PROJECT REPORT

CLOUD APPLICATION DEVELOPMENT

GREEN THUMBS: A COMPREHENSIVE GUIDE TO
CARING FOR YOUR HOUSRPLANTS

TEAM MEMBERS	4
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TEAM MEMBER 1	SANDHIYA .G
TEAM MEMBER 2	AKALYA .M
TEAM MEMBER 3	REKHA .K

GREEN THUMBS: A COMPREHENSIVE GUIDE TO CARING FOR YOUR HOUSRPLANTS

1.INTRODUCTION

Green Thumbs is a passion project dedicated to spreading the joy of gardening and nurturing a love for plants. We believe that connecting with nature and cultivating green spaces can bring immense happiness and well-being to individuals and communities. Our platform serves as a hub for plant enthusiasts of all levels, from beginners to experienced gardeners. We offer a wealth of resources, information, and interactive features to support you on your plant journey. Our community is at the heart of Green Thumbs. Connect with fellow plant lovers, share your experiences, ask questions, and seek advice in our forums and chat rooms. We believe that learning from each other and exchanging ideas can greatly enhance your gardening skills and foster a sense of camaraderie.

1.1 PROJECT OVERVIEW

This website is intended to provide information about attention house plants that are grown indoors in pots or containers, rather than outside in a garden. They are a popular choice for adding greenery and natural beauty to homes and offices, as well as for their potential benefits to indoor air quality. For instance, fluctuations in temperature, light, and soil moisture might affect the plant growth process.In addition to their decorative value, house plants can provide a number of benefits. They can help to purify the air by removing harmful pollutants and increasing humidity, and they can also improve mood and reduce stress by providing a sense of connection to nature. However, it's important to choose the right

plant for your space and to provide proper care, including watering, fertilizing, and pruning as needed.

1.2 PURPOSE

The project may aim to encourage and educate people about sustainable gardening practices, such as organic gardening, water conservation, and using native plants. Its purpose could be to raise awareness about the importance of sustainable practices for environmental conservation.

2. PROBLEM STATEMENT DEFINITION

As a plant owner, I struggle with keeping my houseplants healthy and thriving. I am not sure how often to water them, what kind of soil to use, or how much sunlight they need. I have tried following generic care instructions online, but my plants still seem to wilt and die. I want a comprehensive guide that will provide me with specific, easy-to-follow instructions for caring for my houseplants, so that I can enjoy healthy, beautiful plants in my home.
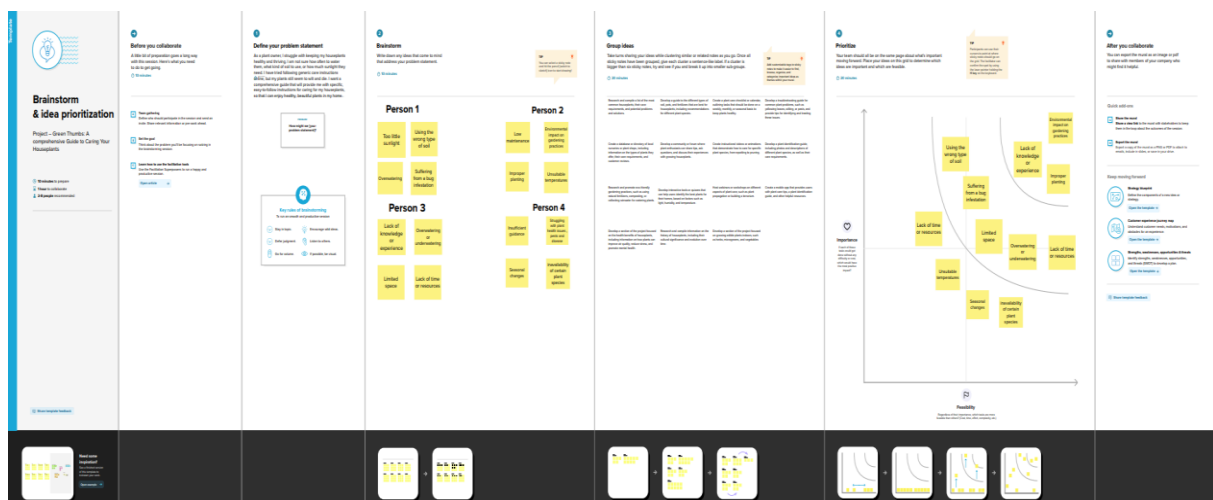
3. IDEATION

