CA - Prerequisites Document

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TITLE: **Food Ordering Website using Flask .**
INTRODUCTION:

This project is a fully responsive restaurant website built using Flask and MongoDB, allowing users to browse and order food items online. It features secure user authentication, a user-friendly interface, and smooth integration between frontend and backend using Flask and Jinja2. A key highlight is the use of Formspree for handling bulk order requests, which sends order details directly to the admin via email, making it efficient for managing large or custom orders without overloading the database.

SYSTEM REQUIREMENTS:

1. **Operating System:**
   Compatible with Windows 10/11, macOS, or any Linux distribution that supports Python and Node.js

2. **Software Requirements:**
   - Python 3.9 or above
   - Flask Web Framework
   - MongoDB (local or Atlas cloud)
   - Node.js (for JavaScript runtime)
   - Code Editor (e.g., VS Code, Sublime Text)

3. **Hardware Requirements:**
   - Minimum 4 GB RAM (8 GB recommended for smooth development)
   - At least 500 MB of free storage - Dual-core processor or above

4. **Browser Compatibility:**
   - Fully tested on Google Chrome
   - Also compatible with Firefox, Microsoft Edge, and Safari

TECHNOLOGY STACK:

Frontend: Utilizes HTML5, CSS3, and Bootstrap to create a responsive and visually appealing UI, with Jinja2 for dynamic content rendering and seamless integration with Flask.

Backend: Built with Flask to handle backend routing and logic, paired with MongoDB as a NoSQL database to store food items, user data, and order details efficiently.

Authentication: Secure user login and session management are handled using Flask-Login, ensuring users and admins can safely access the website and perform actions like placing orders or managing the menu.

Payment Integration: Integrated Stripe for secure online payment processing, enabling users to pay for their orders safely with credit or debit cards.

SETUP INSTRUCTIONS:

1. Install Node.js and NPM

Download and install Node.js from Node.js Official Website. Verify installation:
node-
v npm
-v

2. Install Python and Flask

Download and install Python from the Python Official Website. Verify installation:
python--version
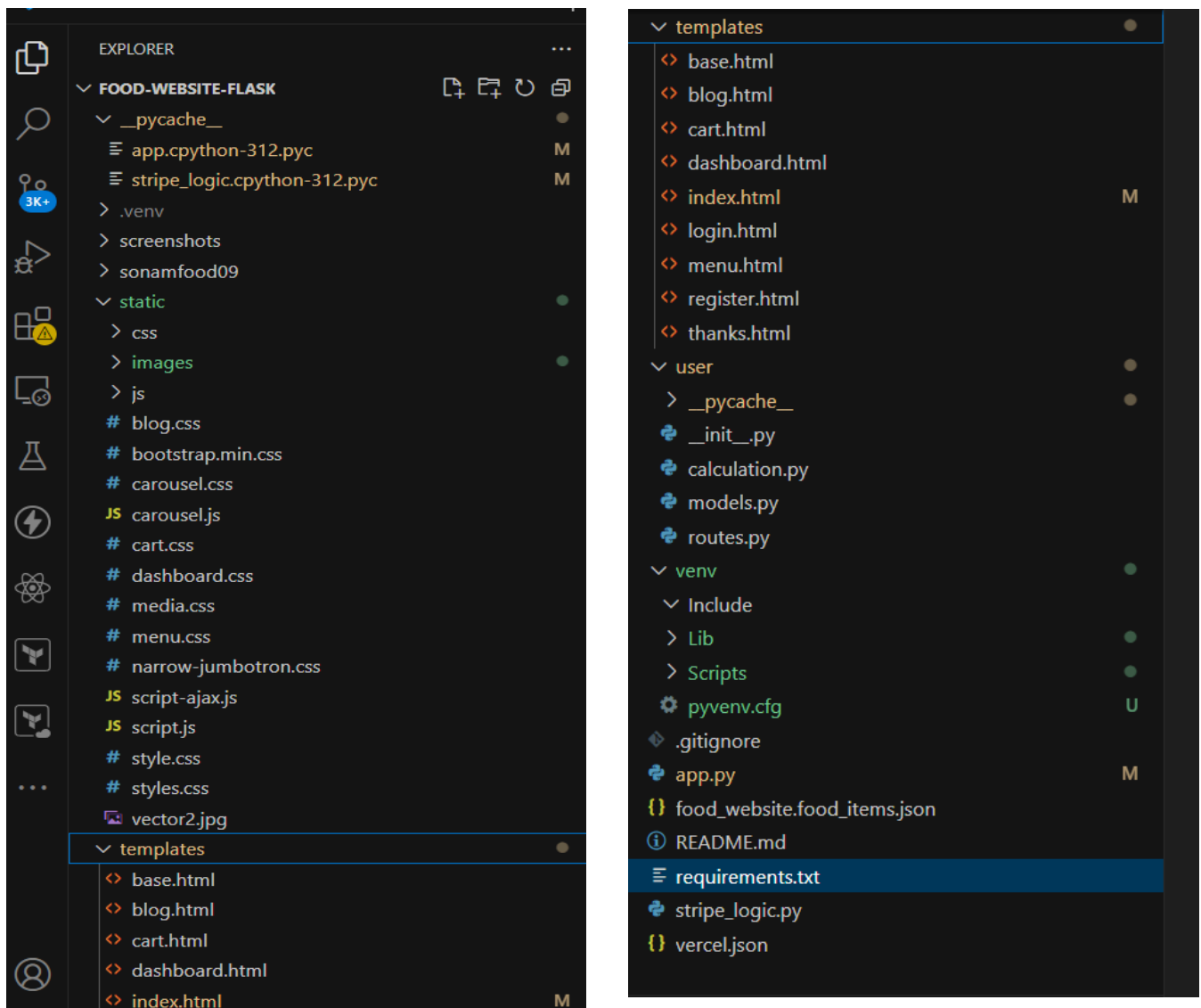pip --version
Install Flask and required dependencies:

pip install flask flask-cors pymongo

3. Setup MongoDB

Use MongoDB Atlas for cloud storage or install MongoDB locally from MongoDB Official Website.

If using a local setup, start MongoDB using: mongod
--dbpath /path/to/data

PROJECT STRUCTURE

CONCLUSION:

This document provides the necessary prerequisites for setting up the Food Delivery project, including hardware/software requirements. Ensuring all dependencies and configurations are correctly set up will help in running the project efficiently.