Project Development Phase

Sprint 3 – Front End Development

Date	18 November 2022
Team ID	PNT2022TMID18498
Project Name	Project – Natural Disasters Intensity Analysis and Classification Using Artificial Intelligence

HOME.HTML:

```
<html>
<script>

<style>
.header {

position: relative;
top:0;
margin:0px;
z-index: 1;
left: 0px;
right: 0px;
position: fixed;
background-color: #FCAD98;
color: white;
box-shadow: 0px 8px 2px 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: #FCAD98;
.topnav-right a {
 float: left;
 color: black;
 text-align: center;
 padding: 14px 16px;
 text-decoration: none;
 font-size: 18px;
.topnav-right a:hover {
 background-color: #FCAD98;
 color: black;
.topnav-right a.active {
 background-color: #FCAD98;
 color: white;
.topnav-right {
 float: right;
 padding-right:100px;
body {
background-image: -webkit-linear-gradient(90deg, skyblue 0%, steelblue 100%);
```

```
background-image: url("");
 background-size: cover;
 background-attachment: fixed;
 background-size: 100% 100%;
 background-color:;
 background-repeat: no-repeat;
 background-size:cover;
 background-position: 0px 0px;
 .button {
 background-color: #091425;
 border: none;
 color: white;
 padding: 15px 32px;
 text-align: center;
 text-decoration: none;
 display: inline-block;
 font-size: 12px;
 border-radius: 16px;
.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;margin-right: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: #091425;
 color: white;
```

```
padding: 14px 20px;
 margin-bottom:10px;
 border: none;
 cursor: pointer;
 width: 17%;
 border-radius:4px;
 font-family:Montserrat;
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 (max-width: 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: #FCAD98;
/* 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 (max-width: 300px) {
 .text {font-size: 11px}
@import url('https://fonts.googleapis.com/css2?family=Poppins&display=swap');
* {
 box-sizing: border-box;
body {
 min-height: 100vh;
```

```
margin: 0;
 color: #fff;
 font-family: 'Poppins', sans-serif;
 display: flex;
 align-items: center;
justify-content: center;
background-color: #f5f5f5;
.container {
max-width: 1376px;
 margin: auto;
padding: 2rem 1.5rem;
.cards {
display: flex;
flex-wrap: wrap;
 align-items: center;
justify-content: center;
.card {
 cursor: pointer;
background-color: transparent;
height: 300px;
perspective: 1000px;
margin: 1rem;
 align-items: center;
justify-content: center;
.card h3 {
border-bottom: 1px #fff solid;
padding-bottom: 10px;
margin-bottom: 10px;
 text-align: center;
```

```
font-size: 1.6rem;
 word-spacing: 3px;
.card p{
opacity: 0.75;
font-size: 0.8rem;
 line-height: 1.4;
.card img {
width: 360px;
height: 300px;
 object-fit: cover;
border-radius: 3px;
.card-inner {
position: relative;
 width: 360px;
height: 100%;
transition: transform 0.9s;
transform-style: preserve-3d;
.card:hover .card-inner {
transform: rotateY(180deg);
.card-front,
.card-back {
position: absolute;
 width: 360px;
height: 100%;
 -webkit-backface-visibility: hidden;
 backface-visibility: hidden;
```

