

CA - Prerequisites Document

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TITLE:

Recipe Sharing Platform

INTRODUCTION

It is a full stack app which allows users to share all the Recipes which want to and build a community with features like comment and like added. The project is built using React with TypeScript for the frontend, Flask for the backend, and MongoDB for data storage.

SYSTEM REQUIREMENTS

1. Hardware Requirements:

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

2. Software Requirements

- Node.js (v18.16.1 or later) – Required for running frontend
- npm (v9.5.1 or later) – For managing dependencies
- Python (3.11.9 or later) – Required for Flask backend
- MongoDB Atlas – Cloud-based NoSQL database
- VS Code – Recommended IDE
- Postman – For API testing and verification

TECHNOLOGY STACK

1. Frontend

- React
- TypeScript (Typed JavaScript)
- External CSS (for styling and responsive UI)

2. Backend

- Flask (Python web framework)
- Flask-CORS (Handles cross-origin requests)
- PyMongo (MongoDB connector)

3. Database

- MongoDB Atlas (Cloud-based NoSQL database for storing users and tasks)

SETUP INSTRUCTIONS

1. Install Node.js and NPM

Download and install Node.js from [Node.js Official Website](https://nodejs.org/en/).

Verify installation:

```
node -v
```

```
npm -v
```

2. Install Python and Flask

Download and install Python from the [Python Official Website](https://www.python.org/).

Verify installation:

```
python --version
```

```
pip --version
```

- Install dependencies:

```
pip install flask flask-cors pymongo
```

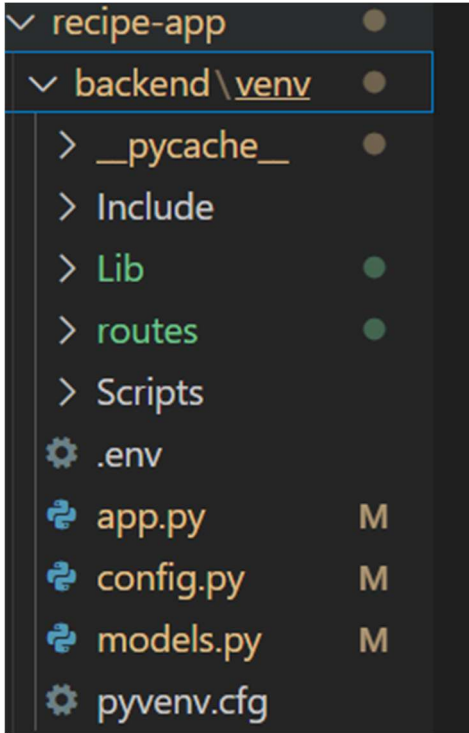
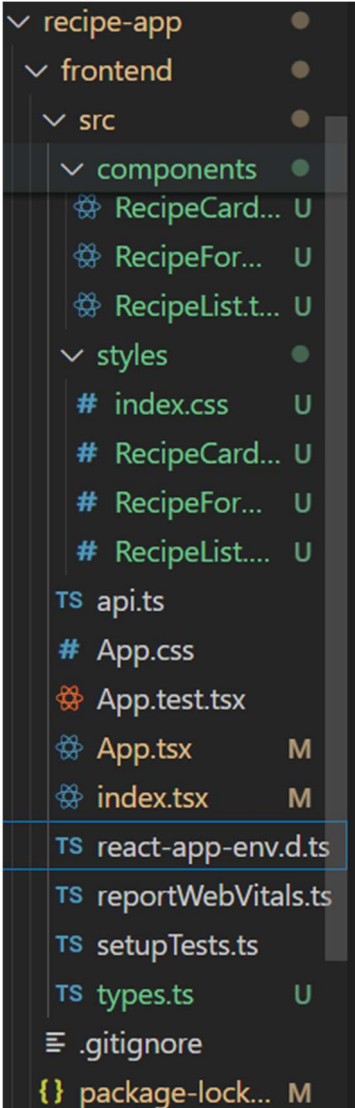
3. Setup MongoDB

Use **MongoDB Atlas** for cloud storage or install **MongoDB locally** from [MongoDB Official Website](https://www.mongodb.com/).

Setup MongoDB Atlas

- Create a cluster at <https://www.mongodb.com/>
- Create collections: users, tasks
- Connect using connection string in Flask

PROJECT STRUCTURE

Backend	Frontend
	

CONCLUSION

This document provides the prerequisites for setting up the **Recipe Sharing Platform** project including system setup, technology stack, and dependencies. Following the instructions ensures a smooth environment for development and demonstration of the Recipe Sharing application.