3.1 EMPATHY MAP CANVAS

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes. It is a useful tool to helps teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.

Empathy Map

Think and Feel
- User wants to grow plants that are free of disease and pests
- User interests in trying out new techniques and methods to improve gardening skills
- User feels excited when sees new growth or harvest produce
- Frustrated when my plants don't grow well or die

Hear
- Frustration of other gardeners when they face any challenges
- Advice and tips from the experienced gardeners
- Interaction with vendors

See
- Green gardens filled with variety of plants and beautiful flowers and harvests
- Pest infected or diseased plants that are struggling to survive

Say and Do
- Ask questions and seek advice from other gardeners
- Experiments with new techniques and methods to improve gardening skills
- Research and purchase eco-friendly gardening products

Pain:
- Struggling with plant health issues ,pests and disease
- Worrying about there environmental impact of their gardening

Gain:
- Enjoying the beauty and healthy of the healthy garden
- Reducing their carbon footprint and feeling good about the eco friendly gardening process
- Learning new techniques and methods to improve houseplants gardening skills

3.2 IDEATION OR BRAIN STORMING

3.3 PROPOSED SOLUTION

S.NO	PARAMETER	DESCRIPTION
1.	Problem Statement (Problem to be solved)	As a plant owner, I struggle with keeping my houseplants healthy and thriving. I am not sure how often to water them, what kind of soil to use, or how much sunlight they need. I have tried following generic care instructions online, but my plants still seem to wilt and die. I want a comprehensive guide that will provide me with specific, easy-to-follow instructions for caring for my houseplants, so that I can enjoy healthy, beautiful plants in my home.
2.	Idea / Solution description	Our solution is to create a comprehensive guide for caring for houseplants, aimed at both novice and experienced gardeners. This guide will cover topics such as selecting the right plants for your home, proper watering and fertilizing techniques, pest control, and troubleshooting common problems. It will also include tips for propagating and repotting plants, as well as information on the benefits of indoor plants for air quality and mental health.
3.	Novelty / Uniqueness	While there are many resources available for caring for houseplants, our guide will be unique in its comprehensive approach, providing all the information needed for successful plant care in one place. It will also be written in a user-friendly, accessible language, making it easy for people with varying levels of gardening experience to understand.

4.	Business Model (Revenue Model)	Our guide will be available for purchase as an ebook or print book, and we will also offer online courses and workshops on houseplant care for a fee. Additionally, we may partner with plant nurseries and retailers to offer our guide as a bundled product with the purchase of plants or gardening supplies
5.	Social Impact / Customer Satisfaction	Our guide will help people to successfully care for their houseplants, leading to healthier, more vibrant plants that can contribute to improved air quality and mental health. By helping people to successfully care for their plants, we hope to encourage a greater appreciation for the natural world and the benefits that plants can bring to our homes and communities.
6.	Scalability of the Solution	Our guide can easily be scaled to reach a larger audience by leveraging digital marketing channels such as social media and search engine optimization. We can also expand our offerings to include more specialized guides for specific plant varieties or gardening styles, as well as creating a community platform for plant enthusiasts to connect and share their experiences.

