

Application Building

Team ID	PNT2022TMID35762
Project Name	DEMANDEST – AI POWERED FOOD DEMAND FORECASTER

Home Page:

<!DOCTYPE html>

<html>

<head>

<title>FoodDemandForecaster</title>

<link

href="https://fonts.googleapis.com/css?family=Poppins:200,300,400,500,600,700,800&display=swap" rel="stylesheet">

<link rel="stylesheet" href="../static/css/animate.css">

<link rel="stylesheet" href="../static/css/owl.carousel.min.css">

<link rel="stylesheet" href="../static/css/icomoon.css">

<link rel="stylesheet" href="../static/css/style.css">

</head>

<body class="goto-here">

<div class="py-1 bg-primary">

<div class="container">

<div class="row no-gutters d-flex align-items-start align-items-center px-md-0">

<div class="col-lg-12 d-block">

<div class="row d-flex">

<div class="col-md pr-4 d-flex topper align-items-center">

<div class="icon mr-2 d-flex justify-content-center align-items-center"></div>

+91 1234567089

</div>

<div class="col-md pr-4 d-flex topper align-items-center">

<div class="icon mr-2 d-flex justify-content-center align-items-center"></div>

FDFC@email.com

</div>

```

<div class="col-md-5 pr-4 d-flex topper align-items-center
text-lg-right">
    <span class="text">3-5 Business days delivery
& Free Returns</span>
</div>
</div>
</div>
</div>
</div>
</div>
<nav class="navbar navbar-expand-lg navbar-dark ftco_navbar bg-dark ftco-navbar-light"
id="ftco-navbar">
    <div class="container">
        <a class="navbar-brand" href="/index">FDFC</a>
        <div class="collapse navbar-collapse" id="ftco-nav">
            <ul class="navbar-nav ml-auto">
                <li class="nav-item active"><a href="/index" class="nav-link">Home</a></li>
                <li class="nav-item"><a href="/index1" class="nav-link">Predict</a></li>
            </ul>
        </div>
    </div>
</nav>

<section id="home-section" class="hero">
    <div class="home-slider owl-carousel">
        <div class="slider-item" style="background-image: url(../static/images/bg_1.jpg);">
            <div class="overlay"></div>
            <div class="container">
                <div class="row slider-text justify-content-center align-items-center" data-
scrollax-parent="true">

                    <div class="col-md-12 ftco-animate text-center">
                        <h1 class="mb-2">We serve Fresh Vegetables & Fruits</h1>
                        <h2 class="subheading mb-4">We deliver organic vegetables &
fruits</h2>

