href="stylesheet.css"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js">
</script>
<script>
$(document).ready(function(){
$("#crops").click(function(){
$("#crops-d").slide Toggle(1000);
});
```

```
});  
$(document).ready(function(){  
$("#text1").mouseenter(function(){  
$("#text").slideDown(1000);  
$("#sign").slideDown(1500);  
});  
});  
</script>  
</head>  
<style>  
.media  
{  
margin-left:auto ;  
margin-right: auto;  
}  
.fa  
{  
padding: 20px;  
font-size: 30px;  
width: 30px;  
text-align: center; text-  
decoration: none;  
margin: 5px 2px;  
border-radius: 50%;  
}  
.fa:hover  
{  
opacity: 0.7;  
}  
.fa-facebook  
{  
background: #3B5998;
```

```
color: white;
margin-left: 20px;
}
.fa-twitter
{
background: #55ACEE;
color: white;
margin-left: 20px;
}
.fa-google
{
background: #dd4b39;
color: white;
margin-left: 20px;
}
.fa-linkedin
{
background: #007bb5;
color: white;
margin-left: 20px;
}
.fa-instagram
{
background: #125688;
color: white;
margin-left: 20px;
}
.media
{
text-align: center;
padding-bottom: 10px;
padding-top: 10px;
```

```
background-color: black;

}

.image
{
display: block;
width: 100%;
height: auto;
}

.text
{
color: white;
font-size: 20px;
position: absolute;
top: 50%;
left: 50%;
-webkit-transform: translate(-50%, -50%);
-ms-transform: translate(-50%, -50%);
transform: translate(-50%, -50%);
text-align: center;
}

.drop{
margin-left:70px;
}

.dropbtn {
background-color:limegreen   ;
color: white;
padding:   12px;
font-size:  16px;
border: none;
}

.dropdown {
position: relative;
```

```
display: inline-block;
}
.dropdown-content {
display: none;
position: absolute;
background-color: azure;
min-width: 160px;
box-shadow: 0px 8px 16px 0px rgba(0,0,0,0.2);
z-index: 1;
}
.dropdown-content a {
color: black;
padding: 12px 16px;
text-decoration: none;
display: block;
}
.dropdown-content a:hover {background-color: #ddd;}
.dropdown:hover .dropdown-content {display: block;}
.dropdown:hover .dropbtn {background-color: #3e8e41;}Create four equal columns that floats next
to each other */
.column {
text-align: center;
align-items: center;
float: left;
width: 15%;
margin-left: 32px;
padding: 10px;
}
.row{
margin-left: auto;
margin-right: auto;
}
```

