Learning Python + FastAPI

Chú ý:

* Phân biệt biến mutable và immutable
* Cấu trúc một project python
* Cách import module giữa các file trong project
* List comprehension (cái này dùng nhiều và nhanh hơn loop for )

11/8:

**OOP in Python:**

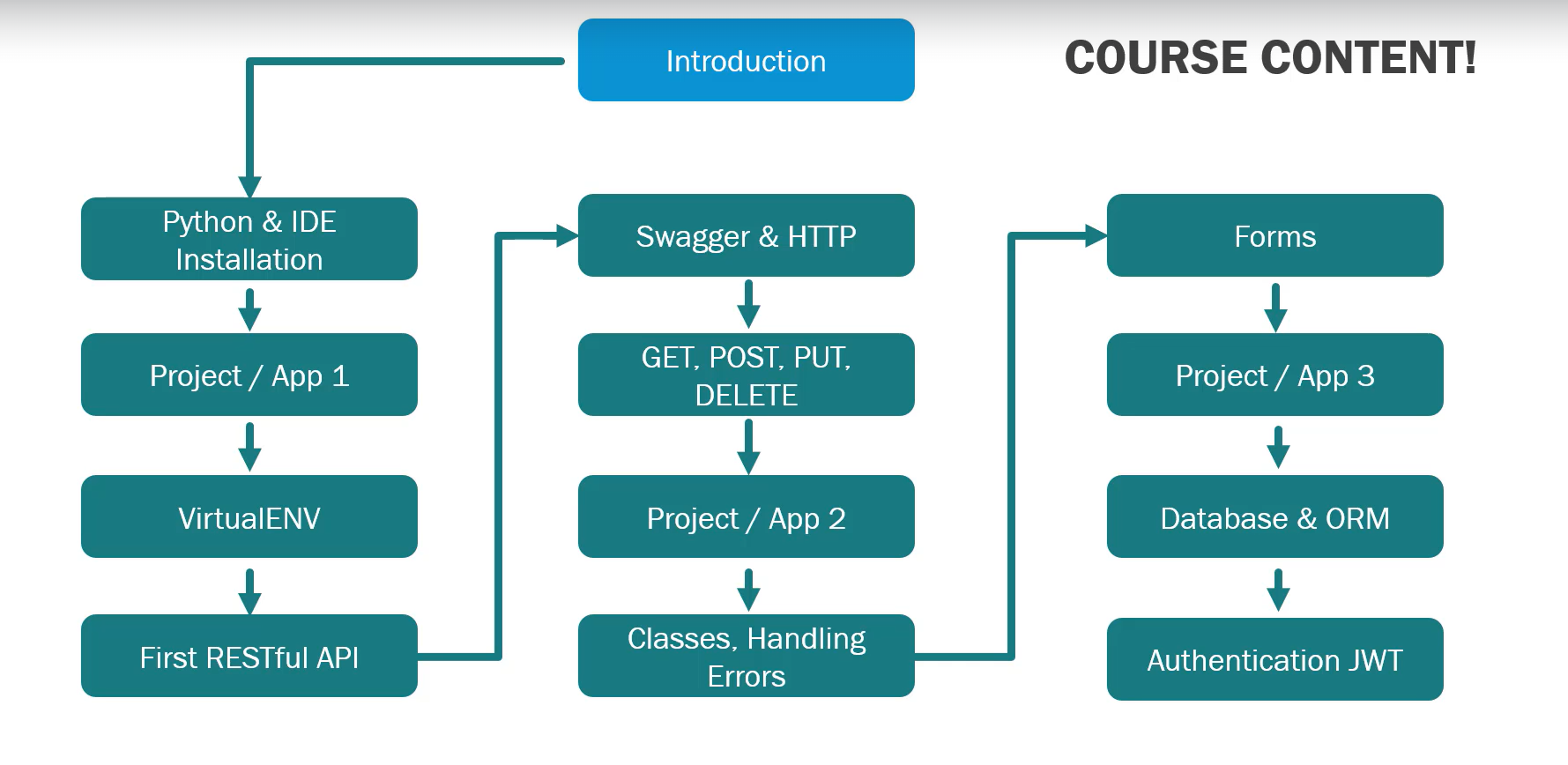
class Student:  
 def \_\_init\_\_(self, attribute\_1, ….):  
 self. attribute\_1 = attribute\_1  
 ….  
 Student.number\_of\_student +=1 # to track the number of variables created

