

R.V.S Educational Trust's Group Of Institutions

Department of (Computer Science Engineering)

“Project Report”

“Fertilizers-Recommendation-System-For-Disease-Prediction ”

Team ID: PNT2022TMID48898

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1)Introduction

1.1.Project Overview

Plant disease prediction helps in the detection and recognition of the plant diseases. The images of plants are captured and

analyzed for certain symptoms using Computer vision and image processing. By identifying the disease, the deficit nutrients that lead to the disease are found. Based on the available data on fertilizers, the necessary nutrient rich fertilizers are recommended.

1.2.Purpose

The plant diseases may lead to abnormal functionalities which may end up with the death of the plant. The project aims at recognizing the symptoms at the early stages. The project also aims at guiding the farmers with the proper choice of the fertilizers that are required to counter the deficiency of the nutrients that cause the disease.

2)Literature Survey

2.1 Existing Problem

2.2) References

Title	Technique	Links
Soil Based Fertilizer Recommendation System for Crop Disease Prediction System – P.Pandi Selvi,P.Poornima	Long or Short Term Memory Algorithm	http://www.ijetajournal.org/volume-8/issue-2/IJETA-V8I2P1
IOT based Crop Recommendation,Crop Disease Prediction and Its Solution – Rani Holambe, Pooja Patil, Padmaja Pawar Hrushikesh Joshi,Saurabh Salunkhe	Crop Recommendation System,Crop Disease Prediction,Internet of things,Machine Learning	https://arxiv.org/pdf/2204.11340
Farmer's Assistant:A Machine Learning Based Application for Agricultural Solutions-Shloka Gupta,Aparna Bhonde,Akshay Chopade,Nishit Jain	Image Analysis,Deep Learning,Machine Learning	https://www.irjet.net/archives/V7/i10/TRJET-V7I1004
R. Neela, P. Fertilizers Recommendation System For Disease Prediction In Tree Leaf International journal of scientific & technology research volume 8, issue 11, november 2019	Adding a CNN(Convolutional neural network) and SVM(Support Vector Machine)	http://www.ijstr.org/final-print/nov2019/
Plant Disease Detection Using Image Processing and Machine Learning	Random Forest classifier, a combination of multiple decision trees is used where each tree is trained by using different subsets of the whole dataset to reduce the overfitting and improves the accuracy of the classifier.	https://arxiv.org/abs/2106.10698
Fertilizers Recommendation System for Disease Prediction in Tree Leaves	Support Vector Machine (SVM) algorithm classifies the leaf image as normal or affected. And it is used to identify a function F_x which obtain the hyper-plane.	https://www.semanticscholar.org/paper/Fertilizers-Recommendation-Disease-In-Neela-Nithya/495379d3ef2b461fabd2de8d0605c16

- [1] Semi-automatic leaf disease detection and classification system for soybean culture IET Image Processing, 2018
- [2] Cloud Based Automated Irrigation And Plant Leaf Disease Detection System Using An Android Application. International Conference on Electronics, Communication and Aerospace Technology, ICECA 2017.
- [3] Ms. Kiran R. Gavhale, Ujwalla Gawande, Plant Leaves Disease detection using Image Processing Techniques, January 2014.
https://www.researchgate.net/profile/UjwallaGawande/publication/314436486_An_Overview_of_the_Research_on_Plant_Leaves_Disease_detection_using_Image_Processing_Techniques/links/5d37106_64585153e591a3d20/An-Overview-of-the-Research-on-Plant-Leaves-Disease_detection-using-ImageProcessing_Techniques.pdf

- [4] Duan Yan-e, Design of Intelligent Agriculture Management Information System Based on IOT, IEEE, 4th, Fourth International reference on Intelligent Computation Technology and Automation, 2011 <https://ieeexplore.ieee.org/document/5750779>
- [5] R. Neela, P. Fertilizers Recommendation System For Disease Prediction In Tree Leaf International journal of scientific & technology research volume 8, issue 11, november 2019 <http://www.ijstr.org/final-print/nov2019/FertilizersRecommendationSystem-For-Disease-PredictionIn-Tree-Leave.pdf> .
- [6] Swapnil Jori¹, Rutuja Bhalshankar², Dipali Dhamale³, Sulochana Sonkamble , Healthy Farm: Leaf Disease Estimation and Fertilizer Recommendation System using Machine Learning, International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211
- [7] Detection of Leaf Diseases and Classification using Digital Image Processing International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS), IEEE, 2017.
- [8] Shloka Gupta , Nishit Jain , Akshay Chopade, Farmer's Assistant: A Machine Learning Based Application for Agricultural Solution

2.3 Problem Statement Definition

This project aims at providing a system to support the cultivators in choosing the right fertilizers for their plants to counter the deficiency of nutrients that cause various infections and diseases. The below blocks define the problems faced by the different users and the solutions that are provided by the system.

I am	Describe customer with 3-4 key characteristics - who are they?	Describe the customer and their attributes here
I'm trying to	List their outcome or goal - what are they trying to achieve?	List the thing they are trying to achieve here
but	Describe what problems or barriers stand in the way - what hinders their goal?	Describe the problems or barriers that get in the way here
because	Enter the "root cause" of why the problems or barriers exist - what needs to be solved?	Describe the reason the problems or barriers exist
which makes me feel	Describe the emotions from the customer's point of view - how does it impact them emotionally?	Describe the emotions the result from experiencing the problems or barriers

Reference: <https://miro.com/templates/customer-problem-statement/> Example:



3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas

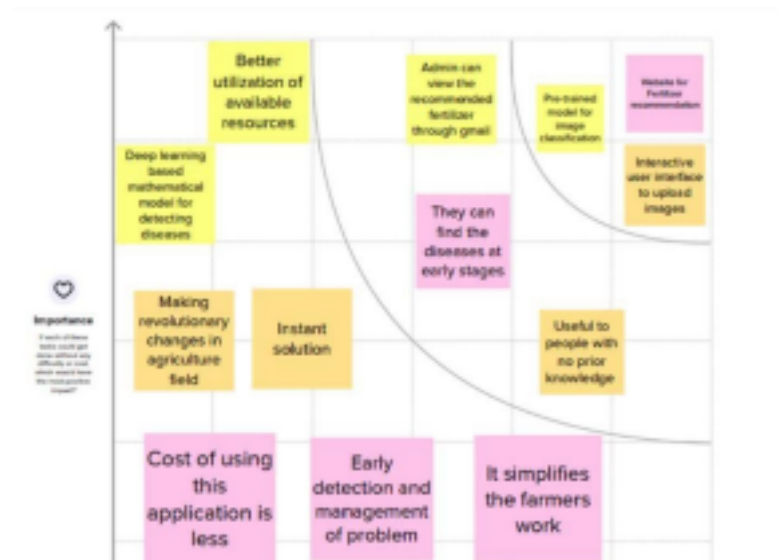
Agriculture is the main aspect of the economic development of a country. Agriculture is the heart and life of most Indians.

