**Developer Documentation**

This section supports future developers or contributors with technical documentation.

**Project Repository**

* GitHub: <https://github.com/LouieSu/CITS5206-Capstone-Group-5>

**Tech Stack**

* **Frontend**: React.js
* **Backend**: Django (Python)
* **Database**: SQLite (development), extendable to PostgreSQL
* **Deployment**: Deployed via custom domain

**Directory Structure**

**Backend (Django)**

backend/

├── api/ # API endpoints

├── config/ # Django configuration

├── util/ # Prerequisite & rule validation

├── UWAStudyPlanner/ # Django core project files

└── requirements.txt # Python dependency list

**Frontend (React)**

frontend/

├── public/ # Static resources

**Frontend (React)**



**Setup Instructions**

**Backend**

cd backend

pip install -r requirements.txt

python manage.py runserver

**Frontend**

cd frontend

npm install

npm start

**Key API Endpoints**

| **Endpoint** | **Purpose** |
| --- | --- |
| /api/courses/ | Fetches available units |
| /api/validate/ | Validates a study plan |
| /api/prerequisites/ | Checks prerequisites for selected units |

**Testing Tools**

* **Frontend**:
* **Backend**:

**Future Development Suggestions**

* User account integration (authentication and plan history)
* Academic advisor collaboration features
* Real-time unit updates from UWA Handbook API