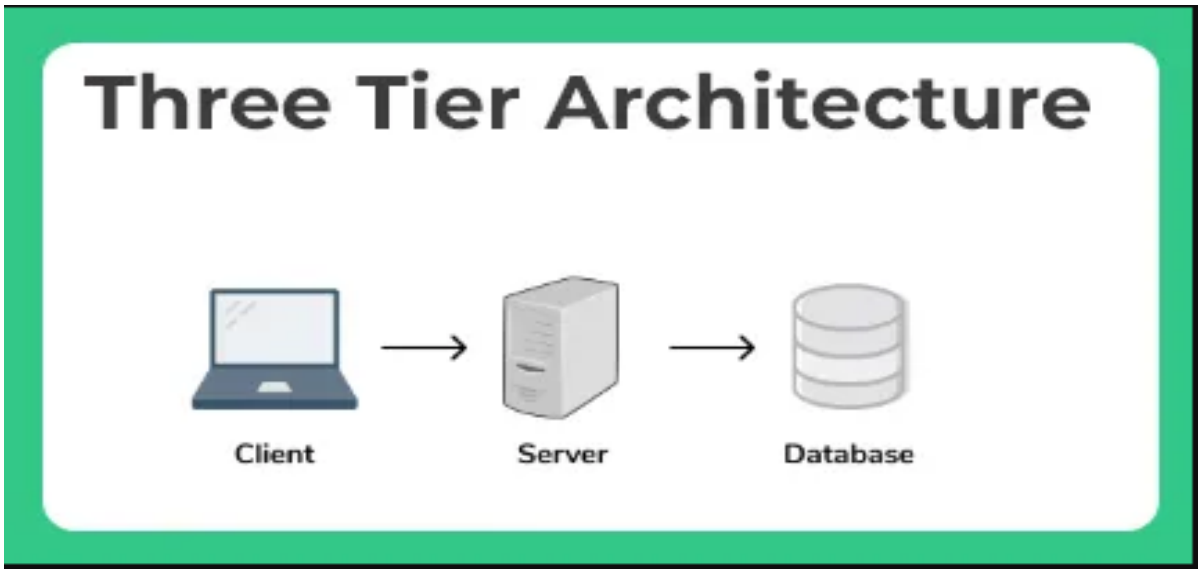
What is the 3-Tier Architecture?

The 3-Tier Architecture, also known as the three-layer architecture, is a client-server software architecture that separates an application into three distinct layers, or tiers. The purpose of this architecture is to improve modularity, maintainability, scalability, reliability and flexibility of the software system.



The three tiers are:

1. **Client-tier**: This tier represents the user interface of the application and is responsible for presenting data to the user and receiving user input. It includes the graphical user interface (GUI) components, such as web pages, forms, and widgets.

2. **Server-tier**: This tier contains the business logic of the application and performs the core processing of the data. It is responsible for processing user requests, retrieving and manipulating data, and performing complex operations. It includes modules such as controllers, services, and APIs.

3. **Data Tier**: This tier is responsible for managing the data storage and retrieval in the system. It includes the database or file system where data is stored, as well as the data access layer (DAL) that interacts with the database to read and write data. The three tiers are connected through well-defined interfaces, allowing each layer to function independently and enabling easy modification and maintenance of the application. The 3-Tier Architecture is a widely used design pattern for building scalable and maintainable software applications, and it is commonly used in web applications and enterprise software systems.