By understanding their feelings and problems, we can create a better product and contribute to their lives. For our project, we are getting surveys from farmers to understand what they truly require and desire.



3.2 Ideation & Brainstorming

Ideation and Brainstorming are performed to generate ideas and solutions. Brainstorming is a group activity unlike ideation.



Dinesh



Aparna



Kanteepan



Muthusavary

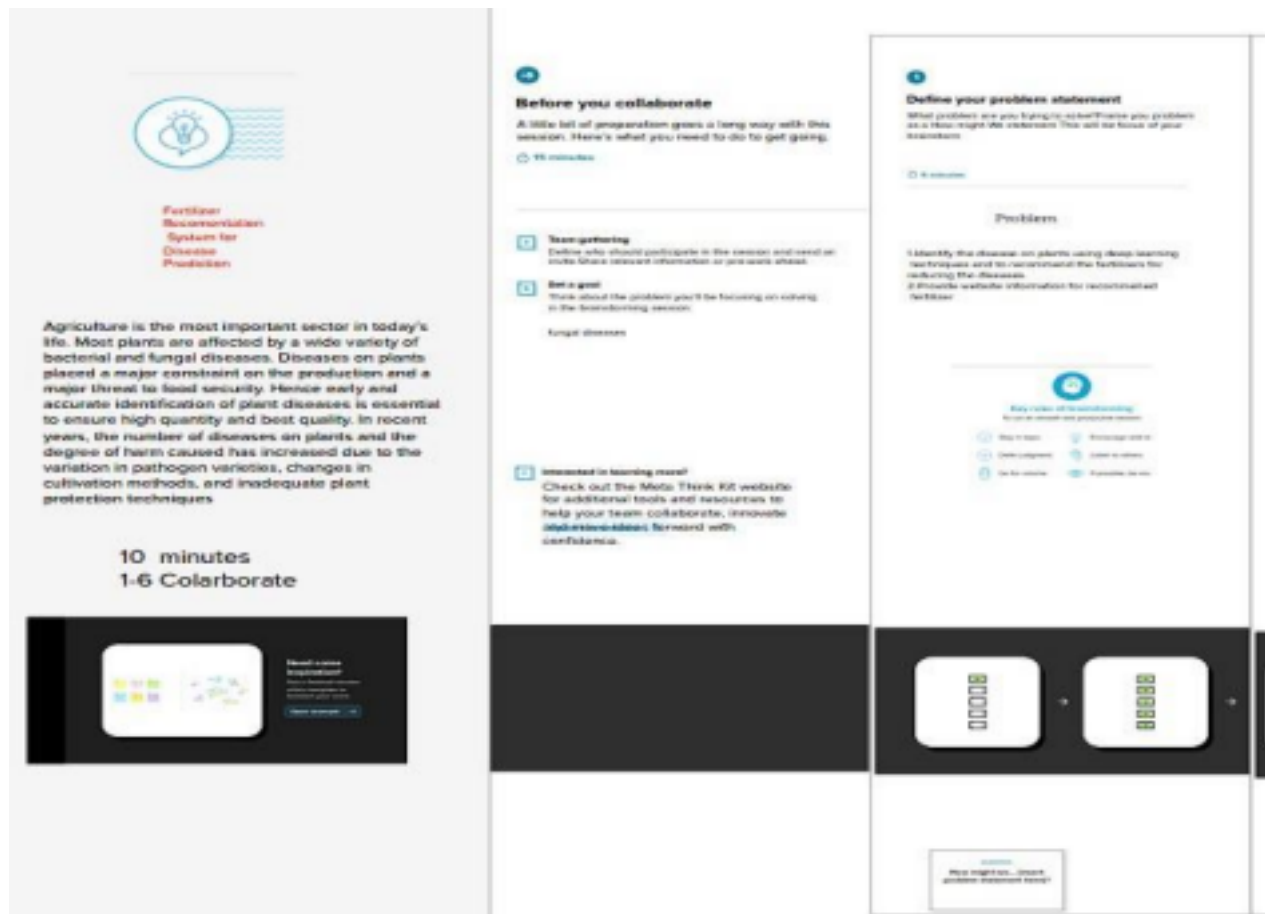


Deleji



Praveenraj@sankaran





3. Proposed Solution

An automated system that takes the images of plant parts as input identifies different diseases on plants by checking the symptoms shown on the leaves of the plant is built . Deep learning techniques are used to identify the diseases and suggest the fertilizes that can help cure the disease. The user need not consult any specialist for identification of diseases that affected the leaves or for the recommendation of the fertilizers.

