

# PROJECT DEVELOPMENT PHASE

## NATURAL DISASTERS INTENSITY ANALYSIS AND CLASSIFICATION USING ARTIFICIAL INTELLIGENCE

PNT2022TMID29928

### Sprint -1 (DESIGN AN WEB APPLICATION)

As per Sprint delivery plan, Sprint-1 includes:

#### USER STORY NUMBER -1:

Design a web application which facilitates the image input.

#### CODE FOR WEB APPLICATION:

index.html:

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

```
<h2>Natural Disaster Intensity Analysis and  
Classification using AI</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>

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

    </div>

{% endblock %}

```

STATIC FILES :

main.css :

```

.img-preview {
    width: 256px;
    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;
}

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

```

main.js :

```

$(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();

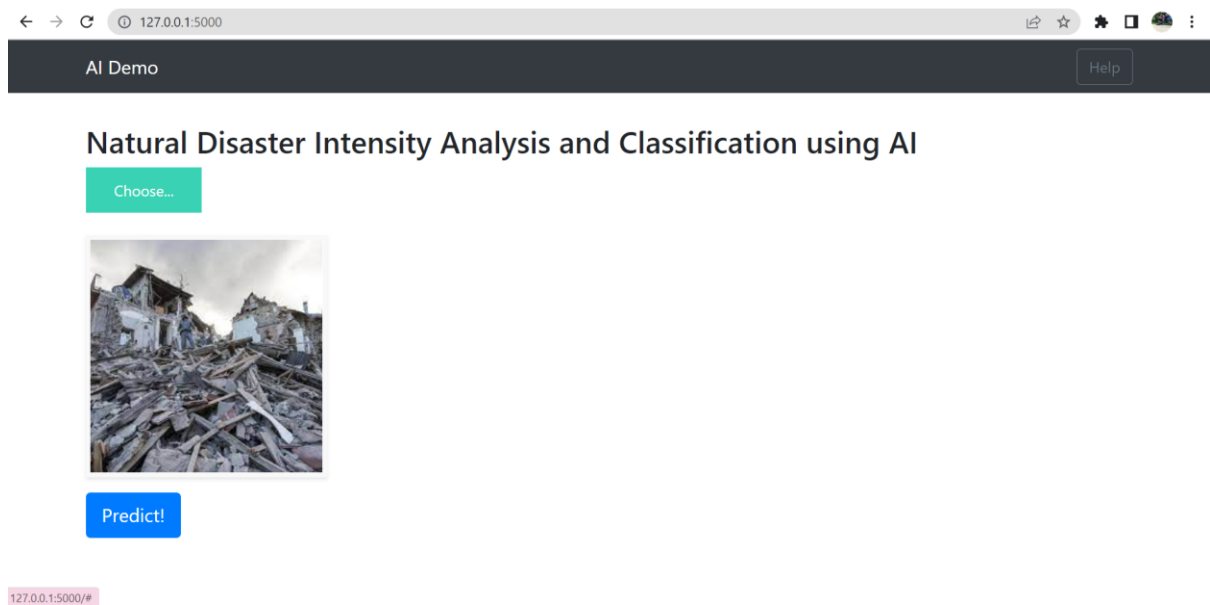
        // Make prediction by calling api /predict
        $.ajax({
            type: 'POST',
            url: '/predict',
            data: form_data,
            contentType: false,
            cache: false,
            processData: false,
            async: true,
            success: function (data) {
                // Get and display the result
                $('#.loader').hide();
                $('#result').fadeIn(600);
                $('#result').text(' Result:  ' +
data);

                console.log('Success!');
            },
        });
    });
});

});

```

## WEB APPLICATION DESIGN



Once we click the choose button, it will let the user to upload the image file present in his local directory.



127.0.0.1:5000



AI Demo

Help

# Natural Disaster Intensity Analysis and Classification using AI

Choose...

127.0.0.1:5000/#