4. REQUIREMENT ANALYSIS

4.1 FUCTIONAL REQUREMENT

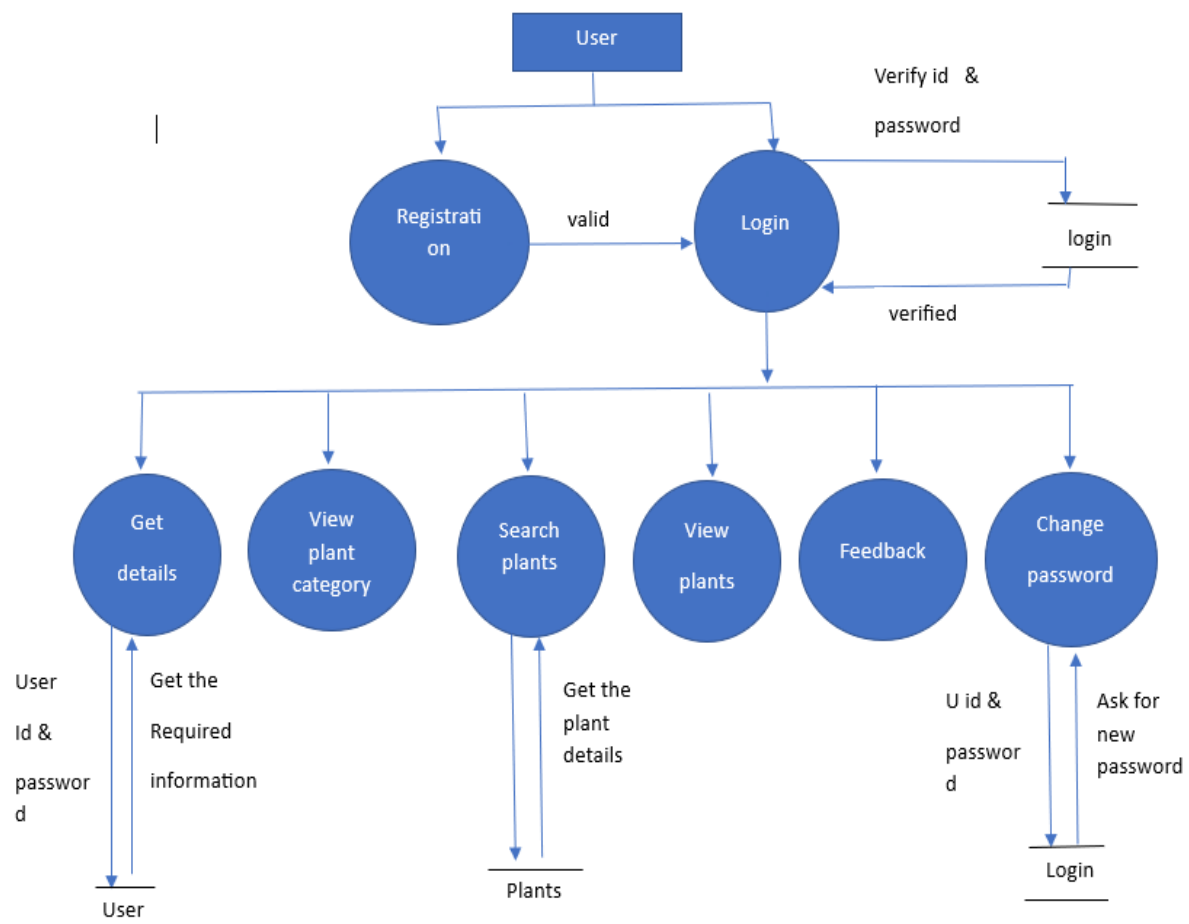| FR.NO.	FUNCTIONAL REQUIREMENT	SUB REQUIREMENT
FR-1	User Registration And authentication	Users should be able to register through Gmail and authenticate themselves to access the guide and its features
FR-2	Plant Identification	Users should be able to identify their plants through the website using features such as plant name or picture recognition.
FR-3	Plant Care Information	The website should provide comprehensive care information for each plant, including watering, lighting, soil, temperature, and humidity requirements.
FR-4	Community Forum	The website should include a community forum where users can ask and answer questions related to plant care, share tips and advice, and connect with other plant enthusiasts.
FR-5	Customized Care Plans	Users should be able to create customized care plans for their plants based on their individual requirements and preferences.