```

```
</div>
</div>
</div>
</div>
```

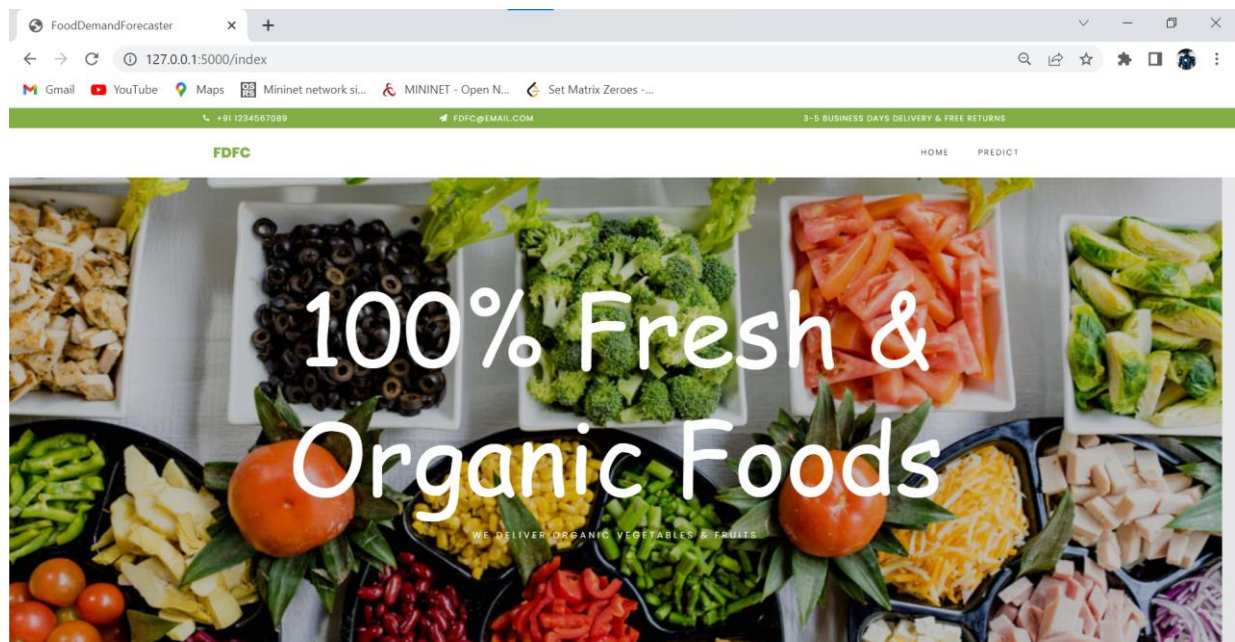
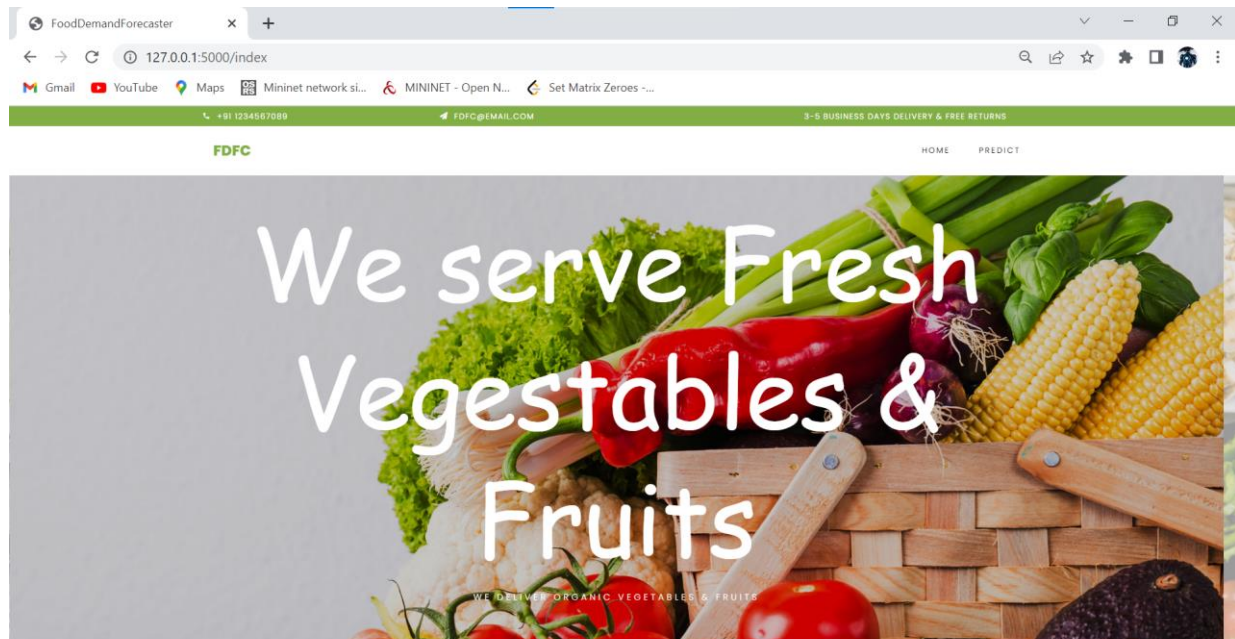
```
<div class="slider-item" style="background-image:
url(../static/images/image_5.jpg);">
  <div class="overlay"></div>
  <div class="container">
    <div class="row slider-text justify-content-center align-items-center" data-
scrollax-parent="true">
```

```
      <div class="col-sm-12 ftco-animate text-center">
        <h1 class="mb-2">100% Fresh & Organic Foods</h1>
        <h2 class="subheading mb-4">We deliver organic vegetables &
fruits</h2>
      </div>
```

```
    </div>
  </div>
</div>
</div>
</section>
```

```
<script src="../static/js/jquery.min.js"></script>
<script src="../static/js/jquery-migrate-3.0.1.min.js"></script>
<script src="../static/js/jquery.waypoints.min.js"></script>
<script src="../static/js/jquery.stellar.min.js"></script>
<script src="../static/js/owl.carousel.min.js"></script>
<script src="../static/js/aos.js"></script>
<script src="../static/js/scrollax.min.js"></script>
<script src="../static/js/main.js"></script>
```

