Project name	Car resale value prediction
Team ID	PNT2022TMID11620
Sprint number	3

Here we will be developing the web application using the Flask,

The things we have done here are:

1. Created our HTML pages
   a. index.html

```html
<!doctype html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Used Car Price Predict</title>
    <!-- Bootstrap CSS -->
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">
    <!-- Own CSS -->
    <!-- <link rel="stylesheet" href="style.css"> -->
    <style>
    .carousel-item {
    height: 100vh;
    min-height: 350px;
    background: no-repeat center center scroll;
    -webkit-background-size: cover;
    -moz-background-size: cover;
    -o-background-size: cover;
    background-size: cover;
    }
    /* body{
    background-image:url("{{url_for('static',filename='img/img-2.jpg')}}");
     background-image:url("img/img-1.jpg");
    }
    */
</style>
  </head>

  <body>
    <!-- Front page -->
    <nav class="navbar navbar-expand-lg navbar-light bg-light fixed-top">
        <div class="container">
          <a class="navbar-brand" href="#">CAR RESALE PROJECT</a>
          <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-
bs-target="#navbarResponsive" aria-controls="navbarResponsive" aria-expanded="false"
aria-label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
          </button>
```

```html
            <div class="collapse navbar-collapse" id="navbarResponsive">
                <button type="button" class="btn btn-dark ms-auto" data-bs-
toggle="modal" data-bs-target="#cardetails">Predict</button>

            </div>
        </div>
    </nav>

    <header>

        <div id="carouselExampleCaptions" class="carousel slide" data-bs-
ride="carousel">
            <div class="carousel-indicators">
                <button type="button" data-bs-target="#carouselExampleCaptions" data-bs-
slide-to="0" class="active" aria-current="true" aria-label="Slide 1"></button>
                <button type="button" data-bs-target="#carouselExampleCaptions" data-bs-
slide-to="1" aria-label="Slide 2"></button>
            </div>
            <div class="carousel-inner">
                <div class="carousel-item active" style="background-image:
url('{{url_for('static',filename='img/img-1.jpg')}}')"></div>
                <div class="carousel-item" style="background-image:
url('{{url_for('static',filename='img/img-2.jpg')}}')"></div>
            </div>
            <button class="carousel-control-prev" type="button" data-bs-
target="#carouselExampleCaptions" data-bs-slide="prev">
                <span class="carousel-control-prev-icon" aria-hidden="true"></span>
                <span class="visually-hidden">Previous</span>
            </button>
            <button class="carousel-control-next" type="button" data-bs-
target="#carouselExampleCaptions" data-bs-slide="next">
                <span class="carousel-control-next-icon" aria-hidden="true"></span>
                <span class="visually-hidden">Next</span>
            </button>
        </div>
    </header>

    <!-- modal code -->
    <div class="modal fade" id="cardetails" tabindex="-1" aria-
labelledby="exampleModalLabel" aria-hidden="true">
        <div class="modal-dialog">
            <div class="modal-content">
                <div class="modal-header">
                    <h1 class="modal-title fs-5" id="exampleModalLabel">New message</h1>
                    <button type="button" class="btn-close" data-bs-dismiss="modal" aria-
label="Close"></button>
                </div>
                <div class="modal-body">
                    <!-- FORM-->
                    <form action = "http://127.0.0.1:5000/y_predict", method="GET">
                        <div class="mb-3">
                            <label for="Registration Year" class="col-form-label">Registration
Year</label>
```

```html
                        <input type="text" class="form-control" id="Registration Year"
name="regyear",maxlength=50>
                    </div>
                    <div class="mb-3">
                        <label for="regmonth" class="col-form-label">Registration Month
(Enter the month number)</label>
