

NAVYA NARAYAN PANICKER

WEEK 3 DAY 4: 10/10/25 [FRIDAY]

TASK : Write docs (Markdown or OpenAPI), version the API (e.g. v1), test deployment locally

QUESTIONS/REFLECTIONS:

1. What's OpenAPI / Swagger? Why document APIs?

**OpenAPI** is a **standard format (YAML/JSON)** for describing REST APIs — what endpoints exist, what they do, what data they accept/return.

**Swagger** provides **tools** (like Swagger UI) to *view and test* those APIs interactively.

Why to document APIs:

Helps developers understand how to use your API.

Enables auto-testing and auto-generation of client SDKs.

Makes debugging and onboarding easier.

2. How versioning helps backward compatibility; what versioning strategies exist (URI versioning, header versioning etc.).

When you update your API (add/remove/change endpoints), old clients might still rely on the previous behavior.

Versioning lets both new and old clients work safely.

1. **URI versioning** — simplest and most common  
    /api/v1/users  
    /api/v2/users
2. **Header versioning** — client specifies version in request header  
    Accept-Version: v2
3. **Query param versioning**  
    /api/users?version=2
4. If deploying to cloud (or staging), what environment configs will you need?

When deploying to cloud (like AWS, Azure, Render, etc.), you'll need configuration values for each environment.

THESE ARE THE COMMON VARIABLES USED:

DB_HOST	Database host URL
DB_USER	Database username

DB_PASSWORD	Database password
DB_NAME	Database name
SECRET_KEY	Flask secret key
PORT	Port to run app on

These are saved in a .env file-