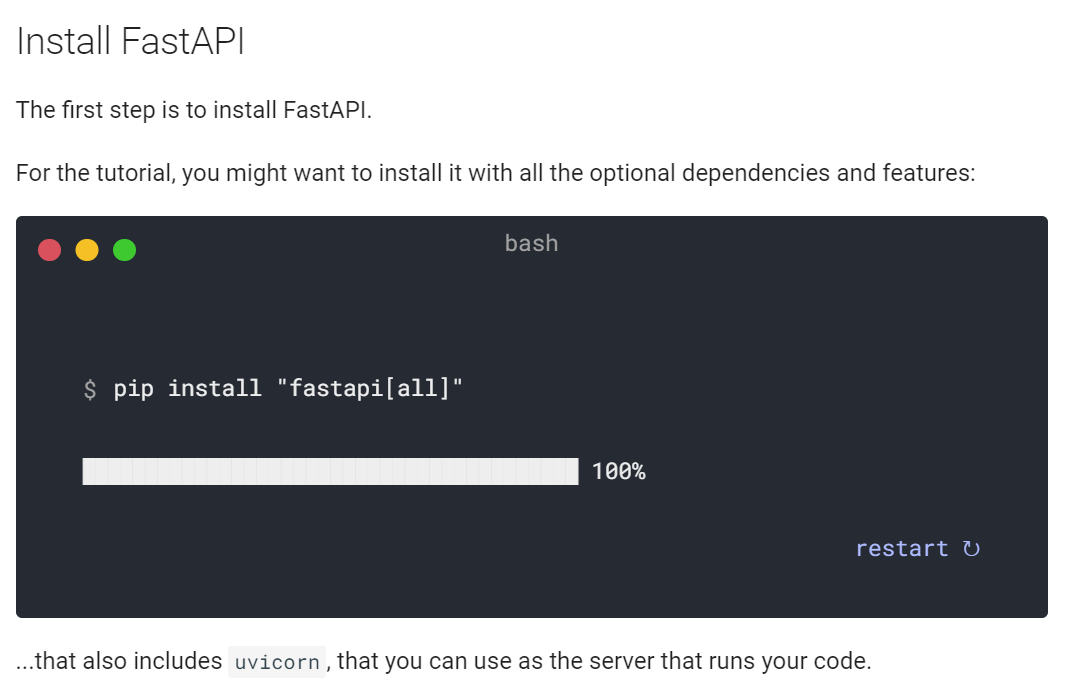
student\_1 = Student (value\_1,…)  
print(Student.number\_of\_student)

**NOTE:**

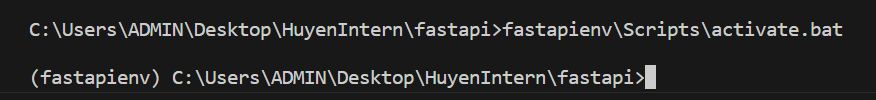
Section 24: Files, Directories, Paths  
Section 26: List comprehension: <https://www.w3schools.com/python/python_lists_comprehension.asp>