Proposed Solution Template:

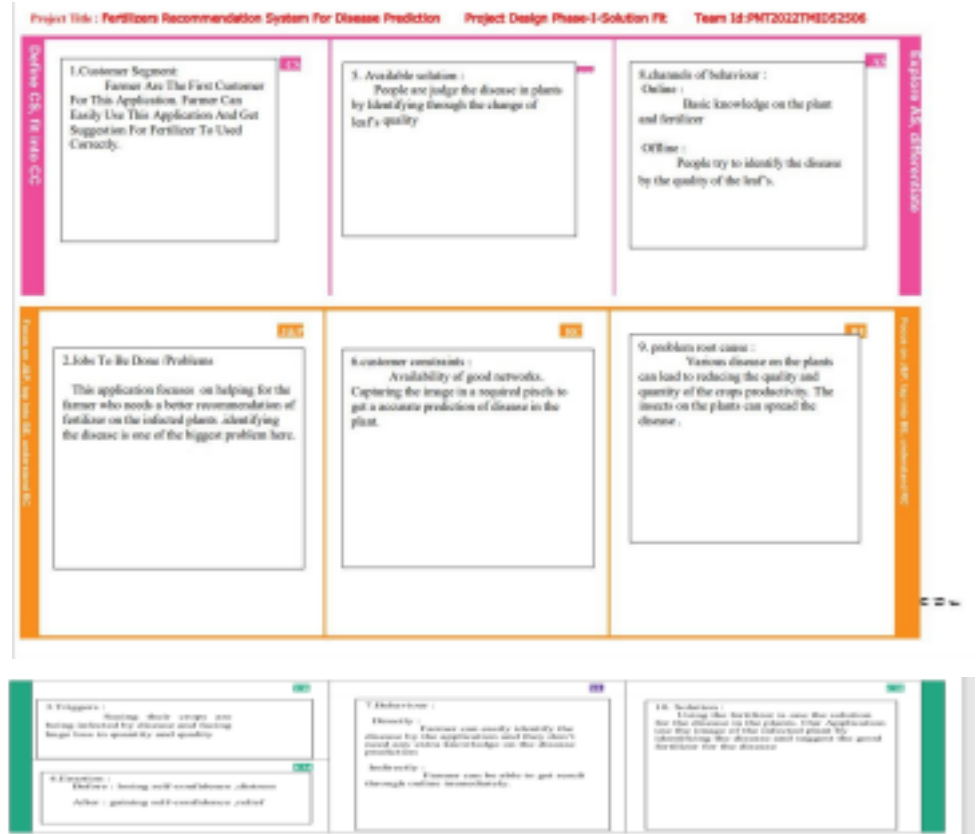
Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Agriculture is having a great impact on the country's economy. Different diseases affect plant that reduces their production and is a major threat to food security. The major problems that the farmers of our country are currently facing includes Crop Failure, Lack of adequate knowledge, Crop damage due to ignorance/carelessness, Lack of

		professional assistance. Inaccessibility to agro-tech solutions. Most of the diseases are detected in later stage that to manually which is time consuming and results in heavy loss so it is important to build an automated system that detects disease at early stage and provides fertilizer recommendation accordingly.
2.	Idea / Solution description	An automated system is built that takes the input as picture of leaves which is uploaded by the user, identifies different diseases on plants by checking the symptoms shown on the leaves of the plant. Deep learning techniques are used to identify the diseases and suggest the fertilizer needed for the plant.
3.	Novelty / Uniqueness	It doesnot require user to consult any specialist for identification of diseases that affected the leaves
		and the fertilizers that is required for the same. It detects Plant disease at their early stage.
4.	Social Impact / Customer Satisfaction	The whole process of identifying disease and recommendation of fertilizer happens just by uploading image so it is user friendly. It helps farmers to get good yield out of the crop. People will get good quality food products.
5.	Business Model (Revenue Model)	Social media is the best way to spread the word about our application. And with the influencers we can reach out to people. Clustering and targeting the farmers for identifying diseases on their plants and recommending them fertilizers for the same.
6.	Scalability of the Solution	It can be used in research areas to study about the diseases in plant and the best fertilizer that can be recommended for it among the list of fertilizers available. It can be used by anyone in the world.

Problem Solution fit:

The Problem-Solution Fit means that the solution that is realized can actually solve the problem that the customer faces.



4. Requirement Analysis

4.1 Functional requirement

Functional requirement :

Following are the functional requirements of the proposed solution .

Fr.no	Functional requirement	Sub requirement (story/subtask)
Fr-1	User registration	Registration through form Registration through Gmail
Fr-2	User confirmation	Confirmation via OTP Confirmation via Email
Fr-3	Capturing image	Capture the image of the leaf And check the parameter of the captured image .
Fr-4	Image processing	Upload the image for the prediction of the disease in the leaf.
Fr-5	Leaf identification	Identify the leaf and predict the disease in leaf.
Fr-6	Image description	Suggesting the best fertilizer for the disease .

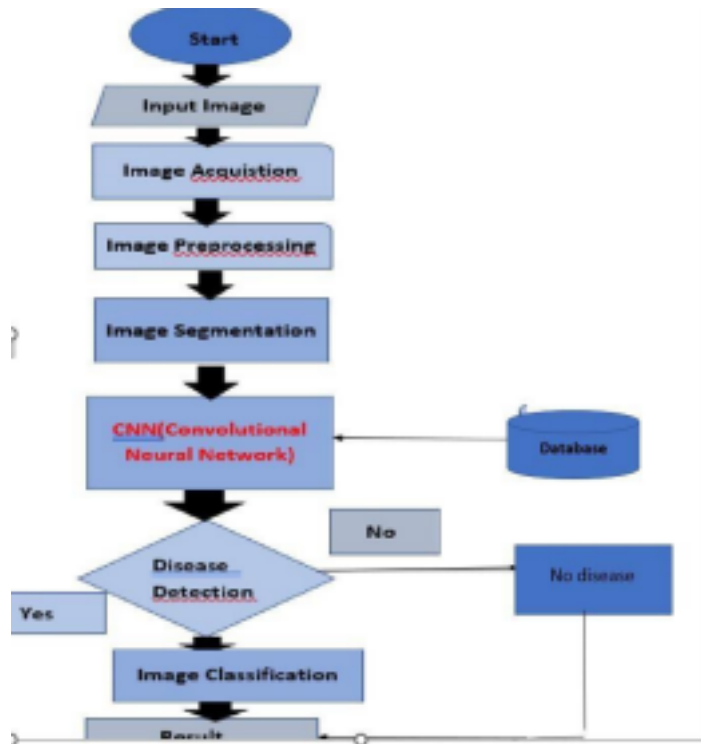
Following are the non-functional requirement of the proposed solution