4.2 NON FUNCTIONAL REQUIREMENTS

FR.NO.	NON-FUNCTIONAL REQUIREMENTS	DESCRIPTION
NFR-1	Usability	The application should be user-friendly, with clear and concise instructions for users to follow. The userinterface should be intuitive and easy to navigate.
NFR-2	Security	The application should be secure, with measures in place to protect user data and prevent unauthorized access. This includes secure login procedures, encrypted data storage, and regular security updates.
NFR-3	Reliability	The website should be reliable and available to usersat all times. It should be able to handle a large number of users without crashing or experiencing downtime.
NFR-4	Performance	The website should be fast and responsive to user interactions. Load times should be minimal to ensureusers do not get frustrated while using the application.
NFR-5	Availability	The application should be available to users aroundthe clock, with no scheduled downtime for maintenance or updates

5. PROJECT DESIGN

5.1 DATA FLOW DIAGRAM

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

5.2 USER STORIES

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Team Member
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the website by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Rekha
		USN-2	As a user, I will receive confirmation email once I have registered for the website	I can receive confirmation email & click confirm	High	Sandhiya
		USN-3	As a user, I can register for the website through Facebook, Google,	I can register & access the dashboard with Facebook Login	Low	Keerthika
		USN-4	As a user, I can register for the website through Gmail		Medium	Rekha
	Login	USN-5	As a user, I can log into the website by entering email & password		High	Akalya
		USN-6	As a user, I can login to the existing account or create a new account		Medium	Sandhiya
	Feedback	USN-7	As a user, I can provide the ratings and the feedback to the designer to improve the website		High	Sandhiya
Customer (Web user)	Dashboard	USN-1	As a web user, I can perform multitasking on the website	I can access my account / dashboard	Medium	Keerthika
		USN-2	As a web user, I can access the API's efficiently		Medium	Akalya
	Registration	USN-3	As a user, I can register for the website by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Rekha
	Login	USN-4	As a user, I can log into the website by entering email & password		High	Akalya
	Feedback	USN-5	As a user, I can provide the ratings and the feedback to the designer to improve the website		High	Sandhiya

