**Deployment Plan**

1. **Deployment Overview (General Deployment Approach)**

This project is published using the PythonAnywhere cloud platform.

- Operating System: Linux, Windows, macOS

- Server Type: Cloud (PythonAnywhere)

- Database: SQLAlchemy (hosted in PythonAnywhere)

- Version Control System: GitHub

- Project Dependencies:

Backend: Python Flask

Frontend: HTML, JavaScript, CSS

- API Usage: OpenWeatherAPI

- Tests:

Unit testing and Flask Testing are used for testing.

Domain Address: [https://activesky.pythonanywhere.com/](https://activesky.pythonanywhere.com/)

**2. Deployment Process (Deployment Process)**

Newly developed features are tested in the feat branch and if successful, they are merged into the main branch.

GitHub was used in the project development process. After the development process was completed, it was submitted to Python Anywhere for demo.

The following steps were followed to deploy the project to the PythonAnywhere server:

1) Setting up Virtual Environment (Isolation) and Dependencies

python3 -m venv venv

source venv/bin/activate

pip install flask flask\_sqlalchemy

2) Updating WSGI File

import sys

import os

project\_home = '/home/ActiveSky/ActiveSky/ActiveSky'

if project\_home not in sys.path:

sys.path.insert(0, project\_home)

os.chdir(project\_home)

from main import app as application

3) Publishing the Web Application to PythonAnywhere

- Go to the Web tab on the PythonAnywhere Dashboard.

- Created a new Flask Web App.

- The Source Code Path was entered as ~/ActiveSky/ActiveSky/ActiveSky

- The WSGI Configuration File was selected as /var/www/activesky\_pythonanywhere\_com\_wsgi.py.

- The Reload Web App button was pressed to publish.

**3. Configuration Plan**

The following configurations have been configured for the project to work properly:

Database and Storage

- SQLAlchemy is used with PythonAnywhere's SQLite database.

The database file is stored as database.db.