NFr.no	Non-functional requirement	Description
Nfr-1	Usability	Datasets of all the leaf is used to detecting the disease that present in the leaf.
Nfr-2	Security	The information belongs to the user and leaf are secured highly.
Nfr-3	Reliability	The leaf quality is important for the predicting the disease in leaf.
Nfr-4	Performance	The performance is based on the quality of the leaf used for disease prediction
Nfr-5	Availability	It is available for all user to predict the disease in the plant
Nfr-6	Scalability	Increasing the prediction of the disease in the leaf

5. PROJECT DESIGN

5.1 Data Flow Diagrams

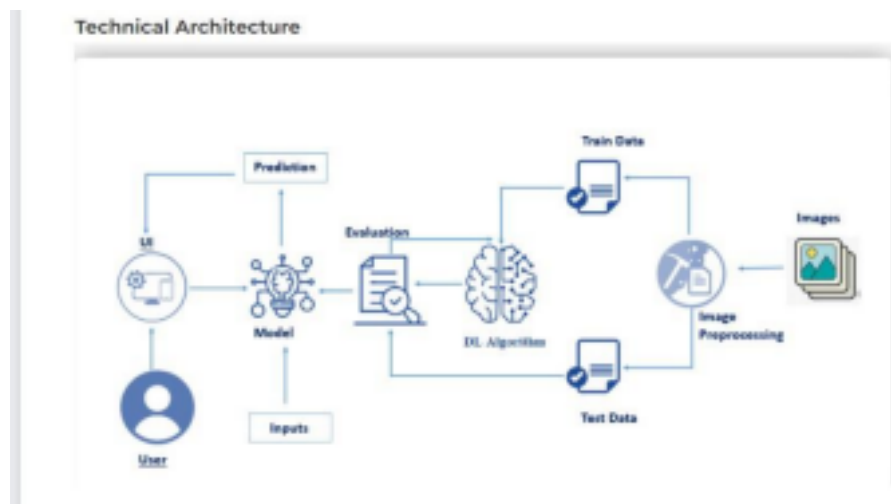
A data flow diagram or DFD(s) maps out the flow of information for any process or system. DFDs help you better understand process or system operation to discover potential problems, improve efficiency, and develop better processes.



5.2 Solution & Technical Architecture

Solution Architecture:

Solution architecture is the process of developing solutions based on predefined processes, guidelines and best practices with the objective that the developed solution fits within the enterprise architecture in terms of information architecture, system portfolios, integration requirements, etc.



5.2 Technical Architecture:

Technical architecture involves the development of a technical blueprint

regarding the arrangement, interaction, and interdependence of all elements so that system-relevant requirements are met.



5.3 User Stories

An informal, generic explanation of a software feature written from the viewpoint of the end user is known as a user story. Its objective is to explain how a software feature will benefit the user



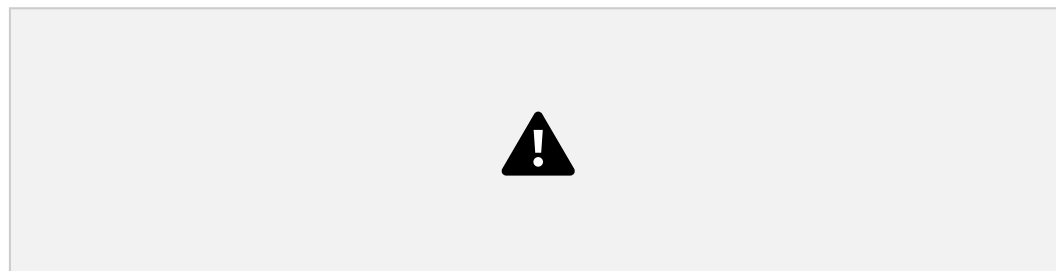
6. Project Planning and Scheduling

6.1 Sprint Planning & Estimation



6.2 Sprint Delivery Schedule

Agile sprints typically last from one week to one month. The goal of sprints is to put pressure on teams to innovate and deliver more quickly, hence the shorter the sprint, the better



6.3 Reports from JIRA

Backlog:

A backlog is a list of issues that's related to the project and the functions of the system. It makes it simple to make, store, manage a variety of problems including the ones the team is working on.



Board:A board reflects your team's process, tracking the

status of work. The columns on the board represent the status of your team's issues. The visual representation of the work helps in discussing and tracking of the progress of the project from start to finish.

Roadmap:

A roadmap offers quick and easy planning that helps teams better manage their dependencies and track progress on the big picture in real-time.



