Sprint – 4

Front end web application development

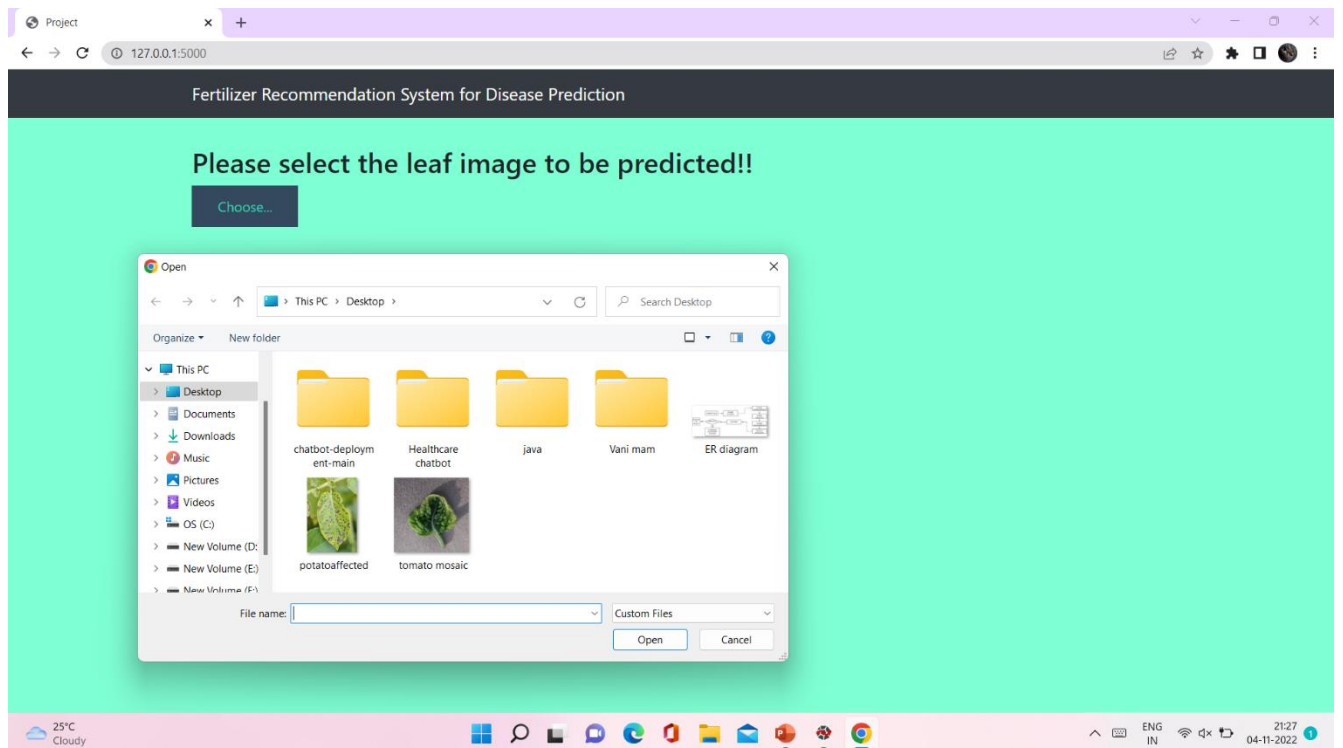