**FastAPI:**

****

****

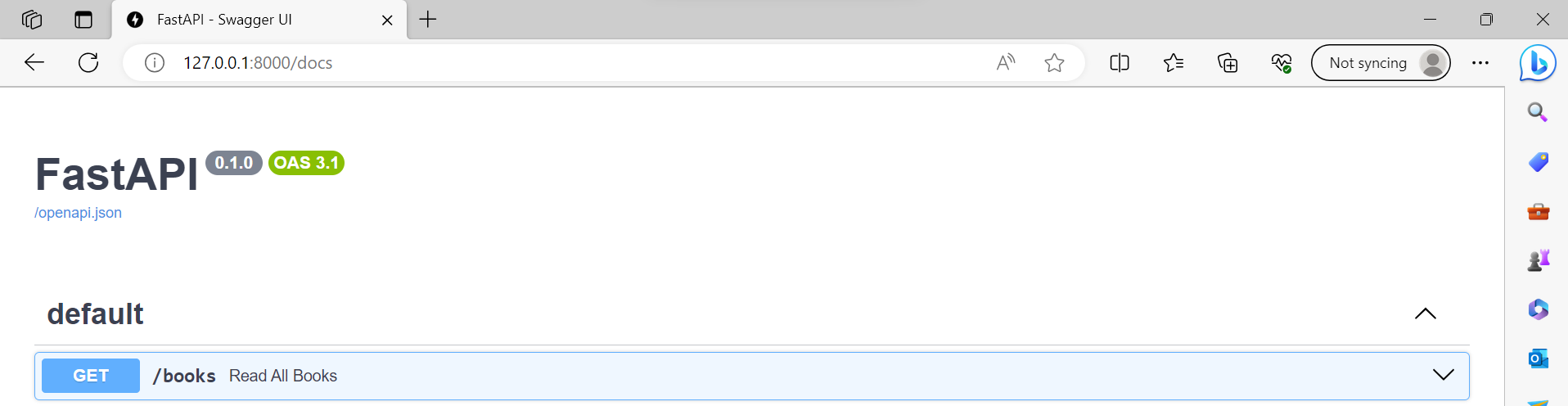
**Start Environment**

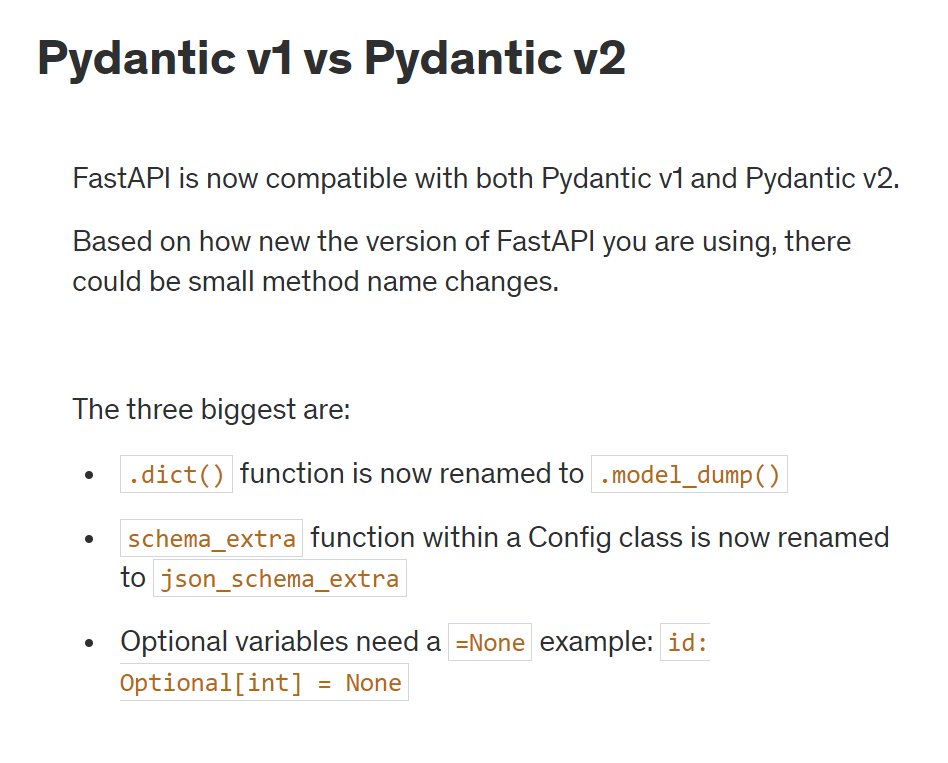
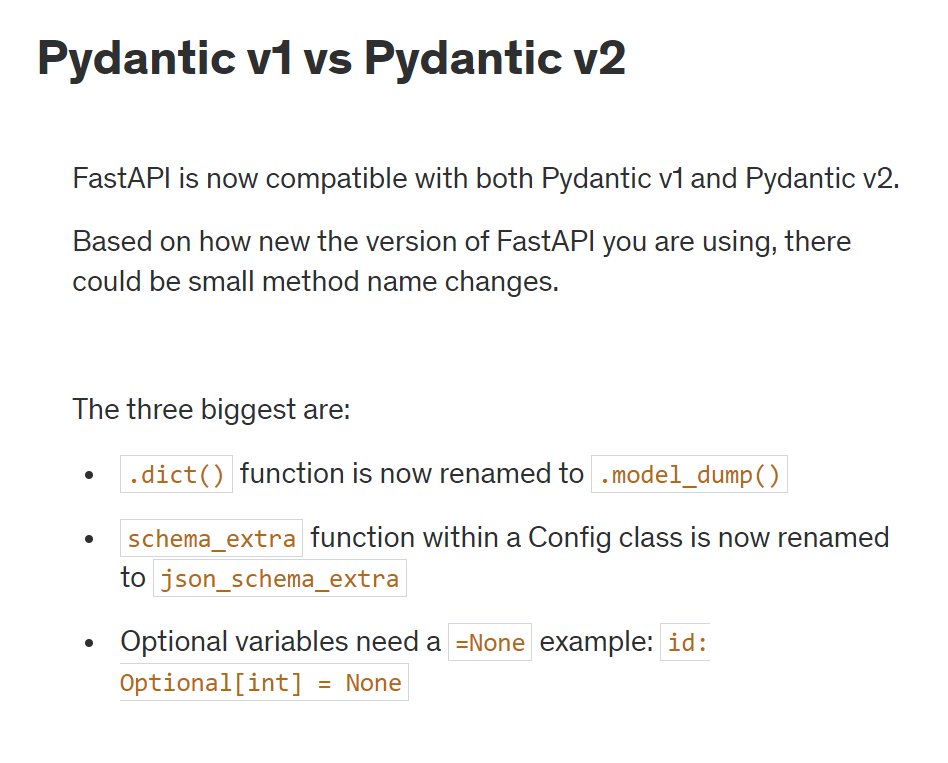
****

