

2. Getting Started

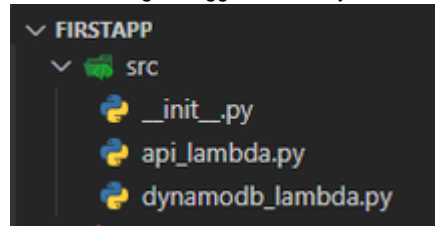
In this chapter, we'll set up the base project structure and development environment.

Create a 'src' folder and add following blank files.

__init__.py : Makes 'src' folder as a package.

api_lambda.py : code for lambda function which gets triggered from API gateway

dynamodb_lambda.py : code for lambda function which gets triggered from dynamo db.

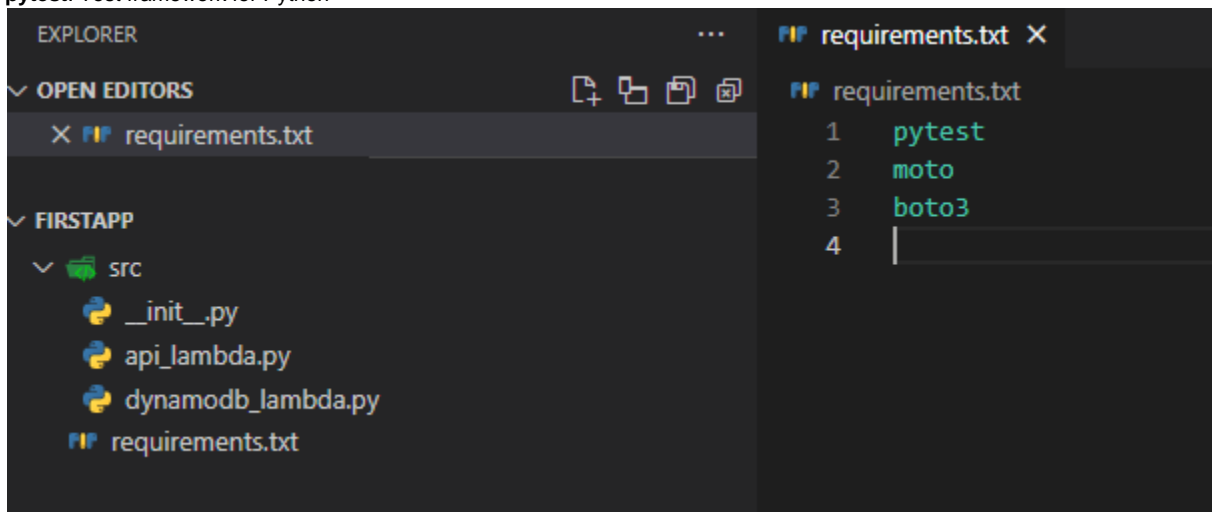


Add requirements.txt to the root and insert boto3, pytest, and moto

boto3: AWS SDK for Python

moto: Mock AWS Services

pytest: Test framework for Python



create and activate virtual environment by typing following command in VSCode terminal. Make sure you are present under root folder of your application.

```
python -m venv devenv
.\devenv\Script\activate
```

```
PS C:\Ashpak\Practice\CoderClub\FirstApp> python -m venv devenv
PS C:\Ashpak\Practice\CoderClub\FirstApp> .\devenv\Scripts\activate
(devenv) PS C:\Ashpak\Practice\CoderClub\FirstApp> |
```



Tip : We are creating virtual environment for python development so that all the required dependencies can be installed inside the virtual environment and we can activate and deactivate the virtual environment whenever we want to switch between development environment and clean environment. We can create different virtual environment with different dependencies and libraries installed.

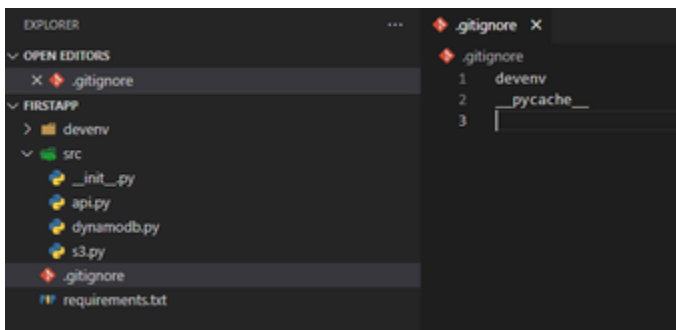
Install requirements.txt items in virtual environment using following command

```
pip install -r requirements.txt
```

```
(devenv) PS C:\Ashpak\Practice\CoderClub\FirstApp> pip install -r requirements.txt
Collecting boto3==1.23.3
  Downloading boto3-1.23.3-py3-none-any.whl (132 kB)
    132.5/132.5 kB 1.1 MB/s eta 0:00:00
Collecting s3transfer<0.6.0,>=0.5.0
  Downloading s3transfer-0.5.2-py3-none-any.whl (79 kB)
    79.5/79.5 kB 4.6 MB/s eta 0:00:00
Collecting botocore<1.27.0,>=1.26.3
  Downloading botocore-1.26.3-py3-none-any.whl (8.8 MB)
    8.8/8.8 MB 3.7 MB/s eta 0:00:00
Collecting jmespath<2.0.0,>=0.7.1
  Downloading jmespath-1.0.0-py3-none-any.whl (23 kB)
Collecting python-dateutil<3.0.0,>=2.1
  Downloading python_dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
    247.7/247.7 kB 3.0 MB/s eta 0:00:00
Collecting urllib3<1.27,>=1.25.4
  Using cached urllib3-1.26.9-py2.py3-none-any.whl (138 kB)
```

Add .gitignore file to project root with following contents

```
__pycache__
devenv
```



Tip : we are adding folder or file names to .gitignore file because these are not actual code files/folder. These are either temporary files or required locally for testing and we don't want to push them to remote repo.