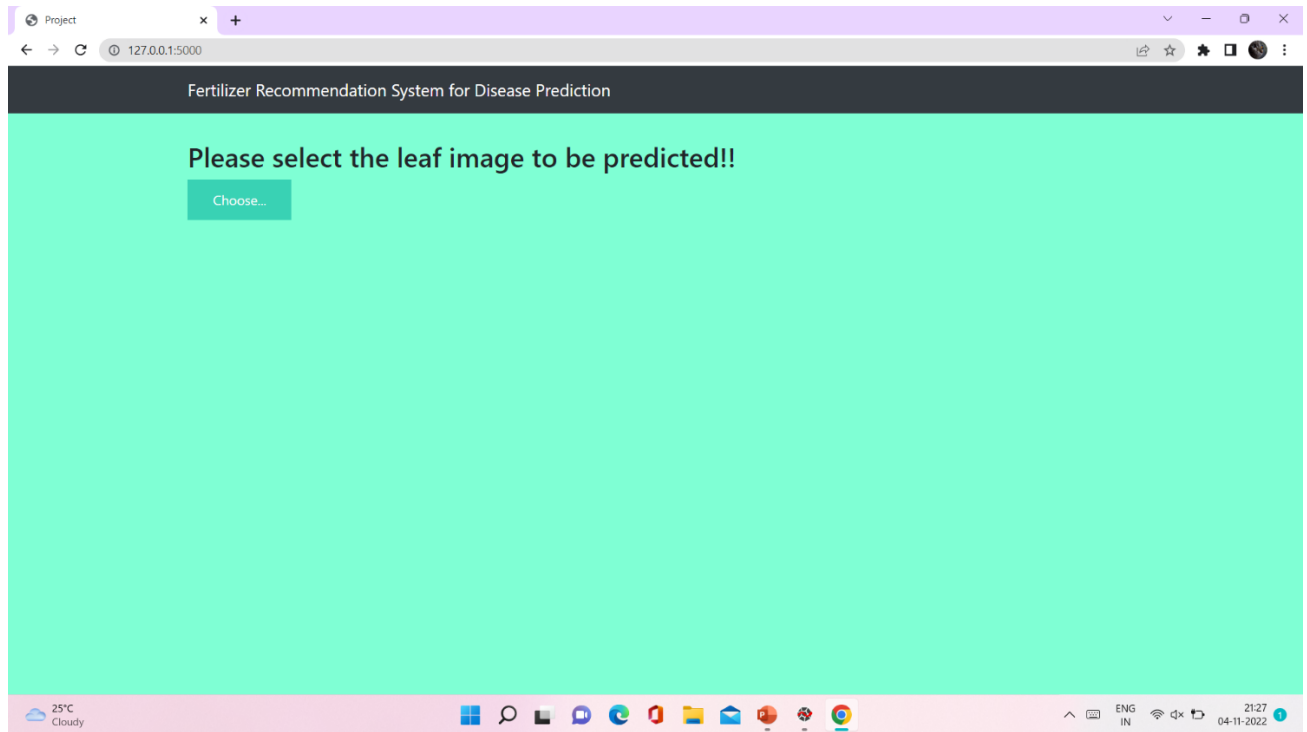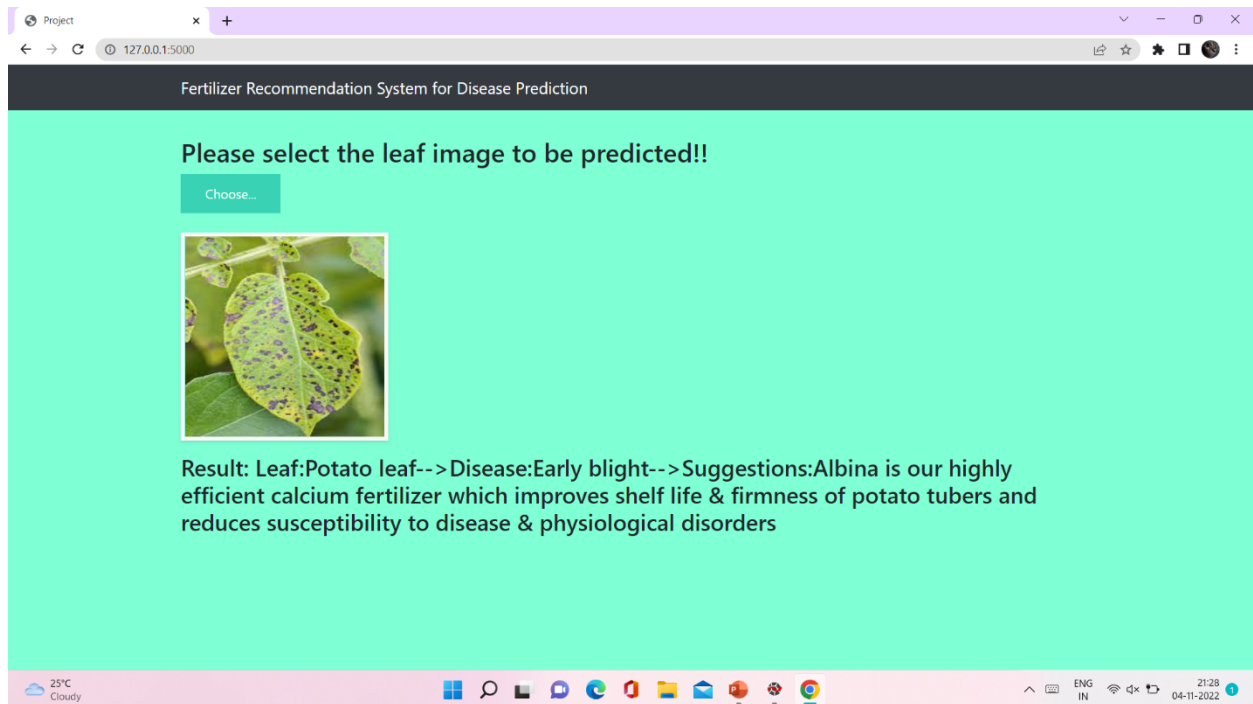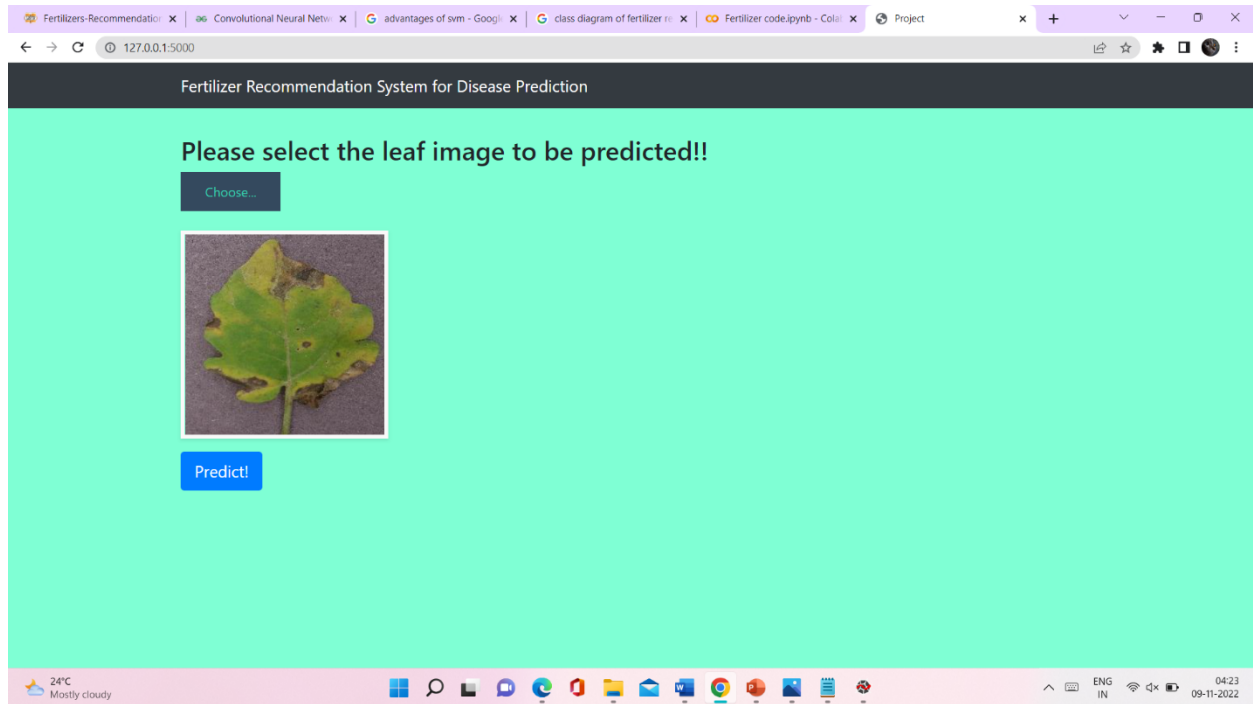| Team ID	PNT2022TMID18626
Project Name	Fertilizer recommendation system for disease prediction

