

Travel Companion Application - Setup Instructions

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Prerequisites

Ensure the following software and tools are installed on your system:

- Python 3.8 or higher
- Node.js 14.x or higher
- npm 6.x or higher
- Git

Backend Setup

1. **Clone the Repository**
`git clone <repository-url>`
2. `cd travel-companion-app`
3. **Create and Activate Virtual Environment**
 - **Windows:**
`python -m venv venv`
 - `.\venv\Scripts\activate`

- **macOS/Linux:**
`python3 -m venv venv`
- `source venv/bin/activate`
- 4. Install Python Dependencies**
`pip install -r requirements.txt`
- 5. Set Up Environment Variables** Create a `.env` file in the root directory with the following content:
`OPENAI_API_KEY=your_openai_api_key`
- 6. Verify Data Files** Ensure `Top_Indian_Places_to_Visit.csv` is present in the root directory.

Frontend Setup

- 1. Navigate to Client Directory**
`cd client`
- 2. Install Dependencies**
`npm install`
- 3. Configure Environment** Create a `.env` file in the `client` directory with the following content:
`VITE_API_URL=http://localhost:8000`

Running the Application

- 1. Start Backend Server** From the root directory, run:
`python Final.py`
- 2. # OR**
- 3. uvicorn Final:app --reload**
The backend will run on `http://localhost:8000`.
- 4. Start Frontend Development Server** From the `client` directory, run:
`npm run dev`
The frontend will run on `http://localhost:5173`.

Environment Variables

Backend (.env)

OPENAI_API_KEY=your_openai_api_key

Frontend (.env)

VITE_API_URL=http://localhost:8000

Project Structure

```
travel-companion-app/
├── Final.py                # Main backend server
├── requirements.txt        # Python dependencies
├── .env                    # Backend environment
├── variables
│   ├── Top_Indian_Places_to_Visit.csv # Data file
│   └── client/             # Frontend directory
│       ├── src/            # Source code
│       ├── package.json    # Frontend dependencies
│       └── .env            # Frontend environment
├── variables
└── README.md              # Setup instructions
```

Dependencies

Backend

```
fastapi==0.68.0
uvicorn==0.15.0
python-dotenv==0.19.0
openai==0.27.0
pandas==1.3.3
python-multipart==0.0.5
```

Frontend

```
{
  "dependencies": {
    "react": "^17.0.2",
    "react-dom": "^17.0.2",
    "axios": "^0.21.1"
```

```
}  
}
```

Troubleshooting

Common Issues and Solutions

1. Backend Won't Start

- Check if port 8000 is already in use:
Windows
- `netstat -ano | findstr :8000`
- # Linux/macOS
- `lsof -i :8000`

2. Frontend Build Errors

- Clear npm cache and reinstall dependencies:
`npm cache clean --force`
- `rm -rf node_modules`
- `npm install`

3. CORS Issues

- Verify backend CORS settings in `Final.py`.
- Check frontend API URL in `.env`.

4. OpenAI API Issues

- Verify API key in `.env`.
- Check API quota and limits.

Additional Notes

Development Mode

- Backend runs in debug mode with hot-reloading.
- Frontend uses Vite's development server with HMR.

Production Deployment

1. **Build frontend:**
`cd client`
2. `npm run build`
3. **Serve backend:**
`uvicorn Final:app --host 0.0.0.0 --port 8000`

Testing

- **Backend tests:**
`pytest`
- **Frontend tests:**
`cd client`
- `npm test`

Support

For additional support:

1. Check the issues section in the repository.
2. Contact the development team.
3. Review the documentation in the Jupyter notebooks.