6. PROJECT PLANNING AND SCHEDULING

6.1 SIMPLIFIED ARCHITECTURE
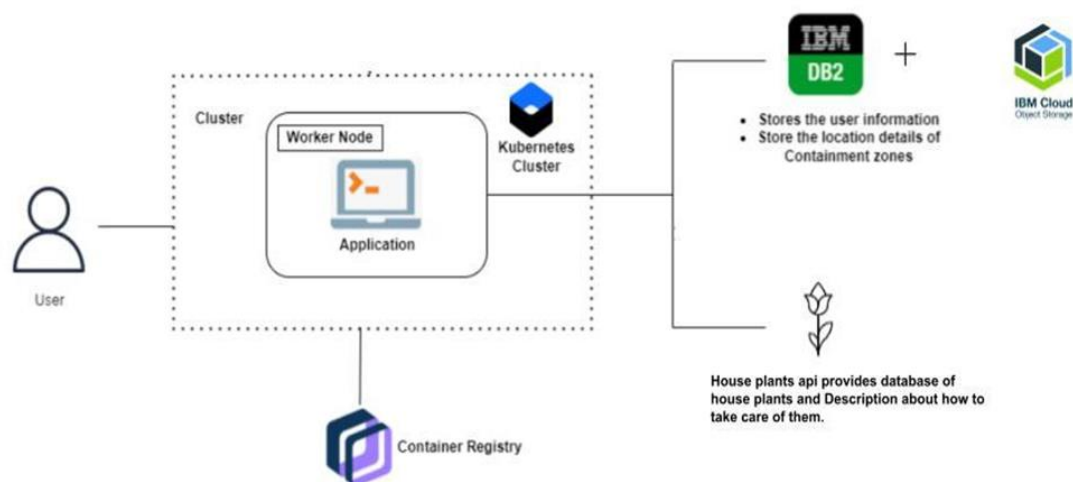
6.2 PROPOSED ARCHITECTURE
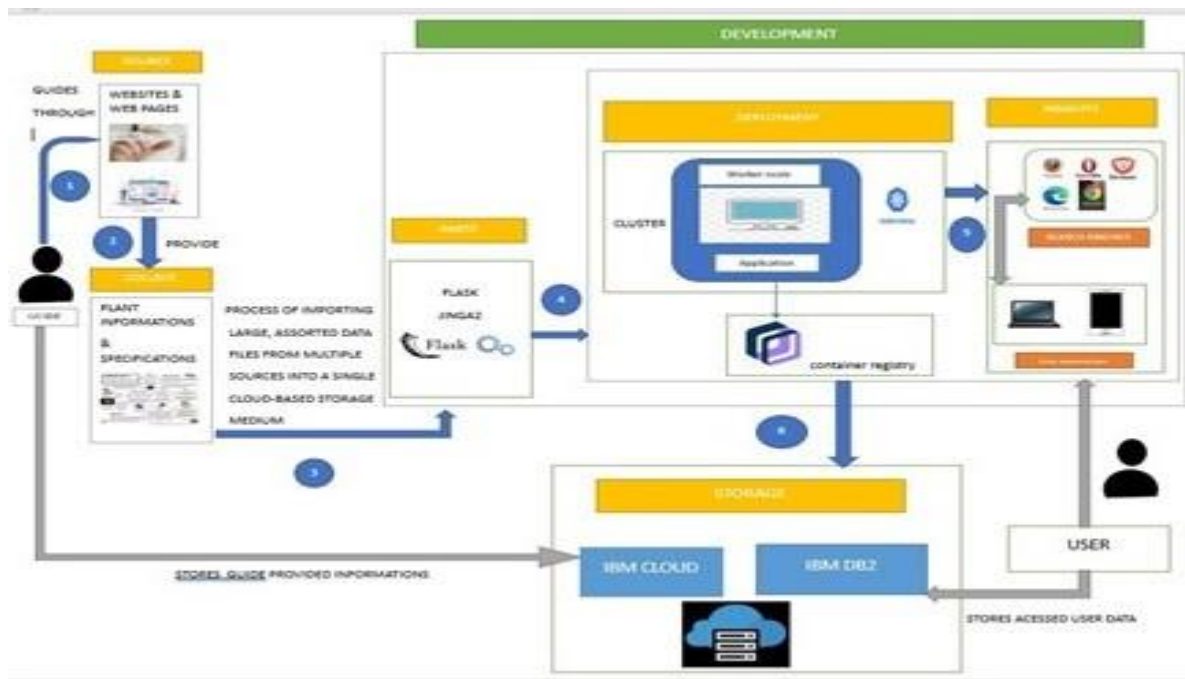
7. PROJECT

7.1 CODINGS

STEP-1: (HOME PAGE)

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="utf-8">
 <meta name="viewport" content="width=device-width, initial-scale=1">
 <title> home page  </title>


<style type="text/css">
*{
```

```css
        margin: 0;

        padding: 0%;

        font-family: 'Times New Roman';

    }

    .header

    {

        min-height: 100vh;

        width: 100%;

        background: #fff;

        color: #111111;

    }

    nav{

        display:flex;

        justify-content: space-between;

        align-items: center;

        position: relative;

        z-index: 1;

    }

    .nav-links

    {

        text-align: right;

        padding: 10px 30px;

        border-bottom-left-radius: 18px;