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



Predict Page:

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>FoodDemandForecaster</title>
```

```
    <link
```

```
      href="https://fonts.googleapis.com/css?family=Poppins:200,300,400,500,600,700,800&displa
      y=swap" rel="stylesheet">
```

```
    <link rel="stylesheet" href="../static/css/animate.css">
```

```
    <link rel="stylesheet" href="../static/css/owl.carousel.min.css">
```

```
    <link rel="stylesheet" href="../static/css/icomoon.css">
```

```

<link rel="stylesheet" href="../static/css/style.css">
<link rel="stylesheet" href="../static/css/predictstyle.css">
</head>

<body class="goto-here">
    <div class="py-1 bg-primary">
        <div class="container">
            <div class="row no-gutters d-flex align-items-start align-items-center px-md-0">
                <div class="col-lg-12 d-block">
                    <div class="row d-flex">
                        <div class="col-md pr-4 d-flex top-0 align-items-center">
                            <div class="icon mr-2 d-flex justify-content-center align-items-center"><span class="icon-phone2"></span></div>
                            <span class="text">+91 1234567089</span>
                        </div>
                        <div class="col-md pr-4 d-flex top-0 align-items-center">
                            <div class="icon mr-2 d-flex justify-content-center align-items-center"><span class="icon-paper-plane"></span></div>
                            <span class="text">FDFC@email.com</span>
                        </div>
                        <div class="col-md-5 pr-4 d-flex top-0 align-items-center text-lg-right">
                            <span class="text">3-5 Business days delivery
                            & Free Returns</span>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
</body>

<nav class="navbar navbar-expand-lg navbar-dark ftco_navbar bg-dark ftco-navbar-light" id="ftco-navbar">
    <div class="container">
        <a class="navbar-brand" href="/index">FDFC</a>
        <div class="collapse navbar-collapse" id="ftco-nav">

```

```

<ul class="navbar-nav ml-auto">
  <li class="nav-item active"><a href="/index" class="nav-link">Home</a></li>
  <li class="nav-item"><a href="/index1" class="nav-link">Predict</a></li>
</ul>
</div>
</div>
</nav>

```