                        <input class="form-control",type=text, id="regmonth",name="regmonth">
                        <!--
                        <option value=""></option>
                        <option value=1>Jan</option>
                        <option value=2>Feb</option>
                        <option value=3>Mar</option>
                        <option value=4>Apr</option>
                        <option value=5>May</option>
                        <option value=6>Jun</option>
                        <option value=7>July</option>
                        <option value=8>Aug</option>
                        <option value=9>Sep</option>
                        <option value=10>Oct</option>
                        <option value=11>Nov</option>
                        <option value=12>Dec</option>
                      </select> -->
                    </div>
                    <div class="mb-3">
                        <label for="Power of car" class="col-form-label">Power of
car</label>
                        <input type="text" class="form-control" id="powerps"
name="powerps",maxlength=5>
                    </div>

                    <div class="mb-3">
                        <label for="Kilometer the car driven" class="col-form-
label">Kilometer the car driven</label>
                        <input type="text" class="form-control" id="kms"
name="kms",maxlength=7>
                    </div>

                    <div class="mb-2">
                        <label for="Gear Type" class="col-form-label">Gear Type</label>
                    </div>
                    <div class="form-check form-check-inline">
                        <input class="form-check-input" type="radio" name="gearbox"
id="gearbox" value="Manual">
                        <label class="form-check-label" for="Manual">Manual</label>
                    </div>
                    <div class="form-check form-check-inline">
                        <input class="form-check-input" type="radio" name="gearbox"
id="gearbox" value="Automatic">
                        <label class="form-check-label" for="Autoamatic">Automatic</label>
                    </div>
                    <div class="form-check form-check-inline">
                        <input class="form-check-input" type="radio" name="gearbox"
id="gearbox" value="Not declared">
                        <label class="form-check-label" for="ND">Not Declared</label>
```

```html
                </div>

                <div class="mb-2">
                    <label for="Gear Type" class="col-form-label">Car is damaged or
repaired</label>
                </div>
                <div class="form-check form-check-inline">
                    <input class="form-check-input" type="radio" name="dam" id="dam"
value="Yes">
                    <label class="form-check-label" for="Manual">Yes</label>
                </div>
                <div class="form-check form-check-inline">
                    <input class="form-check-input" type="radio" name="dam" id="dam"
value="No">
                    <label class="form-check-label" for="Autoamatic">No</label>
                </div>
                <div class="mb-3">
                    <label for="Model Type" class="col-form-label">Model Type</label>
                    <select class="form-select" aria-label="Default select
example",id="model",name="model">
                        <option value=""></option>
                        <option value="transporter">Transporter </option>
                        <option value="punto">Punto </option>
                        <option value="e_klasse">E Klasse </option>
                        <option value="clio">Clio </option>
                        <option value="kadett">Kadett </option>
                        <option value="kangoo">Kangoo </option>
                        <option value="corsa">Corsa </option>
                        <option value="one">One </option>
                        <option value="fortwo">Fortwo </option>
                        <option value="1er">1er </option>
                        <option value="b_klasse">B Klasse </option>
                        <option value="focus">Focus </option>