    }

    .banner{

        width: 100%;
```

```css
    height: 100vh;

    background-image: url(images/bg3.jpeg);

    background-size: cover;

    background-position:center;

}

.content{

    width: 100%;

    position: absolute;

    top: 10%;

    transform: translate(-50%);

    text-align: center;

    color: black;

}

.content h1{

    font-size: 30px;

    padding-left: 50%;

}

.content h4{

    font-size:17px;

    padding-left: 50%;

    color: rgb(3, 59, 73);

}

.button{

    display: inline-block;

    margin: 0px;

    padding:10px 24px;
```

```
      text-align: center;

      cursor: pointer;

      padding-left: 50%;

      font-weight: bold;

      font-size: 16px;

      background: transparent;

    }


    </style>

    </head>

    <body>

      <div class="banner">

        <nav>

          <div class="nav-links">

            <a href="home.html">HOME</a>  

            <a href="About.html">ABOUT</a>  

            <a href="guide.html">GUIDE</a>  

            <a href="forum.html">DISCUSSION FORUM</a>  

            <a href="connect.html">CONNECT</a>  

            <a href="socio-ref.html">SOCIO REF</a>  

            <a href="#">LOGOUT</a>

          </div>

        </nav>

      </div>

      <div class="content">

        <h1>WELCOME TO OUR HOUSEPLANTS CARE GUIDE</h1></br>
```

```html
    <h4>Knowing how much you guys love plants too.</br>We decided to put
together a plant guide, something for you..</h4></br></br>

    <div class="button"><table><tr><form action="login.html" data-
inline="true"><button>Login</button></form>   

      <form action="register.html" data-
inline="true"><button>Register</button></form></tr></table>


    </div>

  </div>

</body>

</html>
```

STEP-2: (GUIDE PAGE)

```html
<!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=1.0">

  <title> Guide page </title>

</head>

<style type="text/css">

 @import
url('https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400;500
;600;700;800;900&display=swap');

*{

  margin: 0;

  padding: 0;

  font-family: 'Poppins', sans-serif;
```

```css
    }
.header
{
    min-height: 100vh;
    width: 100%;
    background: #fff;
    color: #111111;
}
nav{
    display:flex;
    justify-content: space-between;
    align-items: center;
    position: relative;
    z-index: 1;
}
.logo
{
    text-decoration:none;
    color: #ffd04e;
    font-size: 20px;
    font-weight: bold;
    padding-bottom: 10px;
    padding-left: 2%;
}
.nav-links
{
```

```css
    text-align: right;

    background: #210a86;

    padding: 10px 30px;

    border-bottom-left-radius: 18px;

}

.nav-links ul li{

    list-style: none;

    display: inline-block;

    padding: 10px 25px;

}

.nav-links ul li a{

    color: #fff;

    text-decoration: none;

    font-size: 18px;

    transition: 0.5s ea;

}

.nav-links ul li a:hover

{

    color: #4eb88f;

}

.left-sidebar

{

    width: 28%;

    height: 100%;

    position: absolute;

    left: 0;
```

```css
    top: 0;

    background: #0f0379;

    border-bottom: 35%;

    border-top: 35%;

}

.row

{

    padding: 0 10%;

    display: flex;

    align-items: flex-end;

    justify-content: space-between;

    position: relative;

    margin-top: 5%;

}

.left-col

{

    flex-basis: 150%;

}

.right-col

{

    flex-basis: 100%;

}

.left-col img

{

    width: 80%;

}
```

```css
.right-col h1{
    font-size: 30px;
    font-weight: 600;
}
.right-col p{
    color: #025f38;
    margin: 20px 0 70px;
}
.right-col button{
  background-color: #070480;
  color: #f1f0f5;
  text-align: center;
  display: inline-block;
  font-size: 20px;
  padding: 10px 20px;
}
.right-col button:hover{
  color: #ffd04e;
}
</style>
<body>
  <div class="header">
   <nav>
     <a href="#" class="logo"> HOUSEPLANTS CARE GUIDE</a>
     <div class="nav-links">
       <ul>
```