7. Coding and Solutioning Python – app.py:

Feature 1: home.html

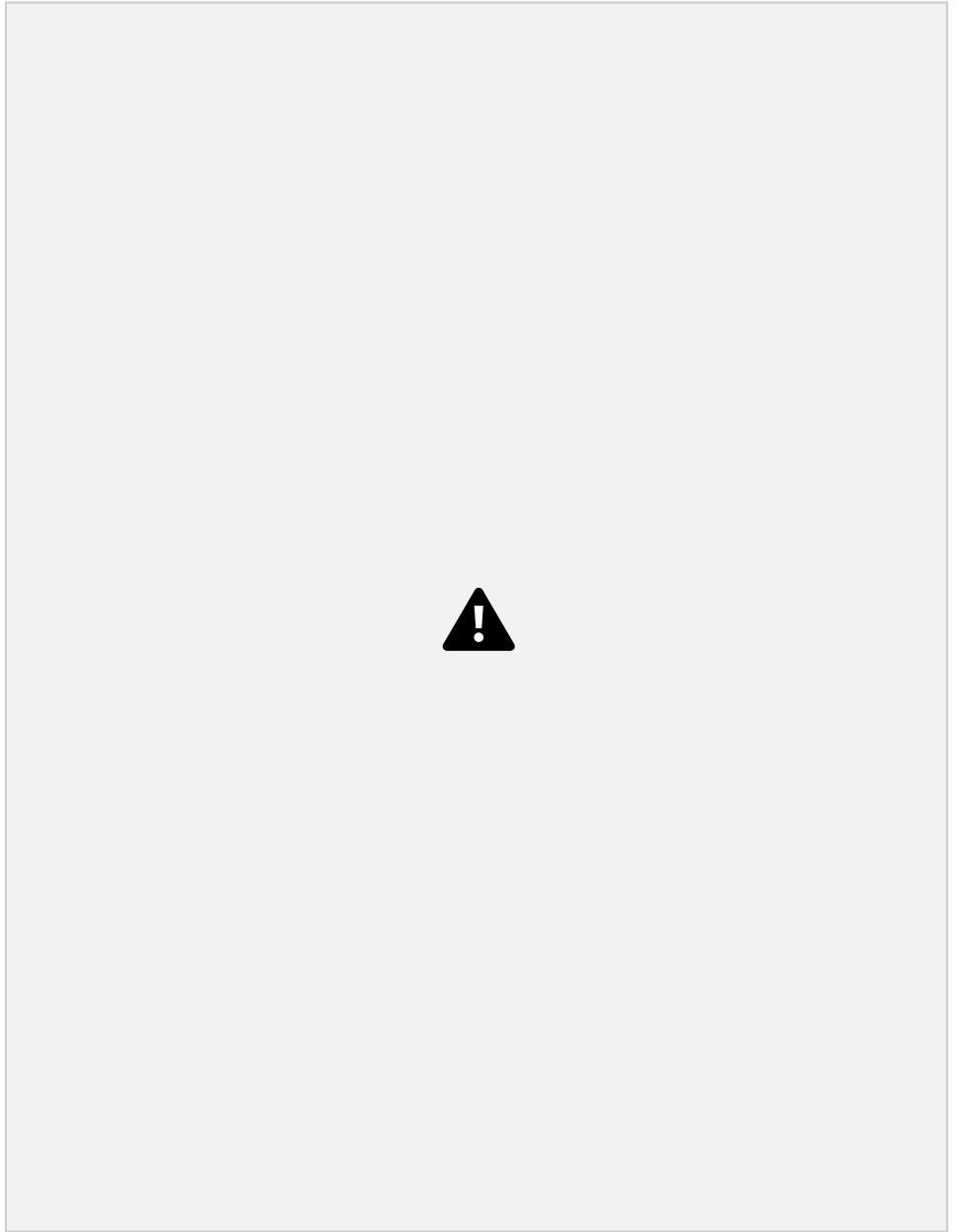












Feature 2:
Predict.html:









final.css
main.js

8. Testing

8.1 Test Cases

Test cases are a set of actions performed on a system to determine if it satisfies software requirements and functions correctly as it claimed to perform



8.2 User Acceptance Testing

Before deploying the software application to a production environment the end user or client performs a type of testing known as user acceptance testing, or UAT to ensure whether the software functionalities serve the purpose of development.





9. Results

Performance Metrics:

metrics are a baseline for performance tests.

Monitoring the correct parameters will help you detect areas that require increased attention and find ways to improve them.



10. Advantages & Disadvantage

Advantages:

- Early detection of plant diseases.
- Proper fertilizer recommendation to prevent or cure the plant infection or disease.
- No need to consult any specialists.
- Fully automated system.

Disadvantages:

- Requires training the system with large

dataset.

- Works only on the pretrained diseases.
- When a plant is infected with multiple diseases the system may not predict all the diseases due to the mixed symptoms.
- Requires a good device connected to the internet.

11. Conclusion:

Hence a system that takes in images as user input, analyses those for certain symptoms and identifies the disease, recommends the fertilizer to counter the deficiency of the nutrients is built and deployed.

12. Future Scope:

The system must be trained with numerous images of plant disease symptoms. In case of presence of multiple diseases, suitable classification must be done to predict each disease accurately and recommend separate fertilizers as a solution to each deficiency or infection.

13. Appendix:

Source Code:

Home.html:

<!DOCTYPE html>

<html >

<head>

<meta charset="UTF-8">

**<meta name="viewport"
content="width=device
width, initial-scale=1"> <title>**

Plant Disease

Prediction</title>

<link

**href='https://fonts.googleapis.
com/css?family=Pacifico'**

rel='stylesheet'

type='text/css'>

<link

**href='https://fonts.googleapis
. com/css?family=Arimo'**

rel='stylesheet'

type='text/css'> <link

**href='https://fonts.googleapis
. com/css?family=Hind:300'**

rel='stylesheet'

type='text/css'> <link

href='https://fonts.googleapis

.

```
com/css?family=Open+Sans+Condensed:300' rel='stylesheet'
type='text/css'> <link
rel="stylesheet" href="{
url_for('static',
filename='css/style.css') }">
<link
href='https://fonts.googleapis.
com/css?family=Merriweather'
rel='stylesheet'> <link
href='https://fonts.googleapis.
com/css?family=Josefin Sans'
rel='stylesheet'> <link
href='https://fonts.googleapis.
com/css?family=Montserrat'
rel='stylesheet'> <script
type="text/javascript"
src="https://gc.kis.v2.scr.kaspe
rsky-labs.com/FD126C42-EBFA
4E12-
B309-
BB3FDD723AC1/main.js?attr=
A
```

MFGetHlf4Q6r2ldpTrTqcDQGN
LDU5Cbc3diYnUdLkg5mQrVB_
t
d

22OHUAsBJSd0oo8OR0zM3rIP
eFWfnEY4XCxQu4KOxMSqlshE
olBOzvYw0SsMYpyUv4fnvKEjm
Joj_Y6cl4ov6AMOkz3Sh3epkfq
0gltnAPvvQBRdXqRmdqePVjlv
vqL28ONZCiS0Qr5t0XGxJ0bSiW
VTrH3cqaKCK05eP1Dx04mieTcj
sA_TtFLx15PUu0ed6soaj