                        <option value="tt">Tt </option>
                        <option value="a6">A6 </option>
                        <option value="impreza">Impreza </option>
                        <option value="vectra">Vectra </option>
                        <option value="berlingo">Berlingo </option>
                        <option value="80">80 </option>
                        <option value="m_klasse">M Klasse </option>
                        <option value="tiguan">Tiguan </option>
                        <option value="i_reihe">I Reihe </option>
                        <option value="espace">Espace </option>
                        <option value="sharan">Sharan </option>
                        <option value="6_reihe">6 Reihe </option>
                        <option value="panda">Panda </option>
                        <option value="up">Up </option>
                        <option value="seicento">Seicento </option>
                        <option value="ceed">Ceed </option>
                        <option value="5_reihe">5 Reihe </option>
                        <option value="yeti">Yeti </option>
                        <option value="octavia">Octavia </option>
                        <option value="mii">Mii </option>
                        <option value="rx_reihe">Rx Reihe </option>
```

```html
<option value="6er">6er </option>
<option value="modus">Modus </option>
<option value="fox">Fox </option>
<option value="matiz">Matiz </option>
<option value="beetle">Beetle </option>
<option value="jazz">Jazz </option>
<option value="omega">Omega </option>
<option value="slk">Slk </option>
<option value="7er">7er </option>
<option value="80">80 </option>
<option value="147">147 </option>
<option value="glk">Glk </option>
<option value="100">100 </option>
<option value="z_reihe">Z Reihe </option>
<option value="sportage">Sportage </option>
<option value="sorento">Sorento </option>
<option value="v40">V40 </option>
<option value="5er">5er </option>
<option value="ibiza">Ibiza </option>
<option value="3er">3er </option>
<option value="mustang">Mustang </option>
<option value="signum">Signum </option>
<option value="astra">Astra </option>
<option value="a8">A8 </option>
<option value="jetta">Jetta </option>
<option value="fiesta">Fiesta </option>
<option value="c_klasse">C Klasse </option>
<option value="micra">Micra </option>
<option value="vito">Vito </option>
<option value="sprinter">Sprinter </option>
<option value="156">156 </option>
<option value="escort">Escort </option>
<option value="x_type">X Type </option>
<option value="5_reihe">5 Reihe </option>
<option value="ducato">Ducato </option>
<option value="s_type">S Type </option>
<option value="x_trail">X Trail </option>
<option value="toledo">Toledo </option>
<option value="altea">Altea </option>
<option value="7er">7er </option>
<option value="voyager">Voyager </option>
<option value="calibra">Calibra </option>
<option value="bravo">Bravo </option>
<option value="range_rover">Range Rover </option>
<option value="4_reihe">4 Reihe </option>
<option value="5er">5er </option>
<option value="6_reihe">6 Reihe </option>
<option value="legacy">Legacy </option>
<option value="pajero">Pajero </option>
<option value="auris">Auris </option>
<option value="niva">Niva </option>
<option value="5_reihe">5 Reihe </option>
<option value="s60">S60 </option>
<option value="nubira">Nubira </option>
```

```html
<option value="vivaro">Vivaro </option>
<option value="g_klasse">G Klasse </option>
<option value="lodgy">Lodgy </option>
<option value="850">850 </option>
<option value="serie_2">Serie 2 </option>
<option value="6er">6er </option>
<option value="charade">Charade </option>
<option value="croma">Croma </option>
<option value="outlander">Outlander </option>
<option value="gl">Gl </option>
<option value="doblo">Doblo </option>
<option value="musa">Musa </option>
<option value="amarok">Amarok </option>
<option value="156">156 </option>
<option value="move">Move </option>
<option value="9000">9000 </option>
<option value="v60">V60 </option>
<option value="145">145 </option>
<option value="aveo">Aveo </option>
<option value="200">200 </option>