```

<section id="home-section" class="hero">
  <div class="home-slider owl-carousel">
    <div class="slider-item" style="background-image: url(../static/images/bg_3.jpg);">
  <div class="center">
    <h1>Demand Forecasting</h1>
    <form action="/predict" method="post">
      <table>
        <tr>
          <th>
            <label style="float:left;">Home Page Featured</label>
            <select id="homepage_featured" name="homepage_featured" class = "ih-
form-control" required style="float:left;">
              <option value="1">Yes</option>
              <option value="0">No</option>
            </select>
          </th>
          <th>
            <label style="float:right;">Emailer For Promotion</label>
            <select id="emailer_for_promotion" name="emailer_for_promotion" class =
"ih-form-control" required style="float:right;">
              <option value="1">Yes</option>
              <option value="0">No</option>
            </select>
          </th>
        </tr>
      </table>
      <div class="txt_field">

```

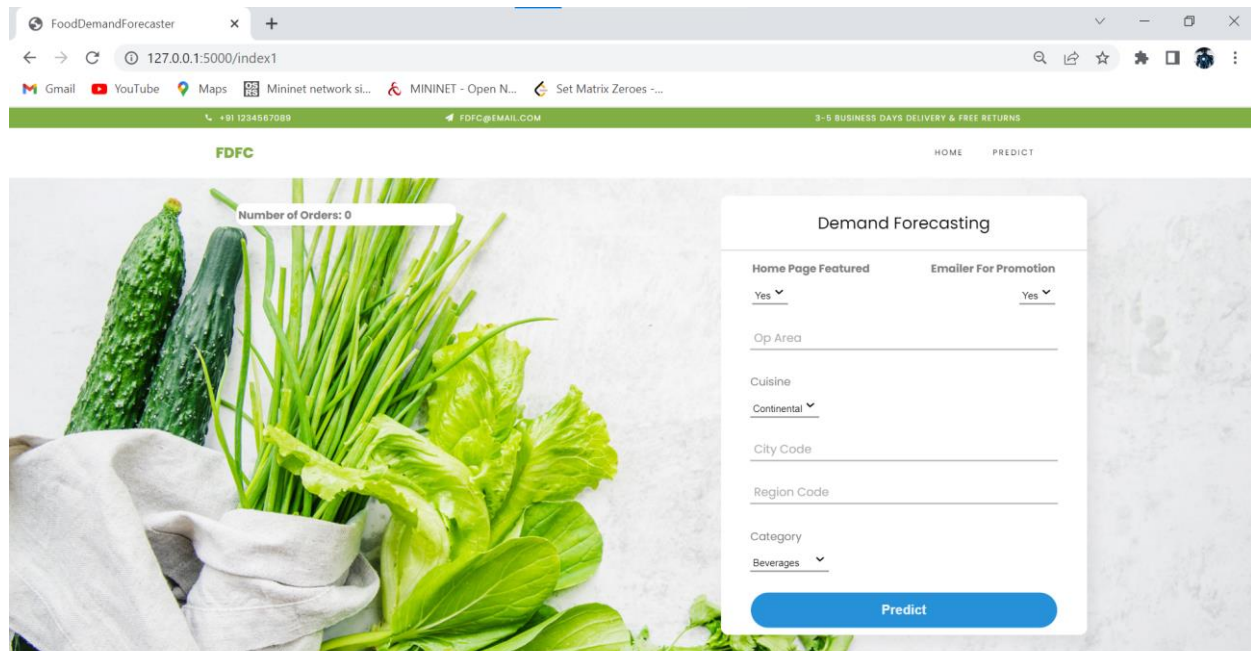
```
<input type="text" required>
<span></span>
<label>Op Area</label>
</div>
<label>Cuisine</label>
  <select id="cuisine" name="cuisine" class = "ih-form-control" required>
    <option value="0">Continental</option>
    <option value="1">Indian</option>
    <option value="2">Italian</option>
    <option value="3">Thai</option>
  </select>
<div class="txt_field">
  <input type="text" name="city_code" required>
  <span></span>
  <label>City Code</label>
</div>
<div class="txt_field">
  <input type="text" name="region_code" required>
  <span></span>
  <label>Region Code</label>
</div>
<label>Category</label>
  <select class = "ih-form-control" id="category" name="category" required>
    <option value="0">Beverages</option>
    <option value="1">Biryani</option>
    <option value="2">Desert</option>
    <option value="3">Extras</option>
    <option value="4">Fish</option>
    <option value="5">Other Snacks</option>
    <option value="6">Pasta</option>
    <option value="7">Pizza</option>
    <option value="8">Rice Bowl</option>
    <option value="9">Salad</option>
    <option value="10">Sandwich</option>
    <option value="11">Seafood</option>
```

```
        <option value="12">Soup</option>
        <option value="13">Starters</option>
    </select>
    <br>
    <input type="submit" value="Predict">
</form>
</div>
<div class="pred center1">
    <table>
        <tr>
            <th> Number of Orders:</th>
            <th> {{ prediction_text }}</th>
        </tr>
    </table>