FOO6-

1d4OQxbJYBXUBefiUhzmoYCP
sGls1OyQvA0huo8AUywYB72d
vs07U3O2hq8BmYBv98h13sSo
8

iXKxyKx4FUsOMkixjxYP6hu0w
wi7yv1E2rei3GHtPl5YwHkWio
QIPqvAmrlmaPtFZmFjE4_UUCi
9IEKws8lduDiqQIFkxfO3YT_sU
C9gWmxKSpGbiebwCgVwvdGE
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ianq63qvzZRMZbEpjzQT0DQAH
3Yho4o4A00FIW2004q8Q80xt2

kV928P_nBgS9HOgHI5EZxenbjf
qANTs1r h8GGhBd7RJaE8-
2AaqT6zbLf2tILJ8j4fk3bV1qsd
w0fPmp6foJbDu4343XH36a0V
GHsMLeVqcc30PSsE1pJbGE4_C
_E
xQd0_uRSA40mRjnFwHdLo9SJ
c1qghyc5YGQil_utG48olMy9cC
6z
iyKg1EeLKB43uq4SlUimRnuUsZ
W7drNWaijSfJPDmkm7IUJ0PO
wQXPfnLa2_spc3FisWCOZ7dFu
lgDcilu0yF8rio2X
0Pz6pZkGQW4Fwl6vWKrLplmH
agJEIKXg58YSWwAT2DILilBjuSP
iTWCHR9Ya_mAXW4C03v7x
zJlaSK9jneECqctvKnH3RFgDS8o
cfDcY65lXNRkq6v1hrcdv5sM2e
k4Kjq4OFgXwijr0JdpSDpZlbIK0
0sPb4u1B8c7MaCqBcbJAhfmg4
utLU6 7fn5GLoCX_-5TAWV0ID-
_sC1Vs9glWRPkKmmktJMbVy9
8XqC5-
DhtE3yd5I9ZM1SEH1gGYLIRjxw

zPjWwHE

**YH1Nx9ImEsq27TK7M86uT8iA
e7LgtviO2YsCB0buShHWmjh3R
zwMGqNqeymFSxPRK_sDmTFo
VjcaYpGa0**

**kaMwhmmF9AtPwGmFaGglv3r
ryVg0X0bGoXRetnrPpDG7jUoq
5zQuXQSedBf9hmNwEqWsSZtl
4z**

**NTxjiEkxU0djhPXqByZbnelp_3z
6pqqniLzqj9jzAkvX6wDOW7Zy
cfDzOtzNgTxWdtf41P6ZjVu8E
WSf65Wqgen5jD4IPXgXGtxkjrS
brqiXNxxxfKVJUOoOcEO0F6n3
DWD0BMWS8UGOQO8gZZeXC
fpuTIGYTD6okyD91kLk5AmhaN
TJV**

**KjkHOdHZqMHxikVhdK6C2PIfg
4lEY0yuE3Fjj_5NNX5ZallpOl3L
N6YQ8Jqis_UmC_OXmjW2F5Y4
p8VR**

**RKc1HW2DFaUxBREgfSwe_key
aofodrjde_pfPuDQDryEgGy9D
NIhpGUV_bQJ8jIPxRL7WSpmP**

U7

-lZ1mVN_onhqq2ol

WTl7ep8w0GsJH3OhSRyyJC0X

C9xtetq

VjIHxcbKYFsxOaXTLLe7U9oHaX

HwjDK3hnZNFYwzV_aoq8180e

b " charset="UTF

8"></script><style

> .header { top:0;

margin:0px; left:

0px;

right: 0px; position: fixed;

background-color: #28272c;

color: white; box-shadow: 0px

8px 4px grey; overflow:

hidden; padding-left:20px;

font-family: 'Josefin Sans';

font-size: 2vw; width: 100%;

height:8%; text-align: center;

}

.topnav { overflow:

hidden; background

color: #333;

}

```
.topnav-right a {  
  float: left; color:  
  #f2f2f2; text  
  align: center;  
  padding: 14px  
  16px; text  
  decoration: none;  
  font-size: 18px;  
}  
  
.topnav-right a:hover {  
  background-color: #ddd; color:  
  black;  
}  
  
.topnav-right a.active {  
  background-color: #565961;  
  color: white;  
}  
  
.topnav-right { float:  
  right; padding  
  right:100px;  
}  
  
body { background  
  color:#ffffff; background  
  repeat: no-repeat;
```

```
background-size:cover;
background-position: 0px 0px;
}
```

```
.button { background
color: #28272c; border:
none; color: white;
padding: 15px 32px; text
align: center; text
decoration: none; display:
inline-block; font-size:
16px; border-radius: 12px;
}
```

```
.button:hover { box-shadow:
0 12px 16px 0
rgba(0,0,0,0.24), 0 17px 50px
0 rgba(0,0,0,0.19);
}
```

```
form {border: 3px solid #f1f1f1;
margin
left:400px;marginright:400px;}
input[type=text],
input[type=password] {
width: 100%; padding:
12px 20px; display:
```

```
inline-block; margin
bottom:18px; border:
1px solid #ccc; box
sizing: border-box;
}
button { background-color:
#28272c; color: white;
padding: 14px 20px;
margin-bottom:8px;
border: none; cursor:
pointer; width: 15%;
border-radius:4px;}
```

```
button:hover {
opacity: 0.8;}
.cancelbtn { width:
auto; padding: 10px
18px; background
color: #f44336;}
.imgcontainer { text
align: center; margin:
24px 0 12px 0;}
img.avatar { width:
30%; border-radius:
```



```
50%;} .container {  
padding: 16px;}  
span.psw {  
float: right; padding-top:  
16px;} /* Change styles for  
span and cancel button on  
extra small screens */  
@media screen and  
(maxwidth: 300px) {  
span.psw { display:  
block; float: none;}  
.cancelbtn { width:  
100%;}} .home{  
margin:80px;  
width: 84%; height:  
500px; padding  
top:10px; padding  
left: 30px;}
```

```
.login{ margin:80px;  
box-sizing: content-box;  
width: 84%; height:  
420px; padding: 30px;  
border: 10px solid blue;
```

```
}  
.left,.right{  
  box-sizing: content  
  box; height: 400px;  
margin:20px; border:  
10px solid blue;  
}  
.mySlides {display: none;}  
img {vertical-align:  
middle;} /* Slideshow  
container */ .slideshow  
container { max-width:  
1000px; position: relative;  
margin: auto;  
}  
/* Caption text */  
.text { color:  
#f2f2f2; font-size:  
15px; padding:  
8px 12px;  
position: absolute;  
bottom: 8px;  
width: 100%; text  
align: center;
```

```
}  
/* The dots/bullets/indicators  
*/ .dot { height: 15px;  
width: 15px; margin: 0 2px;  
background-color: #bbb;  
border-radius: 50%; display:  
inline-block; transition:  
background-color  
0.6s ease;  
}  
.active {  
background-color: #717171;  
}  
/* Fading animation */  
.fade {  
-webkit-animation-name:  
fade; -webkit-animation  
duration:  
1.5s; animation-name:  
fade; animation  
duration: 1.5s;  
}  
@-webkit-keyframes fade  
{ from {opacity: .4} to
```

```

{opacity: 1}
}

@keyframes fade {
  from {opacity: .4}
  to {opacity: 1}
}

/* On smaller screens,
decrease text size */
@media only screen and
(maxwidth: 300px) {
  .text {font-size: 11px}
}

</style>
</head>
<body style="fontfamily:'Times
New Roman', Times,
serif;backgroundcolor:#C2C5A
8 ;">
  <div class="header">
    <div
      style="width:50%;float:left;fo
n t
size:2vw;textalign:left;color:w
hite; paddingtop:1%">Plant