<option value="300c">300c </option>
<option value="b_max">B Max </option>
<option value="delta">Delta </option>
<option value="terios">Terios </option>
<option value="rangerover">RangeRover </option>
<option value="90">90 </option>
<option value="materia">Materia </option>
<option value="kalina">Kalina </option>
<option value="elefantino">Elefantino </option>
<option value="i3">I3 </option>
<option value="kappa">Kappa </option>
<option value="serie_3">Serie 3 </option>
<option value="48429">48429 </option>
<option value="serie_1">Serie 1 </option>
<option value="discovery_sport">Discovery Sport </option>
<option value="antara">Antara </option>
<option value="tucson">Tucson </option>
<option value="q7">Q7 </option>
<option value="citigo">Citigo </option>
<option value="jimny">Jimny </option>
<option value="cx_reihe">Cx Reihe </option>
<option value="wrangler">Wrangler </option>
<option value="lybra">Lybra </option>
<option value="range_rover_sport">Range Rover Sport </option>
<option value="lancer">Lancer </option>
<option value="159">159 </option>
<option value="freelander">Freelander </option>
<option value="captiva">Captiva </option>
<option value="c2">C2 </option>
<option value="500">500 </option>
<option value="range_rover_evoque">Range Rover Evoque </option>
<option value="sandero">Sandero </option>
<option value="note">Note </option>
<option value="900">900 </option>
```

```html
<option value="147">147 </option>
<option value="grand">Grand </option>
<option value="fabia">Fabia </option>
<option value="3er">3er </option>
<option value="2_reihe">2 Reihe </option>
<option value="andere">Andere </option>
<option value="c_max">C Max </option>
<option value="3_reihe">3 Reihe </option>
<option value="passat">Passat </option>
<option value="navara">Navara </option>
<option value="ka">Ka </option>
<option value="forester">Forester </option>
<option value="xc_reihe">Xc Reihe </option>
<option value="scenic">Scenic </option>
<option value="a4">A4 </option>
<option value="a1">A1 </option>
<option value="insignia">Insignia </option>
<option value="combo">Combo </option>
<option value="eos">Eos </option>
<option value="touran">Touran </option>
<option value="getz">Getz </option>
<option value="a3">A3 </option>
<option value="almera">Almera </option>
<option value="megane">Megane </option>
<option value="7er">7er </option>
<option value="1er">1er </option>
<option value="lupo">Lupo </option>
<option value="r19">R19 </option>
<option value="zafira">Zafira </option>
<option value="caddy">Caddy </option>
<option value="2_reihe">2 Reihe </option>
<option value="mondeo">Mondeo </option>
<option value="cordoba">Cordoba </option>
<option value="colt">Colt </option>
<option value="c1">C1 </option>
<option value="rio">Rio </option>
<option value="touareg">Touareg </option>
<option value="logan">Logan </option>
<option value="spider">Spider </option>
<option value="cuore">Cuore </option>
<option value="s_max">S Max </option>
<option value="a2">A2 </option>
<option value="x_reihe">X Reihe </option>
<option value="a5">A5 </option>
<option value="galaxy">Galaxy </option>
<option value="c3">C3 </option>
<option value="viano">Viano </option>
<option value="s_klasse">S Klasse </option>
<option value="1_reihe">1 Reihe </option>
<option value="avensis">Avensis </option>
<option value="sl">Sl </option>
<option value="roomster">Roomster </option>
<option value="q5">Q5 </option>
<option value="kaefer">Kaefer </option>
```

```html
<option value="santa">Santa </option>
<option value="cooper">Cooper </option>
<option value="leon">Leon </option>
<option value="4_reihe">4 Reihe </option>
<option value="500">500 </option>
<option value="laguna">Laguna </option>
<option value="ptcruiser">Ptcruiser </option>
<option value="clk">Clk </option>
<option value="primera">Primera </option>
<option value="exeo">Exeo </option>
<option value="159">159 </option>
<option value="transit">Transit </option>
<option value="juke">Juke </option>
<option value="qashqai">Qashqai </option>
<option value="carisma">Carisma </option>
<option value="accord">Accord </option>
<option value="corolla">Corolla </option>
<option value="lanos">Lanos </option>