```
/* Clear floats after the columns */
```

```
.row:after {
```

```
    content: "";
```

```
    display: table;
```

```
    clear: both;
```

```
}
```

```
.center-img {
```

```
    display: block;
```

```
    margin-left: auto;
```

```
    margin-right: auto;
```

```
}
```

```
.mobile-hidden{
```

```
    text-align: right;
```

```
    margin-right: 400px;
```

```
}
```

```
.article-intro{
```

```
    margin-left: 92px;
```

```
    margin-right: 42px;
```

```
}
```

```
.article{
```

```
    text-align: center;
```

```
}
```

```
.pra{
```

```
    color: chocolate;
```

```
}
```

```
.headtag{
```

```
    margin-left: 80px;
```

```
    color: darkred;
```

```
    font-weight: bold;
```

```
}
```

```
Create four equal columns that floats next to each other */
```

```
.column {
```

```
    text-align: center;
```

```
    align-items: center;
```

```
    float: left;
```

```
    width: 15%;
```

```
    margin-left: 32px;
```

```
    padding: 10px;
```

```
}
```

```
.row{
```

```
    margin-left: auto;
```

```
    margin-right: auto;
```

```
}
```

```
/* Clear floats after the columns */
```

```
.row:after {
```

```
    content: "";
```

```
    display: table;
```

```
    clear: both;
```

```
}
```

```
.center-img {
```

```
    display: block;
```

```
    margin-left: auto;
```

```
    margin-right: auto;
```

```
}
```

```
.mobile-hidden{
```

```
    text-align: right;
```

```
    margin-right: 400px;
```

```
}
```

```
.article-intro{
```

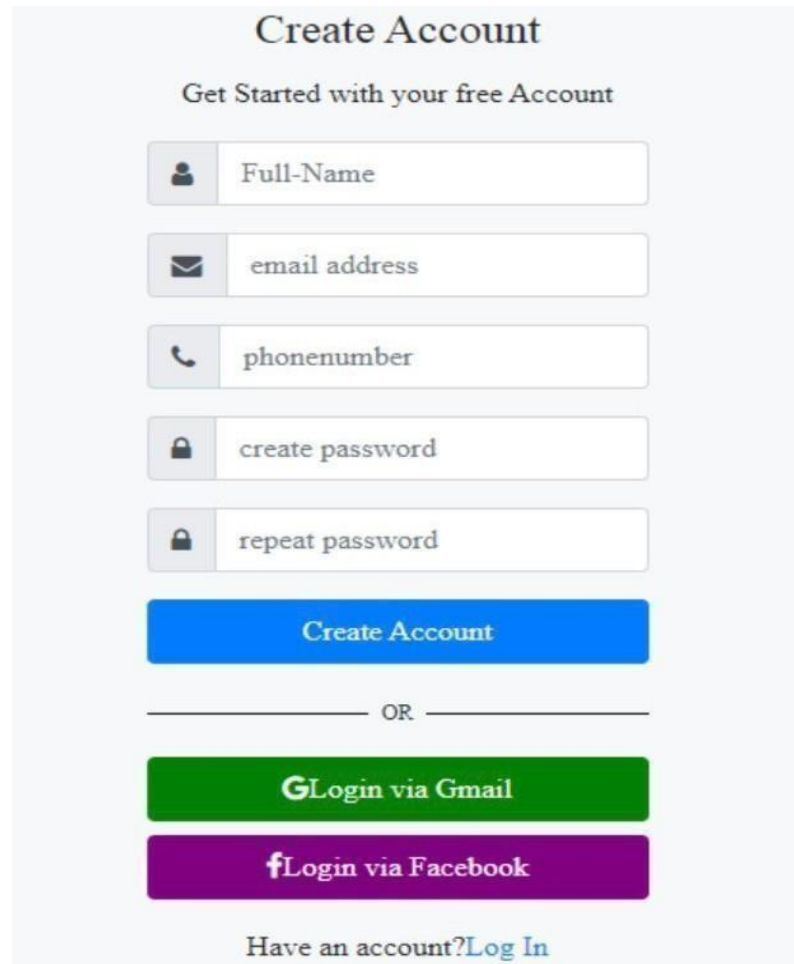
```
    margin-left: 92px;
```

```
    margin-right: 42px;
```



```
}  
.article{  
    text-align: center;  
}  
.pra{  
    color: chocolate;  
}  
  
.headtag{  
    margin-left: 80px;  
    color: darkred;  
    font-weight: bold;  
}  
  
<br><br>  
<br><br><br><br><br><br><br><br><br><br><br><br><br><br>  
<div class="media">  
    <h2> Contact Us</h2>  
    <a href="#" class="fa fa-facebook"></a>  
    <a href="#" class="fa fa-linkedin"></a>  
    <a href="#" class="fa fa-instagram"></a>  
    <a href="#" class="fa fa-google"></a>  
</div>  
  
</body>  
</html>
```

5.2 RESULTS AND DISCUSSIONS:-



The image shows a web form titled "Create Account" with the subtitle "Get Started with your free Account". The form contains five input fields, each with a small icon on the left: a person icon for "Full-Name", an envelope icon for "email address", a telephone icon for "phonenumber", a padlock icon for "create password", and another padlock icon for "repeat password". Below these fields is a blue button labeled "Create Account". Underneath the button is a horizontal line with the word "OR" in the center. Below the line are two more buttons: a green one labeled "GLogin via Gmail" and a purple one labeled "fLogin via Facebook". At the bottom of the form, it says "Have an account?Log In" where "Log In" is a blue link.

Fig 5.2.1 Account creation Page

LOGIN PAGE

Create new Account

Get Started With your account



The login page features two social login buttons at the top: a red button labeled 'Login with gmail' and a blue button labeled 'Login with Facebook'. Below these is the word 'OR' in bold. Underneath is a light purple rectangular box containing two input fields: the top one is labeled 'username' and the bottom one is labeled 'enter password'. Below the input fields is a button labeled 'Login'. At the bottom of the form area, there is a link that says 'Don't have an account? Sign up'.

Fig 5.2.2 LOGIN PAGE

5.2.3 PERFORMANCE ANALYSIS

- Data entered in the app is stored in the database without any redundancy and latency
- User can access the app from any android once if account is created.
- Secure authentication and password reset option is available to the user.
- Password reset email is sent to the users mail id without any delay .
- All the details regarding agriculture farming is found in a single app without searching in other websites.

CHAPTER 6

CONCLUSION AND FUTURE WORK

6.1) CONCLUSION:-

This is a farmer friendly web application . This application uses simple language so that people who are new for farming can also use it. It provides details about agriculture, animalhusbandry, crop suggestions etc.

6.2) FUTURE WORK :-

The future work of the project includes sending weather alerts to users, embeddingsmart farming system into this project.

We also wanted to add a voice note and include different languages like Telugu and Hindi as well .

6.2 References

- <http://www.freebookcentre.net/biology-books-download/gotoweb.php?id=13039>
- <http://www.freebookcentre.net/biology-books-download/Farmers-Handbook-on-BasicAgriculture.html>
- <http://agricollegenews.com/Agricultural>
- <http://www.freebookcentre.net/biology-books-download/gotoweb.php?id=13039>