```

```
Disease Prediction</div> <div
class="topnavright" style="padding-top:0.5%;">
```

```
<a class="active" href="{url_for('home')}">Home</a>
```

```
<a href="{url_for('prediction')}">Predict </a>
```

```
</div>
```

```
</div>
```

```
<div
```

```
style="background-color:#ffffff;
"> <div
```

```
style="width:60%;float:left;">
```

```
<div style="font
```

```
size:50px;fontfamily:Montserrat;padding-left:20px;text-align:center;padding-top:10%;" >
```

```
<b>Detect if your plant<br> is
infected!!</b></div><br> <div
```

```
style="font
```

```
size:20px;fontfamily:Montserrat;padding-left:70px;padding-right:
```

ht:30px;text-align:justify;">Agriculture is one of the major sectors works wide. Over the years it has developed and the use of new technologies and equipment replaced almost all the traditional methods of farming. The plant diseases effect the production.

Identification of diseases and taking necessary precautions is all done through naked eye, which requires labour and laboratories. This application helps farmers in detecting the diseases by observing the spots on the leaves, which inturn saves effort and labor costs.</div>

</div>

</div> <div

style="width:40%;float:right;">

</div>
</div>
<div class="home">

</div> <script> var
slideIndex = 0;
showSlides(); function
showSlides() {
var i; var
slides =
document.getElementsByClassName
Name("mySlides");
var dots =
document.getElementsByClassName
Name("dot");
for (i = 0; i < slides.length; i++)
{
slides[i].style.display =
"none";
```

```

 }
 slideIndex++;
 if (slideIndex > slides.length)
 {slideIndex = 1} for (i = 0; i <
dots.length; i++) {
dots[i].className =
dots[i].className.replace("
active", "");
}

slides[slideIndex1].style.displa
y = "block"; dots[slideIndex
1].className
+= " active";
setTimeout(showSlides, 2000);
// Change image every 2
seconds
}
</script>
</body>
</html>

```

**predict.html:**

**<!DOCTYPE html>**



**<html >**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport"  
content="width=devicewid  
th, initial-scale=1">**

**<title> Plant Disease  
Prediction</title>**

**<link  
href='https://fonts.googlea  
pis.com/css?family=Pacific  
o' rel='stylesheet'  
type='text/css'>**

**<link  
href='https://fonts.googlea  
pis.com/css?family=Arimo'  
rel='stylesheet'  
type='text/css'>**

**<link  
href='https://fonts.googlea  
pis.com/css?family=Hind:3  
00' rel='stylesheet'**

**type='text/css'>**

**<link**

**href="https://cdn.bootcss.  
com/bootstrap/4.0.0/css/b  
ootstrap.min.css"**

**rel="stylesheet">**

**<script**

**type="text/javascript"**

**src="https://gc.kis.v2.scr.k  
asperskylabs.com/FD126C4  
2-EBFA4E12-**

**B309BB3FDD723AC1/main  
.js?at**

**tr=3wvf44XdejigWHFj22AN  
QmgfA**

**L5oa67wZhZwPtEITSot6t8**

**o -**

**DPZwNcHRFhpa2tgGpDJGis  
4-1IHYxyIaN2GE0-**

**kSZKkCLRkbKttCLVN9mKh**

**GFVtGJ3auoiiByn\_jJmA447  
x4TmdjGgz8XvMdLS**

**PF4Gu5xwt0joGxWDXuOE**

**F**

18Sa5usZGgj4TdDiTfDHPeI  
X3P1eHlsevFhUJQEZe3981  
VXjRKYR

n2FrxsYwXGSMBn0sRR9IY  
up35XYNQkvA6DLQV1lwLc  
4XuAo0B

IJYAfi75R4O5LwTWuT  
uaft0DEQeuV\_f3rKvkrcBkaI  
cpWnyXVLeLyjMz5CqpZ1aS  
Cy1MgVAzWxGbGX3eQb0F  
5qOksANddV\_vh  
z1Ai4RgptuAfB8mVyuz0n  
WZzpmwam34lc4NL4tfyW  
GncKz2taMyGfs

K4Mrn0zfPIY9\_n9FP0IMlAX  
0IQ8TfbVp4B1vbwnARVJq8  
mxoTjgMgqhKhp6N  
QY\_8gZULkbqqA0pqUMvfL  
3\_fZC1PFipLNjCyCGe9YOa  
U9L7QF4CXe

KsRhJXmI898FhpxB1oI7z0x  
vndsDLPRsqbNuse\_eGL9tz  
0Te5HLGhtoXSn5O8pHC99  
\_XHYofrlismc

ByzZImVqVkCNfmbnMjaD9  
IQf6xAACyjkQ927AOvyDVC  
ZKrtV6wRZyv\_z7Z1J9AG7S  
GSL

oB34AkMytkYXvpgGn21pG  
FNhvl3YSmyKYc2XJs89zHb  
p5fSyXsfas

ogSEYLbpxCmuvzZKO4haa  
qouKDcLwBGMFp\_Br095fA  
lhhWOdPDx1ezvTMx1Ng  
S4QO97OmbyQCqHUFWW  
ZLYNgjQ8zpfdBXB17L\_v\_lf  
mrUWhUiUV

c9tRcJylpchFJe8Gz7TUOKC  
RDjblW

tiqXryDeENrJgQ31laXpVVY  
pOI1L55pek2fgk5OCGN  
zVges5oG4PpMyClXtJpv32  
E5rIPTktG4hD8eXmYQECV  
U1HvSmEiK

vuY6T6i9wdpqg\_AnyCRzUX  
mYdahFT3W7zToIn2RXzNf  
dOU0zbYBvtJ70TpR4PjfU75  
IJ0FsnphDu

Cnero3UYOak7vYvGYD9YV  
2md5v

3AmPeOor2m55JZRH\_Hxp  
n28xnDNCOHqVBC6leYuY  
F BVV\_  
vL5l

E8n92uWUqwMEzdZPZtAy  
RaCfz3D2Y0lYn

ZrnfNTg2M\_zVJePmUu1xdj  
Yh7d1dx7nwclm7wJrBPb3J  
nX2kvEGYs9SM17MlwzoY1  
VJq4UzJ2D6o

EvhQwHvG4e1etlS6iLWzhy  
8RVMfBITa4DPDOHmTlHhs  
Kbn0UaMyFFCppe79rtlVRc  
tcomnVmQy

sUwUOhjzlAq30hXJCTqdC  
WJe2xnxjAuUHV

qHSiHiZlIZaoOWNCV5Ypx\_  
eqzn-KyZS3u

2\_hGLHHNA2AVBWn\_hF3  
Gz16dw6zA4QSmWZSfDUc  
NObLJGOSTaDS3Z8jPTloYP

Fmu8oES6T

L1dLIEK5YhcSGaX4iv6o95d  
rsZGb6bBcWgT7sNFHW6d  
VE9wdjoDFuBergPIAm0sKa  
ZQ2Ex6j15O

WCbE6UaPg

VNfziA2FEPpJal9hEPI2gdaS  
uHqovlEOt5mjuFBBOxpK0t  
8kOZRtsVzqUuJw3VcLjaP6S  
fG\_KZfgX\_

g8TPs6CcFhlLRz63oXMQFP  
W6AA7eudWfygndazedq5  
B

6DqSkOT04GTUJNqLcElg6K  
EEWqxd88BzoQoK28jrAfx  
WHNIZv5HmQQYEnyX0U\_  
cW8HXhde54TuY\_fY3e5QY  
u4beJxTkA4JxWLEagSa7-  
zs" charset="UTF

8"></script><script  
src="https://cdn.bootcss.c  
om/popper.js/1.12.9/umd/  
popper.min.js"></script>  
<script