```html
        <li><a href="guide.html">HOME</a></li>
        <li><a href="care guide.html">CARE GUIDE</a></li>
        <li><a href="shop.html">ADD PLANTS</a></li>
      </ul>
    </div>
  </nav>
  <div class="left-sidebar"></div>
   <div class="row">
    <div class="left-col"><img src="images/bg4.jpg"></div>
    <div class="right-col">
      <h1>Hello..! all buddies..<br/>
        I'm your CARE GUIDE</h1>
      <p>Fresh beginning always exists.. We only have to
<strong>WELCOME</strong> them.<br/><br/>
        Here we <strong>WELCOME</strong> you all for <b>a new
beginning</b> to make a peaceful and healthy environment by
        providing some care guide tips to your
<strong>HOUSEPLANTS.</strong></p>
      <form action="care guide.html"><button>Explore Now</button></form>
    </div>
   </div>
  </div>
</body>
</html>
```

STEP-3: (CARE GUIDE PAGE)

```html
<!DOCTYPE html>
<html lang="en">
```

```html
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title> care guide page </title>
</head>
<style type="text/css">
@import url('https://fonts.googleapis.com/css2?family=Montserrat&display=swap');
body{
    margin: 20;
    padding: 5px;
    font-family: 'Times New Roman';
    align-items: center;
    justify-content: center;
}
/* Header */
header{
    background-color: #303054;
    width: 100%;
    height: 50px;
    text-align: center;
    padding-top: 2%;
}
header .navbar-brand{
    font-size: 28px;
    color: #fff;
}
```

```html
</style>
<body background-color="#ffffff">
  <div class="fixed-top">
    <header>
      <a class="navbar-brand" href="#">CARE GUIDE</a>
    </div>
  <h1 align="center">Welcome you all...  I am always here to guide you</h1>
  <h2 align="center">let's get started and explore a new environment together with our houseplants</h2>
  <form align="center" name="myform">
    <div alignment="center">
      <h2>Select your plant</h2>
        <a href="plants-careguide/AFRICAN VOILET .html">AFRICAN VOILET </a></br>
        <a href="plants-careguide/BARBERTON DAISY.html">BARBERTON DAISY</a></br>
        <a href="plants-careguide/CORAL BERRY.html">CORAL BERRY</a></br>
        <a href="plants-careguide/DIEFFENBACHIA SEGUINE .html">DIEFFENBACHIA SEGUINE</a></br>
        <a href="plants-careguide/ETERNAL FLAME PLANT.html">ETERNAL FLAME PLANT</a></br>
        <a href="plants-careguide/FLAMING SWORD.html">FLAMING SWORD</a></br>
        <a href="plants-careguide/GENTIANACE.html">GENTIANACE</a></br>
        <a href="plants-careguide/HABRANTHUS .html">HABRANTHUS</a></br>
```

```html
        <a href="plants-careguide/IRON CROSS BEGONIA.html">IRON CROSS
BEGONIA</a></br>

