

DEVELOPING A FLIGHT DELAY PREDICTION MODEL USING MACHINE LEARNING

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APPLICATION BUILDING USING HTML:

```
<html>

  <head>

    <!-- CSS only -->

    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min
.css" rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9B
v1WTRi" crossorigin="anonymous">

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

  </head>

  <body>

    <center>

      <h1>FLIGHT DELAY PREDICTION</h1>

      <div id="form">

        <form class="form-group" action="/prediction" method="post" >

          <div class="row">

            <div class="col-md-12">

              <div class="row ">

                <p class="fw-bolder col-6">ENTER THE FLIGHT
NUMBER : </p>
```

```
        <input class="form-control-lg form-control-inline form-  
control " type="text" name="name" />  
    </div>
```

```
<div class="row input-feilds">
  <p class="fw-bolder col-6">MONTH : </p>
  <input class="form-control-lg form-control-inline form-
control" type="text" name="month" />
</div>
```

```
<div class="row input-feilds">
  <p class="fw-bolder col-6">DAY OF MONTH : </p>
  <input class="form-control-lg form-control-inline form-
control" type="text" name="dayofmonth" />
</div>
```

```
<div class="row input-feilds">
  <p class="fw-bolder col-6">DAY OF WEEK : </p>
  <input class="form-control-lg form-control-inline form-
control" class="form-control-inline form-control" type="text"
name="dayofweek" />
</div>
```

```
<div class="row input-feilds">
  <p class="fw-bolder col-6">ORIGIN : </p>
  <select class="form-select form-select-lg form-control-inline "
name="origin">
    <option value="atl">ATL - Hartsfield-Jackson Atlanta
International</option>
    <option value="dtw">DTW - Detroit Metropolitan Wayne
County </option>
    <option value="sea">SEA - Seattle-Tacoma
International</option>
    <option value="msp">MSP - Minneapolis–Saint Paul
International</option>
```

```

        <option value="jfk">JFK - John F. Kennedy
International</option>
    </select>
</div>
<div class="row input-feilds">
    <p class="fw-bolder col-6">DESTINATION : </p>
    <select class="form-select form-select-lg form-control-inline"
name="destination">
        <option value="atl">ATL - Hartsfield-Jackson Atlanta
International</option>
        <option value="dtw">DTW - Detroit Metropolitan Wayne
County </option>
        <option value="sea">SEA - Seattle-Tacoma
International</option>
        <option value="msp">MSP - Minneapolis–Saint Paul
International</option>
        <option value="jfk">JFK - John F. Kennedy
International</option>
    </select>
</div>
<h2 class="flight-time">ENTER THE FLIGHT TIMINGS</h2>
<div class="row time input-feilds " >
    <p class="fw-bolder sdt">SCHEDULED DEPARTURE TIME :
</p>
    <div class="col-sm-6 time2">
        <label class="fw-bolder">Hour : </label>
        <input placeholder="00" class="form-control-lg form-control-
inline form-control" type="text" name="depthr" />
    </div>
    <div class="col-sm-6">
        <label class="fw-bolder">Minutes : </label>

```

```
<input placeholder="00" class="form-control-lg form-control-
inline form-control" type="text" name="deptmin" />
```

```
</div>
```

```
</div>
```

```
<div class="row time">
```

```
<p class="fw-bolder">ACTUAL DEPARTURE TIME : </p>
```

```
<div class="col-sm-6 time2">
```

```
<label class="fw-bolder">Hour : </label>
```

```
<input placeholder="00" class="form-control-lg form-control-
inline form-control" type="text" name="actdepthr" />
```

```
</div>
```

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

```
<label class="fw-bolder">Minutes : </label>
```

```
<input placeholder="00" class="form-control-lg form-control-
inline form-control" type="text" name="actdeptmin" />
```

```
</div>
```

```
</div>
```

```
<div class="row time">
```

```
<p class="fw-bolder">SCHEDULED ARRIVAL TIME : </p>
```

```
<div class="col-sm-6 time2">
```

```
<label class="fw-bolder">Hour : </label>
```

```
<input placeholder="00" class="form-control-lg form-control-
inline form-control" type="text" name="arrtimehr" />
```

```
</div>
```

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

```
<label class="fw-bolder">Minutes : </label>
```

```
<input placeholder="00" class="form-control-lg form-control-
inline form-control" type="text" name="arrtimemin" />
```

```

        </div>
    </div>
    <button type="submit" class="input-feilds btn btn-outline-light
btn-lg">PREDICT</button>
    </div>
</div>
</form>
<p>{{y}}</p>
</div>
</center>

</body>
</html>

```

RESULT PAGE HTML :

```

<html>
  <head>
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min
.css" rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9B
v1WTRi" crossorigin="anonymous">
    <link rel="stylesheet"
href="{{url_for('static',filename='css/main.css')}}">
  </head>
  <body>
    <center>
      <div id="form" class="result">
        <h1 class="result-text">{{y}}</h1>
      </div>
    </center>
  </body>
</html>

```

```
</center>
</body>
</html>
```

STYLE.CSS:

```
body{
    background-image:url("cloud.jpg");
    background-repeat:no-repeat ;
    background-size: cover;
    background-position: center;
}
```

```
h1{
    color:white;
    font-size: 70px;
    margin-top: 30px;
    margin-bottom: 30px;
}
```

```
p{
    color:white;
    font-size: 25px;
}
```

```
#form{

    border:5px outset white ;
```

```
border-bottom: 3px solid white;
width:fit-content;
background-image:url("flights.jpg");
background-repeat:no-repeat ;
background-size: cover;
background-position: center;
margin-bottom: 30px;
padding: 20px;
}
```

```
label{
    color:white
}
```

```
.time{
    margin: 10px;
}
```

```
.time2{
    margin-bottom: 4px;
}
```

```
.form-control-inline{
    min-width: 0;
    width: auto;
    display: inline;
}
```

```
.input-feilds{
```



```
    margin-top: 30px;  
    padding: 0px  
}
```

```
label{  
    font-size: 20px;  
  
}
```

```
.result{  
    margin-top: 250px;  
}
```

```
.result-text{  
    font-size: 100px;  
    color: rgb(255, 255, 255)  
}
```

```
.flight-time{  
  
    color: white;  
    font-size: 50px;  
    margin-top: 30px;  
    margin-bottom: 40px;  
}
```