

README.md

- Anthony L. Leotta
- 2022-10-12
- fastapi_poc

Part 1

1. Install Prerequisites

1. Install git
2. Install pyenv
3. Install vscode studio
4. Install poetry
 1. (linux or macos)

```
curl -sSL https://raw.githubusercontent.com/python-poetry/poetry/master/get-poetry.py | python -
```

2. (windows)

```
(Invoke-WebRequest -Uri https://raw.githubusercontent.com/python-poetry/poetry/master/get-poetry.py -UseBasicParsing).Content | python -
```

3. poetry --version

2. Initialize Git

```
git init
```

3. Lock Python Version

```
pyenv local 3.10.5
```

4. Initialize Poetry

```
poetry init
```

5. Fix python version to 3.10.5 in pyproject.toml

```
[tool.poetry.dependencies]
python = ">=3.10.5"
```

6. Install Package Dependencies Using Poetry Package Manager

```
poetry install
```

7. Add a .gitignore file

8. Activate Virtual Environment

1. (windows) source .venv/Scripts/activate
2. poetry shell

9. Add Required Packages

```
poetry add fastapi uvicorn[standard]
poetry add -D flake8 autopep8
```

10. Start Server

```
poetry run uvicorn backend01.main:app --reload
```

11. Visit <http://127.0.0.1:8000>

12. Visit <http://127.0.0.1:8000/docs>

13. Visit <http://127.0.0.1:8000/redoc>

14. Visit <http://127.0.0.1:8000/openapi.json>

Part 2

1. Add startup/shutdown

```
@app.on_event("startup")
async def startup_event():
    print('startup...')

@app.on_event("shutdown")
def shutdown_event():
    print('shutdown...')
```

2. Add DBSession.py

```
class DBSession():
    def __init__(self) -> None:
        self.db = 'DBCONN'

    def connect(self):
        print('db connecting')

    def close(self):
        print('db closing')
```

3. Add deps.py

```
from backend02.dbsession import DBSession

async def get_db():
    db = DBSession()
    try:
        yield db
    finally:
        db.close()
```

4. Add Depends to route

```
@app.get("/")
async def main_route(dbsession: DBSession = Depends(get_db)):
    return {
        "message": "It's Alive!",
        "db": dbsession.db
    }
```

5. Start Server

```
poetry run uvicorn backend02.main:app --reload
```

Part 3

1. [aiosqlite: Sqlite for AsyncIO](#)
2. [aiosql](#)
3. poetry add aiosqlite
4. Start Server

```
poetry run uvicorn backend03.main:app --reload
```

Part 4

1. refactor to use one db connection created at startup