<option value="phaeton">Phaeton </option>
<option value="boxster">Boxster </option>
<option value="verso">Verso </option>
<option value="swift">Swift </option>
<option value="rav">Rav </option>
<option value="kuga">Kuga </option>
<option value="picanto">Picanto </option>
<option value="kalos">Kalos </option>
<option value="superb">Superb </option>
<option value="stilo">Stilo </option>
<option value="alhambra">Alhambra </option>
<option value="911">911 </option>
<option value="mx_reihe">Mx Reihe </option>
<option value="m_reihe">M Reihe </option>
<option value="roadster">Roadster </option>
<option value="ypsilon">Ypsilon </option>
<option value="cayenne">Cayenne </option>
<option value="galant">Galant </option>
<option value="justy">Justy </option>
<option value="90">90 </option>
<option value="sirion">Sirion </option>
<option value="crossfire">Crossfire </option>
<option value="6_reihe">6 Reihe </option>
<option value="agila">Agila </option>
<option value="duster">Duster </option>
<option value="cr_reihe">Cr Reihe </option>
<option value="v50">V50 </option>
<option value="discovery">Discovery </option>
<option value="c_reihe">C Reihe </option>
<option value="v_klasse">V Klasse </option>
<option value="yaris">Yaris </option>
<option value="c5">C5 </option>
<option value="aygo">Aygo </option>
<option value="cc">Cc </option>
<option value="carnival">Carnival </option>
<option value="fusion">Fusion </option>
```

```html
                        <option value="bora">Bora </option>
                        <option value="forfour">Forfour </option>
                        <option value="100">100 </option>
                        <option value="cl">Cl </option>
                        <option value="tigra">Tigra </option>
                        <option value="156">156 </option>
                        <option value="300c">300c </option>
                        <option value="100">100 </option>
                        <option value="147">147 </option>
                        <option value="q3">Q3 </option>
                        <option value="spark">Spark </option>
                        <option value="v70">V70 </option>
                        <option value="defender">Defender </option>
                        <option value="cherokee">Cherokee </option>
                        <option value="clubman">Clubman </option>
                        <option value="samara">Samara </option>
                        <option value="2_reihe">2 Reihe </option>
                        <option value="1er">1er </option>
                        <option value="3er">3er </option>
                        <option value="601">601 </option>
                        <option value="3_reihe">3 Reihe </option>
                        <option value="polo">Polo </option>
                        <option value="twingo">Twingo </option>
                        <option value="a_klasse">A klasse </option>
                        <option value="scirocco">Scirocco </option>
                        <option value="5er">5er </option>
                        <option value="meriva">Meriva </option>
                        <option value="arosa">Arosa </option>
                        <option value="c4">C4 </option>
                        <option value="civic">Civic </option>

                    </select>
                </div>
                <div class="mb-3">
                    <label for="Brand" class="col-form-label">Brand</label>
                    <select class="form-select" aria-label="Default select
example",id="brand",name="brand">
                        <option value=""></option>
                        <option value="mini">Mini </option>
                        <option value="smart">Smart </option>
                        <option value="hyundai">Hyundai </option>
                        <option value="sonstige_autos">Sonstige Autos </option>
                        <option value="alfa_romeo">Alfa Romeo </option>
                        <option value="subaru">Subaru </option>
                        <option value="volvo">Volvo </option>
                        <option value="mitsubishi">Mitsubishi </option>
