

CA - Prerequisites Document

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TITLE : Pet Care Management System

INTRODUCTION

The **Pet Care Management System** project is a web app made for veterinary clinics to manage pets, appointments, and medical records easily. It helps vets keep track of pet details, schedule visits, and store treatment history is built using **Html,(TypeScript) for the frontend, Flask for the backend, and MongoDB as the database**. This document outlines the prerequisites required before setting up and running the project successfully.

SYSTEM REQUIREMENTS

1. Hardware Requirements

- **Processor:** Intel Core i5 or higher
- **RAM:** Minimum 8GB (Recommended: 16GB for smooth performance)
- **Storage:** At least 10GB free disk space
- **Operating System:** Windows 10/11, macOS, or Linux

2. Software Requirements

- **Python** (3.11.9 or later) – Required for Flask backend
- **MongoDB Atlas** – Cloud-based NoSQL database
- **VS Code** – Recommended IDE for both frontend and backend development
- **Postman** – For API testing

TECHNOLOGY STACK

1. Frontend

- **HTML**
- **TypeScript** (Strongly typed JavaScript)

2. Backend

- **Flask** (Python-based web framework)
- **Flask-CORS** (To handle cross-origin requests)
- **PyMongo** (For MongoDB connection)

3. Database

- **MongoDB**

SETUP INSTRUCTIONS

1. 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
```

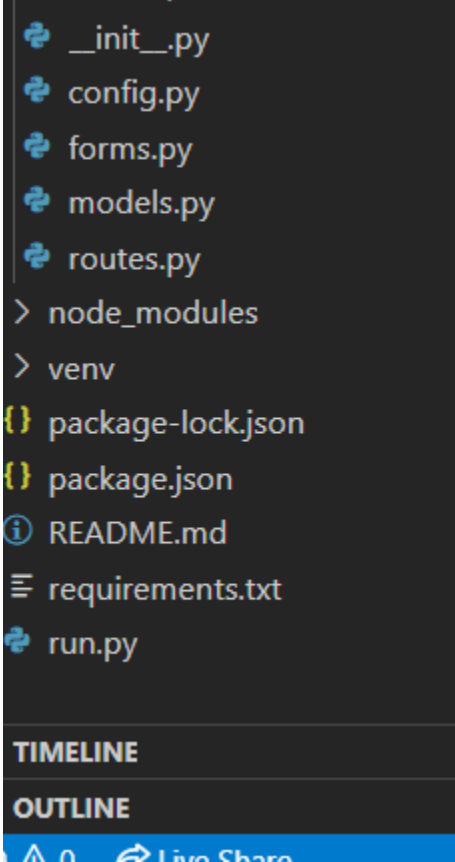
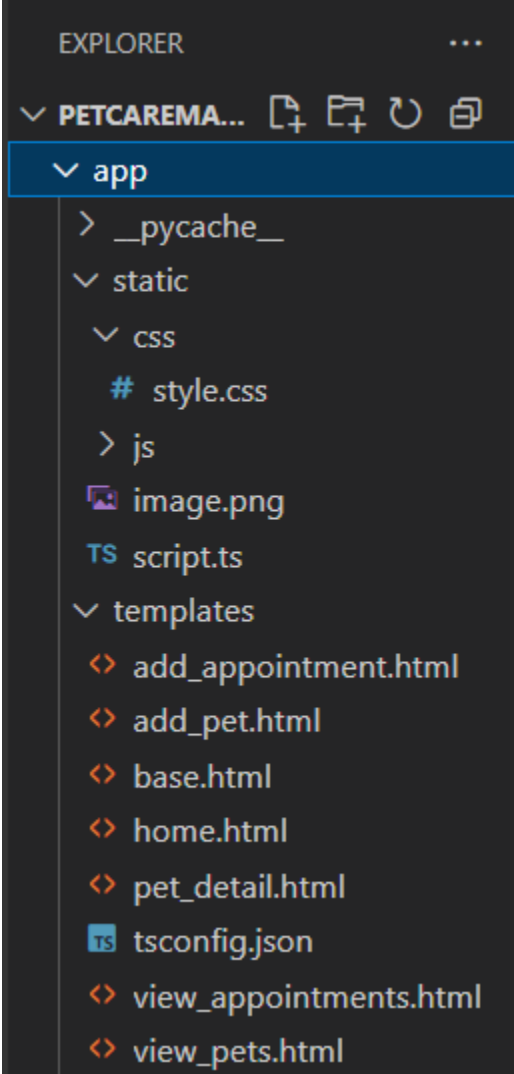
2. Setup MongoDB

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

Backend	Frontend
 <p>A screenshot of a file explorer showing the backend project structure. The files listed are: <code>_init_.py</code>, <code>config.py</code>, <code>forms.py</code>, <code>models.py</code>, <code>routes.py</code>, <code>node_modules</code> (expanded), <code>venv</code> (expanded), <code>package-lock.json</code>, <code>package.json</code>, <code>README.md</code>, <code>requirements.txt</code>, and <code>run.py</code>. At the bottom, there are tabs for TIMELINE and OUTLINE, and a Live Share button.</p>	 <p>A screenshot of a file explorer showing the frontend project structure. The files listed are: <code>__pycache__</code>, <code>static</code> (expanded), <code>css</code> (expanded), <code>style.css</code>, <code>js</code> (expanded), <code>image.png</code>, <code>script.ts</code>, <code>templates</code> (expanded), <code>add_appointment.html</code>, <code>add_pet.html</code>, <code>base.html</code>, <code>home.html</code>, <code>pet_detail.html</code>, <code>tsconfig.json</code>, <code>view_appointments.html</code>, and <code>view_pets.html</code>.</p>

CONCLUSION

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