Setting Up the Environment:

Step 1.- Install Python: - Ensure Python is installed on your system. You can download it from (https://www.python.org/).

Step 2.-Set Up a Virtual Environment (Optional but Recommended):**

- Open a terminal or command prompt.
- Create a virtual environment:

  python -m venv myenv

- Activate the virtual environment:
- On Windows:

  myenv\Scripts\activate

- On macOS/Linux:

  source myenv/bin/activate

Step 3 - Install Required Libraries:

- Install the necessary Python libraries given in **installation.txt**

Preparing Data and Models:

Step 4 - Download Data Files:

- Ensure you have the following data files:
  - `data(1).xls`
  - `seasondata.csv`

Step 5 - Ensure you have the following pre-trained models:

- `age_net.caffemodel`
- `gender_net.caffemodel`
- `opencv_face_detector_uint8.pb`
- `model.h5` (The trained recommendation model)

Step 6 - Set Up Django Project:

- Navigate to your Django project directory.

- Run the Django development server:

    python manage.py runserver

- Open a web browser and go to `http://127.0.0.1:8000/` to access the web application.

Using the Web Application:

Step 7 - Home Page:

- Familiarize yourself with the home page where you can navigate to different functionalities.

Step 8 - Using Webcam for Age and Gender Detection:

- Navigate to the webcam section by clicking on camera on

- Ensure your webcam is connected and functioning.

- Start the webcam to allow the system to capture images and predict age and gender.

Step 9 - Uploading Files If necessary:

- Navigate to the upload section.

- Upload the CSV files with the correct format (should include 'Age' and 'Gender' columns).

Step 10 - Viewing Recommendations:

- After uploading the CSV file or using the camera option, navigate to the recommendations section.

- View the recommended products based on the uploaded data.

- Access different recommendation results for various racks (entrance rack, back rack, central rack, left rack, right rack).

Instructions for Interaction:

Step 11 - Start the System:

- Follow the steps to start the Django server and access the web application.

Step 12 - Using the Webcam:

- Start and stop the webcam feed through the web interface as required.

Step 13 - Uploading and Viewing Results:

- Upload files in the specified format.
- Navigate through the web application to view and interpret the recommendations.

Troubleshooting:

Step 14 -Common Issues:

- Ensure all required libraries are installed.
- Verify that the data files and models are correctly placed.
- Ensure the Django server is running properly.

By following these steps, users should be able to interact with the system effectively, using the webcam for age and gender detection and uploading files to get product recommendations.