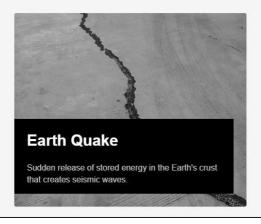
```
.card-back {
 background-color: #222;
 color: #fff;
padding: 1.5rem;
transform: rotateY(180deg);
.text-block {
position: absolute;
 bottom: 20px;
 right: 20px;
 background-color: black;
 color: white;
 padding-left: 20px;
 padding-right: 20px;
</style>
<body>
<div class="header">
<div style="width:50%; float:left; font-size:2vw; text-align:left; color:black; padding-top:1%; padding-left:5%; ">AI based Natural disaster analysis</div>
 <div class="topnav-right"style="padding-top:0.5%;">
  <a class="active" href="/home">Home</a>
  <a href="/intro">Introduction</a>
  <a href="/upload">Open Web Cam</a>
 </div>
</div>
<div class="container">
    <div class="cards">
       <div class="card">
```

```
<div class="card-inner">
                               <div class="card-front">
                                     <img src="https://images.unsplash.com/photo-1454789476662-</pre>
53eb23ba5907?ixid=MXwxMjA3fDB8MHxwaG90by1wYWdlfHx8fGVufDB8fHw%3D&ixlib=rb-1.2.1&auto=format&fit=crop&w=689&q=80"
                                            alt="">
 <div class="text-block">
      <h2>Cyclone</h2>
      violent winds, torrential rain, high waves and, very destructive storm
    </div>
                                </div>
                               <div class="card-back">
                                     <h3>Cyclone</h3>
                                     The effects of tropical cyclones include heavy rain, strong wind, large storm surges near landfall, and tornadoes. The destruction from
a tropical cyclone, such as a hurricane or tropical storm, depends mainly on its intensity, its size, and its location.
                                </div>
                         </div>
                   </div>
<div class="container">
            <div class="cards">
                  <div class="card">
                         <div class="card-inner">
                                <div class="card-front">
                                     <img src="https://images.unsplash.com/photo-1603869311144-</pre>
66b03d340b32?ixid=MXwxMjA3fDB8MHxzZWFyY2h8M3x8ZWFydGhxdWFrZXxlbnwwfHwwfA\%3D\%3D\&ixlib=rb-defined and the contraction of the co
1.2.1&auto=format&fit=crop&w=500&q=60"
                                            alt="">
 <div class="text-block">
      <h2>Earth Quake</h2>
      Sudden release of stored energy in the Earth's crust that creates seismic waves.
    </div>
                                </div>
```

```
<div class="card-back">
              <h3>Earth Ouake</h3>
             Earthquakes are usually caused when rock underground suddenly breaks along a fault. This sudden release of energy causes the
seismic waves that make the ground shake..... During the earthquake and afterward, the plates or blocks of rock start moving, and they continue to move
until they get stuck again.
           </div>
         </div>
       </div>
<div class="container">
    <div class="cards">
       <div class="card">
         <div class="card-inner">
           <div class="card-front">
              <img src="https://images.unsplash.com/photo-1547683905-</pre>
f686c993aae5?ixid=MXwxMjA3fDB8MHxzZWFyY2h8MXx8Zmxvb2R8ZW58MHx8MHw%3D&ixlib=rb-
1.2.1&auto=format&fit=crop&w=500&q=60"
                alt="">
<div class="text-block">
  <h2>Flood</h2>
  A flood is an overflow of water on normally dry ground
 </div>
           </div>
           <div class="card-back">
             <h3>Flood</h3>
             >During heavy rain, the storm drains can become overwhelmed or plugged by debris and flood the roads and buildings nearby. Low
spots, such as underpasses, underground parking garages, basements, and low water crossings can become death traps. Areas near rivers are at risk from
floods.
           </div>
         </div>
       </div>
```

```
<div class="container">
                <div class="cards">
                        <div class="card">
                                <div class="card-inner">
                                        <div class="card-front">
                                                <img src="https://images.unsplash.com/photo-1473260079709-</pre>
83c808703435?ixid=MXwxMjA3fDB8MHxzZWFyY2h8NHx8d2lsZGZpcmV8ZW58MHx8MHw\%3D\&ixlib=rb-diversity for the control of the control o
1.2.1&auto=format&fit=crop&w=500&q=60"
                                                        alt="">
 <div class="text-block">
        <h2>WildFire</h2>
        Uncontrolled fire in a forest, grassland, brushland
    </div>
                                         </div>
                                        <div class="card-back">
                                                <h3>Wildfire</h3>
                                                Wildfires can be caused by an accumulation of dead matter (leaves, twigs, and trees) that can create enough heat in some instances to
spontaneously combust and ignite the surrounding area. Lightning strikes the earth over 100,000 times a day. 10 to 20% of these lightning strikes can
cause fire.
                                        </div>
                                </div>
                       </div>
</body>
<html>
```









INTRO.HTML:

<html>

<script>

```
<style>
.header {
              position: relative;
                     top:0;
                     margin:0px;
                     z-index: 1;
                     left: 0px;
                     right: 0px;
                     position: fixed;
                     background-color: rgba(100, 100, 100, 0.5);
                     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: #FCAD98;
.topnav-right a {
float: left;
color: black;
 text-align: center;
 padding: 14px 16px;
text-decoration: none;
 font-size: 18px;
.topnav-right a:hover {
background-color: #FCAD98;
 color: black;
```

```
.topnav-right a.active {
 background-color: #FCAD98;
 color: white;
.topnav-right {
 float: right;
 padding-right:100px;
body {
 background-color:;
 background-repeat: no-repeat;
 background-size:cover;
  background-size: cover;
 background-position: 0px 0px;
 .button {
 background-color: #091425;
 border: none;
 color: white;
 padding: 15px 32px;
 text-align: center;
 text-decoration: none;
 display: inline-block;
 font-size: 12px;
 border-radius: 16px;
.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;margin-right: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: #091425;
 color: white;
 padding: 14px 20px;
 margin-bottom:10px;
 border: none;
 cursor: pointer;
 width: 17%;
 border-radius:4px;
 font-family:Montserrat;
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 (max-width: 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: #FCAD98;
/* 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 (max-width: 300px) {
 .text {font-size: 11px}
@import url("https://fonts.googleapis.com/css?family=Montserrat&display=swap");
 padding: 0;
```

```
margin: 0;
body {
 height: 100vh;
 display: flex;
 flex-direction: column;
 justify-content: center;
 align-items: center;
h1 {
 font-family: "Montserrat Medium";
 max-width: 90ch;
 text-align: center;
 transform: scale(0.94);
 animation: scale 3s forwards cubic-bezier(0.5, 1, 0.89, 1);
@keyframes scale {
 100% {
  transform: scale(1);
span {
 display: inline-block;
 opacity: 0;
 filter: blur(4px);
span:nth-child(1) {
 animation: fade-in 1s 0.1s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(2) {
 animation: fade-in 0.8s 0.2s forwards cubic-bezier(0.11, 0, 0.5, 0);
```

```
span:nth-child(3) {
 animation: fade-in 0.8s 0.3s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(4) {
 animation: fade-in 0.8s 0.4s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(5) {
 animation: fade-in 0.8s 0.5s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(6) {
 animation: fade-in 0.8s 0.6s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(7) {
 animation: fade-in 0.8s 0.7s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(8) {
 animation: fade-in 0.8s 0.8s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(9) {
 animation: fade-in 0.8s 0.9s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(10) {
 animation: fade-in 0.8s 1s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(11) {
 animation: fade-in 0.8s 1.1s forwards cubic-bezier(0.11, 0, 0.5, 0);
```

```
span:nth-child(12) {
 animation: fade-in 0.8s 1.2s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(13) {
 animation: fade-in 0.8s 1.3s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(14) {
 animation: fade-in 0.8s 1.4s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(15) {
 animation: fade-in 0.8s 1.5s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(16) {
 animation: fade-in 0.8s 1.6s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(17) {
 animation: fade-in 0.8s 1.7s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(18) {
 animation: fade-in 0.8s 1.8s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(19) {
 animation: fade-in 0.8s 1.9s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(20) {
 animation: fade-in 0.8s 2.0s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(21) {
 animation: fade-in 0.8s 2.1s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(22) {
```

```
animation: fade-in 0.8s 2.2s forwards cubic-bezier(0.11, 0, 0.5, 0);
span:nth-child(23) {
 animation: fade-in 0.8s 2.3s forwards cubic-bezier(0.11, 0, 0.5, 0);
}span:nth-child(24) {
 animation: fade-in 0.8s 2.4s forwards cubic-bezier(0.11, 0, 0.5, 0);
}span:nth-child(25) {
 animation: fade-in 0.8s 2.5s forwards cubic-bezier(0.11, 0, 0.5, 0);
}span:nth-child(26) {
 animation: fade-in 0.8s 2.6s forwards cubic-bezier(0.11, 0, 0.5, 0);
}span:nth-child(27) {
 animation: fade-in 0.8s 2.7s forwards cubic-bezier(0.11, 0, 0.5, 0);
}span:nth-child(28) {
 animation: fade-in 0.8s 2.8s forwards cubic-bezier(0.11, 0, 0.5, 0);
@keyframes fade-in {
 100% {
  opacity: 1;
  filter: blur(0);
</style>
<body>
< h1>
 <span> China, India and the United States </span> <span> are among the countries of the world most </span> <span> affected by natural disasters.
</span > <span> Natural disasters have the potential to wreck and even end the lives of those people, </span> <span> who stand in their way. </span>
<span> However, whether or not you are likely to be </span> <span> affected by a natural disaster greatly depends</span> <span> on where in the
world you live, </span>
 <span> The objective of </span> <span> the project is to</span> <span> human build a </span> <span> web application </span> <span> to detect the
</span> <span> type of disaster .</span> <span> The input </span> <span> is taken from the in built web cam,</span>
<span> which in turn </span> <span> is </span> <span> given to the </span> <span> pre trained model .</span> <span> The model predicts the
</span> <span> type of disaster </span> <span> and displayed</span> <span> on UI.</span>
```

China, India and the United States are among the countries of the world most affected by natural disasters.

Natural disasters have the potential to wreck and even end the lives of those people, who stand in their way. However, whether or not you are likely to be affected by a natural disaster greatly depends on where in the world you live, The objective of the project is to human build a web application to detect the type of disaster. The input is taken from the in built web cam, which in turn is given to the pre trained model.