Build HTML Pages

Build the UI where a home page will have details about the application, a prediction page where a user is allowed to browse an image and get the predictions.

Open the browser and navigate to localhost to check your web application.

The home page looks like this.

* Running the application on http://127.0.0.1:5000

Fertilizer Recommendation System for Disease Prediction

Please select the leaf image to be predicted!!

Choose...

Predict!

Fertilizer Recommendation System for Disease Prediction

Please select the leaf image to be predicted!!

Choose...

Result: Leaf:Potato leaf-->Disease:Early blight-->Suggestions:Albina is our highly efficient calcium fertilizer which improves shelf life & firmness of potato tubers and reduces susceptibility to disease & physiological disorders

Please select the leaf image to be predicted!!

Choose...

Result: Leaf:Potato leaf-->Disease:Early blight-->Suggestions:Albina is our highly efficient calcium fertilizer which improves shelf life & firmness of potato tubers and reduces susceptibility to disease & physiological disorders

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Please select the leaf image to be predicted!!

Choose...

Result: Leaf:Tomato-->Disease:Two spotted spider mite-->Suggestion:Apply a miticide spray if mite damage and mites are present on 50 per cent of the leaves and predators are not present.This will effectively control the spread

Index.html

{% extends "base.html" %} {% block content %}

<h2>Please select the leaf image to be predicted!!</h2>

<div>
    <form id="upload-file" method="post" enctype="multipart/form-data">
        <label for="imageUpload" class="upload-label">
            Choose...
        </label>
        <input type="file" name="file" id="imageUpload" accept=".png, .jpg, .jpeg">
    </form>

    <div class="image-section" style="display:none;">
        <div class="img-preview">
            <div id="imagePreview">
            </div>
        </div>
        <div>
            <button type="button" class="btn btn-primary btn-lg " id="btn-predict">Predict!</button>
        </div>
    </div>

    <div class="loader" style="display:none;"></div>

```html
    <h3 id="result">
        <span> </span>
    </h3>

</div>

{% endblock %}
```

Base.html

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

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>Project</title>
    <link href="https://cdn.bootcss.com/bootstrap/4.0.0/css/bootstrap.min.css" rel="stylesheet">
    <script src="https://cdn.bootcss.com/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="{{ url_for('static', filename='css/main.css') }}" rel="stylesheet">
    <style>
        body{
            background-color:aquamarine;
```

```
        }
    </style>
</head>


<body>
    <nav class="navbar navbar-dark bg-dark">
        <div class="container">
            <a class="navbar-brand" href="#">Fertilizer Recommendation System for
Disease Prediction</a>
        </div>
    </nav>
    <div class="container">
        <div id="content" style="margin-top:2em">{% block content %}{% endblock
%}</div>
    </div>
</body>


<footer>
    <script src="{{ url_for('static', filename='js/main.js') }}"
type="text/javascript"></script>
</footer>


</html>
```

Main.css

```css
.img-preview {
    width: 256px;
```

```css
    height: 256px;
    position: relative;
    border: 5px solid #F8F8F8;
    box-shadow: 0px 2px 4px 0px rgba(0, 0, 0, 0.1);
    margin-top: 1em;
    margin-bottom: 1em;
}

.img-preview>div {
    width: 100%;
    height: 100%;
    background-size: 256px 256px;
    background-repeat: no-repeat;
    background-position: center;
}


input[type="file"] {
    display: none;
}

.upload-label{
    display: inline-block;
    padding: 12px 30px;
    background: #39D2B4;
    color: #fff;
    font-size: 1em;
    transition: all .4s;
    cursor: pointer;
}

.upload-label:hover{
    background: #34495E;
    color: #39D2B4;
}

.loader {
    border: 8px solid #f3f3f3; /* Light grey */
    border-top: 8px solid #3498db; /* Blue */
    border-radius: 50%;
    width: 50px;
    height: 50px;
    animation: spin 1s linear infinite;
}
```

```css
@keyframes spin {
    0% { transform: rotate(0deg); }
    100% { transform: rotate(360deg); }
}
```

Main.js

```javascript
$(document).ready(function () {
    // Init
    $('.image-section').hide();
    $('.loader').hide();
    $('#result').hide();

    // Upload Preview
    function readURL(input) {
        if (input.files && input.files[0]) {
            var reader = new FileReader();
            reader.onload = function (e) {
                $('#imagePreview').css('background-image', 'url(' +
e.target.result + ')');
                $('#imagePreview').hide();
                $('#imagePreview').fadeIn(650);
            }
            reader.readAsDataURL(input.files[0]);
        }
    }
    $("#imageUpload").change(function () {
        $('.image-section').show();
        $('#btn-predict').show();
        $('#result').text('');
        $('#result').hide();
        readURL(this);
    });

    // Predict
    $('#btn-predict').click(function () {
        var form_data = new FormData($('#upload-file')[0]);

        // Show loading animation
        $(this).hide();
        $('.loader').show();

        // Make prediction by calling api /predict
        $.ajax({
```

```
                type: 'POST',
                url: '/predict',
                data: form_data,
                contentType: false,
                cache: false,
                processData: false,
                async: true,
                success: function (data) {
                    // Get and display the result
                    $('.loader').hide();
                    $('#result').fadeIn(600);
                    $('#result').text(' Result:  ' + data);
                    console.log('Success!');
                },
            });
        });

});
```