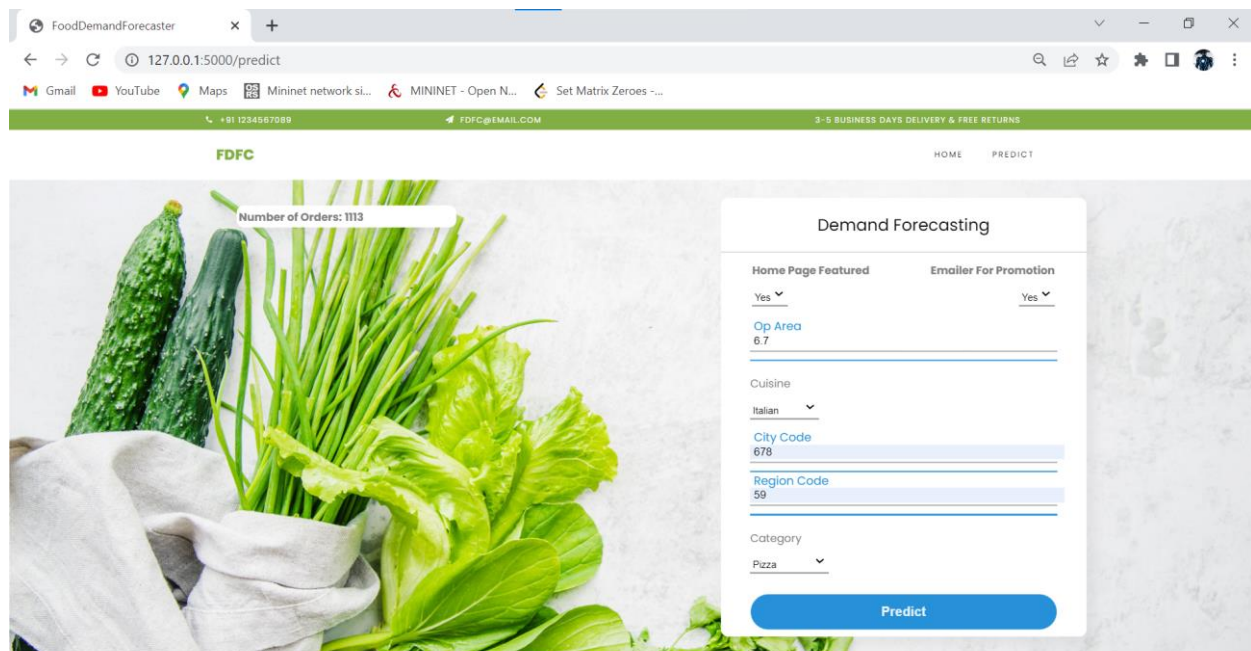
</div>
</div>
</div>
</section>
```

```
<script src="../../static/js/jquery.min.js"></script>
<script src="../../static/js/jquery-migrate-3.0.1.min.js"></script>
<script src="../../static/js/jquery.waypoints.min.js"></script>
<script src="../../static/js/jquery.stellar.min.js"></script>
<script src="../../static/js/owl.carousel.min.js"></script>
<script src="../../static/js/aos.js"></script>
<script src="../../static/js/scrollax.min.js"></script>
<script src="../../static/js/main.js"></script>
```

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

Predicted Result:



Python Flask:

```
# -*- coding: utf-8 -*-
import pandas as pd
import numpy as np
import pickle
import os
from flask import Flask, request, render_template
```

```
app=Flask(__name__,template_folder="templates")
count = 0
```

```
app=Flask(__name__,template_folder="templates")
@app.route('/')
def index():
    return render_template('index.html')
@app.route('/index')
def about():
    return render_template('index.html')
@app.route('/index1')
def page():
    return render_template('predict.html',prediction_text=0)
```

```
@app.route('/predict', methods=['GET', 'POST'])
def predict():
    print("[INFO] loading model...")
    model = pickle.load(open('demand_forecast.pkl', 'rb'))
    input_features = [float(x) for x in request.form.values()]
    features_value = [np.array(input_features)]
    print(features_value)

    features_name = ['homepage_featured', 'emailer_for_promotion', 'op_area',
'cuisine','city_code', 'region_code', 'category']
    prediction = model.predict(features_value)
    output=prediction[0]
    return render_template("predict.html",prediction_text=int(output))
```

```
if __name__ == '__main__':
    app.run(debug=False)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

 flask

```
PS C:\Users\Administrator\Downloads\IBM_CODE> flask run
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000 (Press CTRL+C to quit)
127.0.0.1 - - [23/Nov/2022 15:33:36] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [23/Nov/2022 15:33:36] "GET /static/css/owl.carousel.min.css HTTP/1.1" 304 -
127.0.0.1 - - [23/Nov/2022 15:33:36] "GET /static/css/animate.css HTTP/1.1" 304 -
127.0.0.1 - - [23/Nov/2022 15:33:36] "GET /static/css/style.css HTTP/1.1" 304 -
```