The model predicts the type of disaster and displayed on UI.

UPLOAD.HTML:

<html lang="en">

<head>
<title>Register</title>

```
k href="https://cdn.bootcss.com/bootstrap/4.0.0/css/bootstrap.min.css" rel="stylesheet">
<style>
.header {
              position: relative;
                     top:0;
                     margin:0px;
                     z-index: 1;
                     left: 0px;
                     right: 0px;
                     position: fixed;
                     background-color: #F36262;
                     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: #FCAD98;
.topnav-right a {
float: left;
 color: black:
 text-align: center;
 padding: 14px 16px;
 text-decoration: none;
 font-size: 18px;
.topnav-right a:hover {
 background-color: #FCAD98;
 color: black;
```

```
.topnav-right a.active {
 background-color: #FCAD98;
 color: white;
.topnav-right {
 float: right;
 padding-right:100px;
body {
 background-color:;
 background-repeat: no-repeat;
 background-size:cover;
 background-image: url("https://i.pinimg.com/originals/b2/1d/c6/b21dc69346915015bc4e19bd502f401b.gif");
  background-size: cover;
 background-position: 0px 0px;
 .button {
 background-color: #091425;
 border: none;
 color: white;
 padding: 15px 32px;
 text-align: center;
 text-decoration: none;
 display: inline-block;
 font-size: 12px;
 border-radius: 16px;
.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;margin-right: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: #091425;
 color: white;
 padding: 14px 20px;
 margin-bottom:10px;
 border: none;
 cursor: pointer;
 width: 17%;
 border-radius:4px;
 font-family:Montserrat;
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 (max-width: 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%;
```

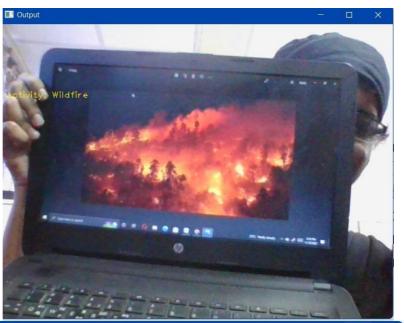
```
height: 420px;
 padding: 30px;
 border: 10px solid blue;
.left,.right{
box-sizing: content-box;
height: 400px;
margin:20px;
border: 10px solid blue;
.mySlides {display: none;}
img {vertical-align: middle;}
/* Slideshow container */
.slideshow-container {
 max-width: 1000px;
 position: relative;
 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: #FCAD98;
/* 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 (max-width: 300px) {
 .text {font-size: 11px}
```

```
.bar
margin: 0px;
padding:20px;
background-color:white;
opacity:0.6;
color:black;
font-family: 'Roboto', sans-serif;
font-style: italic;
border-radius:20px;
font-size:25px;
a
color:grey;
float:right;
text-decoration:none;
font-style:normal;
padding-right:20px;
a:hover{
background-color:black;
color:white;
border-radius:15px;0
font-size:30px;
padding-left:10px;
body
  background-image: url("https://images.unsplash.com/photo-1532883130016-
f3d311140ba8?ixid=MXwxMjA3fDB8MHxwaG90by1wYWdlfHx8fGVufDB8fHw\%3D\&ixlib=rb-1.2.1\&auto=format\&fit=crop\&w=1050\&q=80");\\
  background-size: cover;
p
```

```
color:white;
font-style:italic;
font-size:30px;
}
</style>
</head>

color:white;
font-size:30px;
}
</div class="header">
</div style="width:50%;float:left;font-size:2vw;text-align:left;color:black; padding-top:1%;padding-left:5%;">AI based Natural disaster analysis</div>
</div class="topnav-right"style="padding-top:0.5%;">
</div class="topnav-right"style="padding-top:0.5%;">
</div href="/home">Home</d>
</div class="active" href="/upload">Open Web Cam</a>
</div>
</div>
</div>
</body>
```







PYTHON FLASK FILE:

