AeroAspire SDE Intern

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Week 3 – Day4 (10th October)

Task:

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

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

=OpenAPI (also known as Swagger) is a tool used to describe and document APIs in a clear way.

It helps developers understand what endpoints exist, what data they expect, and what they return.

With Swagger UI, we can also test APIs easily from the browser without using Postman.

Documenting APIs is important because it makes it easier for other developers or teams to use and maintain them.

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

=Versioning helps when we make changes to an API without breaking old clients.

For example, if version 1 is already being used by apps, we can release version 2 with new features but still keep version 1 working. Common versioning methods include:

- URI versioning: Example \rightarrow /api/v1/tasks or /api/v2/tasks
- Header versioning: The client sends the version info in the request header
- Query parameter versioning: Adding something like ?version=1 in the request URL

3. If deploying to cloud (or staging), what environment configs will you need?

=When deploying to the cloud, we usually set up environment configurations such as:

- Database URL or credentials (e.g., MySQL, PostgreSQL, SQLite path)
- Secret keys for authentication or tokens
- Debug mode (turned off in production)
- Allowed origins (CORS)
- Port numbers and API base URLs

These are usually stored in .env files or environment variables to keep them safe and easy to change between development, staging, and production.