**Run Server**

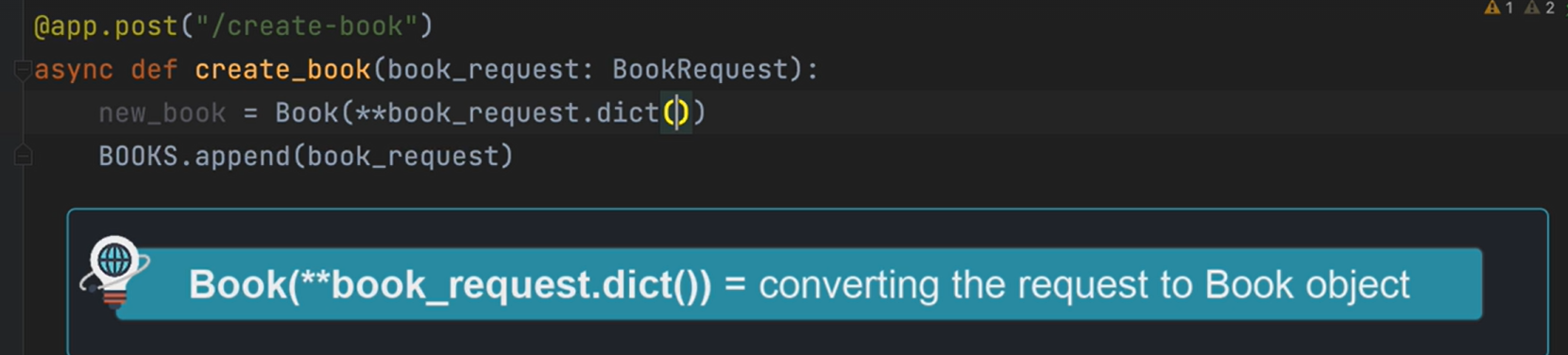
****

**Swagger UI**

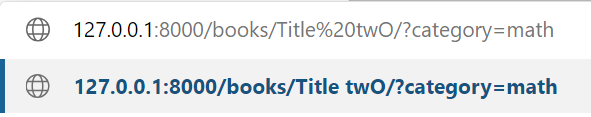
****

****

**Pydantic Request Validation**

****

1. **GET request method**

**Path Parameters(/) & Query Parameters (?)  
**

1. **POST request method**

**Fields – Data Validation**

from pydantic import BaseModel

class BookRequest(BaseModel):

    id:int

    title: str = Field(min\_length=3)

    author: str = Field(min\_length=1)

    description: str = Field(min\_length=1, max\_length=100)

    rating: int = Field(gt=0, lt=6)

Pydantics is used for data parsing and data validation

What is the purpose of class Config within our class BookRequest(BaseModel)?  
-> To create a more descriptive request within our Swagger documentation

**SQLALCHEMY**

* Connect database

Files: models.py: DTB Tables, main.py: create DTB connection for API

**Sao ta ?**

class LoginForm:

    def \_\_init\_\_(self, request: Request):

        self.request = request

        self.username: Optional[str] = None

        self.password: Optional[str] = None

    async def create\_oauth\_form(self):

        form = await self.request.form()

        self.username = form.get("email")

        self.password = form.get("password")