```
src="https://cdn.bootcss.com/jquery/3.3.1/jquery.min.js"></script>
```

```
<script
src="https://cdn.bootcss.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>
```

```
<link
href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet'
type='text/css'>
```

```
<link
href='https://fonts.googleapis.com/css?family=Merriweather' rel='stylesheet'>
```

```
<link
href='https://fonts.googleapis.com/css?family=Josefin+Sans' rel='stylesheet'>
```

```
<link
```

```
href='https://fonts.googlea
pis.com/css?family=Monts
errat' rel='stylesheet'>
```

```
<link href="{{
url_for('static',
filename='css/final.css')}
}"
rel="stylesheet">
```

```
<style> .header {

top:0;

margin:0px; left:

0px; right: 0px;

position: fixed;

background-color:

#28272c; color:

white; box-
shadow: 0px 8px
4px grey;

overflow: hidden;

padding

left:20px; font
```



```
family: 'Josefin
Sans'; font-size:
2vw; width:
100%; height:8%;
text-align: center;
}
```

```
.topnav { overflow:
hidden; background
color: #333;
}
.topnav-right a {
float: left;
color: #f2f2f2; text
align: center; padding:
14px 16px; text
decoration: none; font
size: 18px;
}
```

```
.topnav-right a:hover {
background-color: #ddd;
color: black;
}
```

```
.topnav-right a.active {
background-color:
#565961; color:
white;
}
```

```
.topnav-right {
float: right; padding
right:100px;
}
```

```
.login{ margin-top:-70px;
}
```

```
body { background
color:#ffffff; background
repeat: norepeat;
```

```
background-size:cover;
background-position: 0px
0px;
}
```

```
.login{ margin-top:100px;
}
```

```
.container { margin
top:40px; padding: 16px;
} select { width: 100%;
margin-bottom: 10px;
background:
rgba(255,255,255,255);
border: none; outline:
none; padding: 10px;
font-size: 13px; color:
#000000; text-shadow:
1px 1px 1px
rgba(0,0,0,0.3);
```

**border: 1px solid**

**rgba(0,0,0,0.3);**

**border-radius: 4px;**

**box-shadow: inset 0**

**- 5px 45px**

**rgba(100,100,100,0.2), 0**

**1px 1px**

**rgba(255,255,255,0.2);**

**-webkit-transition:**

**boxshadow .5s ease;**

**-moz-transition:**

**boxshadow .5s ease;**

**-o-transition: box-shadow  
.5s ease;**

**-ms-transition: boxshadow  
.5s ease; transition: box  
shadow .5s ease;**

**}**

**</style>**

```
</head>
<body
style="fontfamily:Montserrat;overflow:scroll;">

<div class="header">

<div
style="width:50%;float:left
;font
size:2vw;text-align:left;color:
white; padding
top:1%">Plant
Disease Prediction</div>
<div class="topnav-right"
style="padding-top:0.5%;">
</div>

</div>

<div class="container">
<div id="content"
style="margin-top:2em">
<div class="container">
<div class="row">
```

```
<div class="col-sm-6 bd" >
```

```


```

```
 </div> <div
```

```
class="col-sm-6"> <div>
```

```
<h4>Drop in the image to
get the prediction </h4>
```

```
<form action = ""
```

```
id="upload-file"
```

```
method="post"
```

```
enctype="multipart/formd
ata">
```

```
<select name="plant">
```

```
<option value="select"
selected>Select plant
type</option>
```

```
<option
```

```
value="fruit">Fruit</option>
```

```
<option
value="vegetable">Vegetable</option>
```

```
</select>

```

```
<label for="imageUpload"
class="upload-label"
style="background:
```

```
#28272c;"> Choose...
```

```
</label>
```