                        <option value="kia">Kia </option>
                        <option value="suzuki">Suzuki </option>
                        <option value="lancia">Lancia </option>
                        <option value="porsche">Porsche </option>
                        <option value="toyota">Toyota </option>
                        <option value="chevrolet">Chevrolet </option>
                        <option value="dacia">Dacia </option>
                        <option value="daihatsu">Daihatsu </option>
```

```html
                <option value="trabant">Trabant </option>
                <option value="saab">Saab </option>
                <option value="chrysler">Chrysler </option>
                <option value="jaguar">Jaguar </option>
                <option value="daewoo">Daewoo </option>
                <option value="rover">Rover </option>
                <option value="land_rover">Land Rover </option>
                <option value="lada">Lada </option>
                <option value="volkswagen">Volkswagen </option>
                <option value="audi">Audi </option>
                <option value="peugeot">Peugeot </option>
                <option value="ford">Ford </option>
                <option value="mazda">Mazda </option>
                <option value="nissan">Nissan </option>
                <option value="renault">Renault </option>
                <option value="mercedes_benz">Mercedes Benz </option>
                <option value="opel">Opel </option>
                <option value="seat">Seat </option>
                <option value="citroen">Citroen </option>
                <option value="jeep">Jeep </option>
                <option value="skoda">Skoda </option>
                <option value="bmw">Bmw </option>
                <option value="honda">Honda </option>
                <option value="fiat">Fiat </option>
              </select>
          </div>
          <div class="mb-3">
            <label for="Fuel Type" class="col-form-label">Fuel type</label>
            <select class="form-select" aria-label="Default select
example",id="fuel",name="fuel">
                <option value=""></option>
                <option value="petrol"> Petrol </option>
                <option value="diesel"> Diesel </option>
                <option value="hybrid">Hybrid </option>
                <option value="lpg">LPG </option>
                <option value="cng">CNG </option>
                <option value="electric">Electric </option>
                <option value="others">Others </option>
                <option value="not-declared"> Not Declared </option>

              </select>
          </div>
          <div class="mb-3">
            <label for="Vehicle Type" class="col-form-label">Vehicle
type</label>
            <select class="form-select" aria-label="Default select
example",id="vehicletype",name="vehicletype">
                <option value=""></option>
                <option value="kleinwagen">Kleinwagen </option>
                <option value="limousine">Limousine </option>
                <option value="coupe">Coupe </option>
                <option value="bus">Bus </option>
                <option value="kombi">Kombi </option>
                <option value="andere">Andere </option>
```

```html
                        <option value="volkswagen">Volkswagen </option>
                        <option value="suv">SUV </option>
                        <option value="cabrio">Cabrio </option>

                    </select>
                </div>
                <button type="submit" value="submit">Predict</button>
            </form>
        </div>
        <!-- <div class="modal-footer">

                    <button type="submit" name="submit" class="btn btn-
primary"></button>


            </div> -->
        </div>
      </div>
    </div>
    <!-- Bootstrap JS -->
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min.js"
integrity="sha384-OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
crossorigin="anonymous"></script>
    <!-- OWN JS -->
    <script src="{{url_for('static',filename='script.js')}}"></script>
  </body>
</html>
```

b. predict.html

```html