        <a href="plants-careguide/JAPANESE ARALIA.html">JAPANESE
ARALIA</a></br>

        <a href="plants-careguide/KENTIA.html">KENTIA</a></br>

        <a href="plants-careguide/LOLLIPOP.html">LOLLIPOP</a></br>

        <a href="plants-
careguide/MADAGASCAR.html">MADAGASCAR</a></br>

        <a href="plants-careguide/NEWGUINEA.html">NEWGUINEA</a></br>

        <a href="plants-careguide/ORCHID.html">ORCHID</a></br>

        <a href="plants-careguide/PEACELILY.html">PEACELILY</a></br>

        <a href="plants-
careguide/QUEENSTEARS.html">QUEENSTEARS</a></br>

        <a href="plants-careguide/RUBBER.html">RUBBER</a></br>

        <a href="plants-
careguide/SCARLETSTAR.html">SCARLETSTAR</a></br>

        <a href="plants-careguide/TIGERJAWS.html">TIGERJAWS</a></br>

        <a href="plants-careguide/URNPLANT.html">URNPLANT</a></br>

        <a href="plants-
careguide/VENUSFLYTRAP.html">VENUSFLYTRAP</a></br>

        <a href="plants-
careguide/WINDMILLPALM.html">WINDMILLPALM</a></br>

        <a href="plants-careguide/XANADU.html">XANADU</a></br>

        <a href="plants-careguide/YUCCA.html">YUCCA</a></br>

        <a href="plants-careguide/ZEBRA.html">ZEBRA</a>
    </div>
  </form>
</body>
```

</html>

7.2 OUPUTS

HOME PAGE:

LOGIN:

REGISTER:

GUIDE HOME PAGE:

CARE GUIDE PAGE:

Welcome you all... I am always here to guide you

let's get started and explore a new environment together with our houseplants

Select your plant

AFRICAN VOILET
BARBERTON DAISY
CORAL BERRY
DIEFFENBACHIA SEGUINE
ETERNAL FLAME PLANT
FLAMING SWORD
GENTIANACE
HABRANTHUS
IRON CROSS BEGONIA
JAPANESE ARALIA
KENTIA
LOLLIPOP
MADAGASCAR
NEWGUINEA
ORCHID
PEACELILY

Select your plant

AFRICAN VOILET
BARBERTON DAISY
CORAL BERRY
DIEFFENBACHIA SEGUINE
ETERNAL FLAME PLANT
FLAMING SWORD
GENTIANACE
HABRANTHUS
IRON CROSS BEGONIA
JAPANESE ARALIA
KENTIA
LOLLIPOP
MADAGASCAR
NEWGUINEA
ORCHID
PEACELILY
QUEENSTEARS
RUBBER
SCARLETSTAR
TIGERJAWS
URNPLANT
VENUSFLYTRAP
WINDMILLPALM
XANADU
YUCCA
ZEBRA

PLANT DETAILS:

PEACE LILY PLANT

COMMON NAME:
Peace lily/Spathe flower

The peace lily plant is very popular and easy enough for most growers to care for and maintain. The peace lily removes benzene, formaldehyde, trichloroethane, and other pollutants from the air, hence acts as an air purifier.

CARING TIPS

Temperature:
Average room temperature's are fine.

Light:
They like light, however, direct sunshine can damage plant leaves. A mixture of light and shade is great, if you can provide it.

Watering:
This plant does drink a lot of water in the summer. Keeping the soil moist (not over watered) and allowing it to dry slightly near the top is a good idea.

Soil:
A peat based potting mix with perlite is ideal.

Humidity:
Misting leaves regularly will improve humidity and keep it happy.

Pruning:
These plants rarely need pruning, You will need to cut away dying leaves and the flowers.

8. ADVANTAGES

Engaging in gardening activities can contribute to environmental conservation in several ways such as improving the air quality and promoting the overall biodiversity.

Green thumbs projects often emphasize educational components, teaching gardening techniques, environmental awareness, and horticultural skills. These initiatives can help individuals develop practical skills, such as planting, nurturing, and harvesting crops, as well as understanding sustainable gardening practices.

9. FUTURE SCOPE AND CONCLUSION

The Green Thumbs project has demonstrated the power of sustainable gardening in promoting environmental conservation, food security, and community engagement. By empowering individuals with the knowledge and tools to grow their own food, the project has successfully encouraged a shift towards more sustainable and self-reliant lifestyles.

The future holds tremendous potential for expansion and collaboration. By reaching out to a broader audience, leveraging technology, and engaging with local communities, Green Thumbs can continue to make a significant impact in promoting sustainable living and creating a greener future for all.