import the necessary packages
from flask import Flask, render_template, request, redirect, url_for
Flask-It is our framework which we are going to use to run/serve our application.
request-for accessing file which was uploaded by the user on our application.
#import operator
import cv2 # opencv library
from tensorflow.keras.models import load_model # to load our trained model
import numpy as np
#import os
from werkzeug.utils import secure_filename
#from playsound import playsound
#from gtts import gTTS

```
app = Flask(__name___, template_folder="templates") # initializing a flask app
# Loading the model
model = load_model('disaster.h5')
print("Loaded model from disk")
# app=Flask(_name_,template_folder="templates")
@app.route('/', methods=['GET'])
def index():
  return render_template('home.html')
@app.route('/home', methods=['GET'])
def home():
  return render_template('home.html')
@app.route('/intro', methods=['GET'])
def about():
  return render_template('intro.html')
@app.route('/upload', methods=['GET', 'POST'])
def predict():
  # Get a reference to webcam #0 (the default one)
  print("[INFO] starting video stream...")
  vs = cv2.VideoCapture(0)
  #writer = None
  (W, H) = (None, None)
  # loop over frames from the video file stream
  while True:
     # read the next frame from the file
     (grabbed, frame) = vs.read()
```

```
# if the frame was not grabbed, then we have reached the end
  # of the stream
  if not grabbed:
    break
    # if the frame dimensions are empty, grab them
  if W is None or H is None:
    (H, W) = frame.shape[:2]
    # clone the output frame, then convert it from BGR to RGB
    # ordering and resize the frame to a fixed 64x64
  output = frame.copy()
  # print("apple")
  frame = cv2.cvtColor(frame, cv2.COLOR BGR2RGB)
  frame = cv2.resize(frame, (64, 64))
  #frame = frame.astype("float32")
  x = np.expand\_dims(frame, axis=0)
  result = np.argmax(model.predict(x), axis=-1)
  index = ['Cyclone', 'Earthquake', 'Flood', 'Wildfire']
  result = str(index[result[0]])
  # print(result)
  # result=result.tolist()
  cv2.putText(output, "activity: {}".format(result), (10, 120), cv2.FONT_HERSHEY_PLAIN,
         1, (0, 255, 255), 1)
  #playaudio("Emergency it is a disaster")
  cv2.imshow("Output", output)
  key = cv2.waitKey(1) & 0xFF
  # if the `q` key was pressed, break from the loop
  if key == ord("q"):
    break
# release the file pointers
print("[INFO] cleaning up...")
vs.release()
cv2.destroyAllWindows()
```

```
return render_template("upload.html")
@app.route('/file', methods=['POST', 'GET'])
def video():
  if request.method == 'POST':
     uploaded_file = request.files['file1']
     if uploaded_file.filename != ":
       vid_name = str(uploaded_file.filename)
       print(vid_name + "Uploaded_Succesfully")
       uploaded file.save(uploaded file.filename)
       vs = cv2.VideoCapture(vid_name)
       if (vs.isOpened() == False):
         print("Error opening video stream or file")
       (W, H) = (None, None)
       while True:
         (grabbed, frame) = vs.read()
         if not grabbed:
            break
         if W is None or H is None:
            (H, W) = frame.shape[:2]
         output = frame.copy()
         frame = cv2.cvtColor(frame, cv2.COLOR_BGR2RGB)
         frame = cv2.resize(frame, (64, 64))
         x = np.expand\_dims(frame, axis=0)
         result = np.argmax(model.predict(x), axis=-1)
         index = ['Cyclone', 'Earthquake', 'Flood', 'Wildfire']
         result = str(index[result[0]])
         cv2.putText(output, "activity: {}".format(
            result), (10, 120), cv2.FONT_HERSHEY_PLAIN, 1, (0, 255, 255), 1)
         cv2.imshow("Output", output)
         key = cv2.waitKey(1) & 0xFF
         if key == ord("q"):
            break
       print("[INFO] cleaning up...")
```

vs.release()

```
cv2.destroyAllWindows()
  return render_template("file.html")
@app.route('/image', methods=['POST', 'GET'])
def image():
  resulttext = "
  if request.method == 'POST':
    uploaded_file = request.files['imgfile']
    if uploaded_file.filename != ":
       img_name = str(uploaded_file.filename)
       print(img_name + "Uploaded Succesfully")
       uploaded_file.save(uploaded_file.filename)
       from tensorflow.keras.models import load_model
       from keras.preprocessing import image
       model = load_model("disaster.h5") # loading the model for testing
       img = image.load_img(img_name, grayscale=False,
                   target_size=(64, 64)) # loading of the image
       x = image.img_to_array(img) # image to array
       x = np.expand\_dims(x, axis=0) # changing the shape
       pred = model.predict_classes(x) # predicting the classes
       index = ['Cyclone', 'Earthquake', 'Flood', 'Wildfire']
       result = index[pred[0]]
       result ext = result
  return render template('image.html', result text=resulttext)
if name == ' main ':
  app.run(host='127.0.0.1', port=8000, debug=True)
Submitted By,
S.Jeyashree(9517201906019)
                                       J.Kavipriya(9517201906020)
K.Kaviya Varshini(9517201906021)
                                       G.Lakshmi Priya(9517201906023)
```