## 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">
              ENTER THE FLIGHT
NUMBER:
```

```
<div class="row input-feilds">
           MONTH : 
           <input class="form-control-lg form-control-inline form-
control" type="text" name="month" />
        </div>
        <div class="row input-feilds">
           DAY OF MONTH : 
          <input class="form-control-lg form-control-inline form-
control" type="text" name="dayofmonth" />
        </div>
        <div class="row input-feilds">
           DAY OF WEEK : 
           <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">
        ORIGIN : 
        <select class="form-select form-select-lg form-control-inline "</pre>
name="origin">
           <option value="alt">ATL - Hartsfield-Jackson Atlanta
International</option>
          <option value="dtw">DTW - Detroit Metropolitan Wayne
County </option>
           <option value="sea">SEA - Seattle-Tacoma
International
          <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">
        DESTINATION : 
         <select class="form-select form-select-lg form-control-inline"</pre>
name="destination">
           <option value="alt">ATL - Hartsfield-Jackson Atlanta
International
           <option value="dtw">DTW - Detroit Metropolitan Wayne
County </option>
           <option value="sea">SEA - Seattle-Tacoma
International
           <option value="msp">MSP - Minneapolis-Saint Paul
International</option>
           <option value="jfk">JFK - John F. Kennedy
International
         </select>
       </div>
       <h2 class="flight-time">ENTER THE FLIGHT TIMINGS</h2>
       <div class="row time input-feilds" >
         SCHEDULED DEPARTURE TIME :
<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">
         ACTUAL DEPARTURE TIME : 
         <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-</pre>
inline form-control" type="text" name="actdeptmin" />
         </div>
       </div>
       <div class="row time">
         SCHEDULED ARRIVAL TIME : 
         <div class="col-sm-6 time2">
         <label class="fw-bolder">Hour : </label>
         <input placeholder="00" class="form-control-lg form-control-</pre>
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>
        {\{y\}} 
     </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-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5lDxbcnCeuOxjzrPF/et3URy9B
v1WTRi" crossorigin="anonymous">
     k 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>
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;
}
```