

Backend Specific topics:

REST APIs

Authentication (JWT, OAuth) and Authorization (RBAC, CBA)

Database management (Sql vs NoSql databases)

ODM/ORM

Web Framework (FastAPI)

Middlewares

Caching

Before diving into learning FastAPI, it's helpful to have a good understanding of the following prerequisites:

- 1. **Python**:** Since FastAPI is a web framework written in Python, you should have a solid grasp of the Python programming language, including its syntax, data types, control structures, functions, and object-oriented programming concepts.
- 2. **HTTP and RESTful APIs**:** Familiarize yourself with the basics of HTTP (Hypertext Transfer Protocol) and RESTful APIs (Representational State Transfer). Understanding concepts such as HTTP methods (GET, POST, PUT, DELETE), status codes, request and response headers, and RESTful API design principles will be beneficial.
- 3. **Asynchronous Programming**:** While not strictly required, having a basic understanding of asynchronous programming concepts in Python, such as `async/await` syntax and `asyncio` module, will be advantageous. FastAPI fully supports asynchronous programming, and leveraging it can enhance the performance of your applications.

4. ****Web Development Basics****: Knowledge of fundamental web development concepts like HTML, CSS, and JavaScript can be useful, especially if you plan to build web applications using FastAPI in conjunction with frontend frameworks like React, Vue.js, or Angular.

5. ****API Documentation Tools****: Understanding the importance of API documentation and familiarity with tools like Swagger UI and ReDoc, which are integrated into FastAPI for automatically generating interactive API documentation, can be helpful for effectively documenting your APIs.

6. ****Database Basics****: If your FastAPI application will interact with databases, having a basic understanding of database concepts and SQL (Structured Query Language) can be beneficial. FastAPI supports various databases through ORMs (Object-Relational Mappers) like SQLAlchemy and ORMs like Tortoise-ORM.

While these are the primary prerequisites, remember that you can start learning FastAPI with just a basic understanding of Python and gradually build upon your knowledge as you explore the framework and its features. FastAPI's documentation is comprehensive and beginner-friendly, making it accessible even to those with limited prior experience in web development.