<!doctype html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Bootstrap demo</title>
    <!-- Bootstrap CSS -->
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">
    <!-- Own CSS -->
    <link rel="stylesheet" href="style.css">

  </head>
  <body>
    <nav class="navbar navbar-expand-lg navbar-light bg-light fixed-top">
        <div class="container">
          <a class="navbar-brand" href="index.html">CAR RESALE PROJECT</a>
          <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-
bs-target="#navbarResponsive" aria-controls="navbarResponsive" aria-expanded="false"
aria-label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
```

```
        </button>
      </div>
    </nav>

    <div class="container mt-5 pt-5">
        <h1 class="text-center">{{msg}}</h1>
    </div>

     <!-- Bootstrap JS -->
     <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min.js"
integrity="sha384-OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
crossorigin="anonymous"></script>
     <!-- OWN JS -->
     <script src="script.js"></script>
  </body>
```

2. Then we created our CSS file for styling.

```
.carousel-item {
    height: 100vh;
    min-height: 350px;
    background: no-repeat center center scroll;
    -webkit-background-size: cover;
    -moz-background-size: cover;
    -o-background-size: cover;
    background-size: cover;
  }
```

3. Now all HTML files must be placed inside the templates folder (if you don't have done create it) and all the other CSS and image files in static

```
∨ FLASK
  ∨ static
    ∨ img
       🖾 img-1.jpg
       🖾 img-2.jpg
    JS script.js
    # style.css
  ∨ templates
    <> index.html
    <> predict.html
  ⊞ autos_preprocessed.csv
  ≡ classesbrand.npy
  ≡ classesfuelType.npy
  ≡ classesgearbox.npy
  ≡ classesmodel.npy
  ≡ classesnotRepairedDamage.npy
  ≡ classesvehicleType.npy
  🐍 resale_flask.py
  ≡ resale_model.sav
```
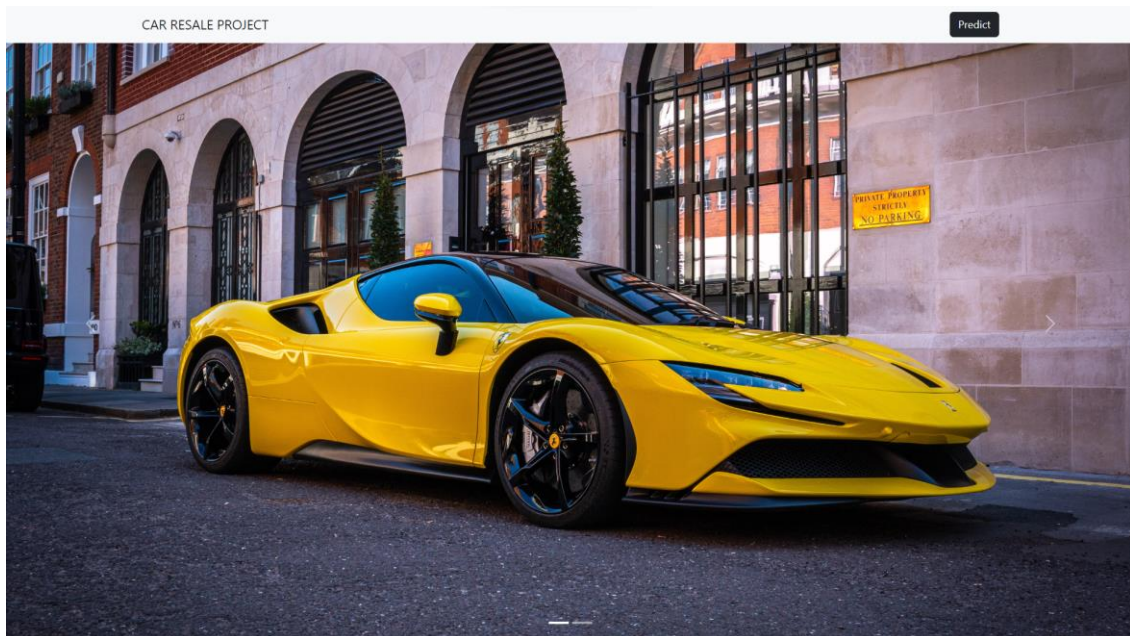
4. Now we create the complete flask application

```python
from flask import Flask, render_template, request
import pandas as pd
import numpy as np
import pickle
from sklearn.preprocessing import LabelEncoder

app = Flask('_name_',template_folder='templates')
filename ='resale_model.sav'
model_rand = pickle.load(open('resale_model.sav','rb'))
@app.route('/')
def index():
    return render_template('index.html')
def y_predict():
    print(request.args.get('regyear'))
    print(type(request.args.get('regyear')))
    regyear= int(request.args.get('regyear'))
    powerps = float(request.args.get('powerps'))
    kms = float(request.args.get('kms'))
    regmonth = request.args.get('regmonth')
    gearbox = request.args.get('gearbox')
    damage = request.args.get('dam')
    brand = request.args.get('brand')
    model = request.args.get('model')
    fuelType = request.args.get('fuel')
    vehicletype = request.args.get('vehicletype')
    new_row = {'yearOfRegistration':regyear, 'powerPS':powerps, 'kilometer': kms,
        'monthofRegistration':regmonth, 'gearbox':gearbox,'model':model,
        'brand':brand, 'fuelType':fuelType,
        'vehicleType':vehicletype}
    new_df = pd.DataFrame(columns = ['vehicleType', 'yearOfRegistration', 'gearbox'
                            'powerPS', 'model', 'kilometer',
'monthofRegistration',"fuelType",'brand', 'notRepairedDamage' ])
    new_df = new_df.append(new_row,ignore_index = True)
    labels = ['gearbox', 'notRepairedDamage', 'model','brand', 'fuelType',
'vehicleType']
    mapper = {}
    for i in labels:
        mapper[i] = LabelEncoder()
        mapper[i].classes_ = np.load(str('classes'+i+'.npy'),allow_pickle=True)
        tr = mapper[i].fit_transform(new_df[i])
        new_df.loc[:,i + '_Labels'] = pd.Series (tr, index=new_df.index)
    new_df.describe()
    labeled = new_df[ ['yearOfRegistration','powerPS','kilometer'
,'monthofRegistration',]+[x+'_Labels' for x in labels]]
    X = labeled.values.tolist()
    y_prediction = model_rand.predict(X)
    return render_template('predict.html',msg = 'The resale value predicted is {:.2f}
$'.format(y_prediction[0]))
app.run(debug=True)
```

Output:


```
* Serving Flask app '_name_'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 114-051-335
```