

Three-Tire Architecture

Three-Tire Architecture are also known as the three tier model or three tier Application architecture model. It is a popular design pattern in web engineering and Software Development. It divides a web application into three interconnected layers. Each layer is responsible for Specific Functions and aspects of the application. This Architecture is used to enhance scalability, maintainability, and flexibility in web applications.

- 1) Presentation Tier
- 2) Application Tier
- 3) Data Tier

- 1) Presentation Tier(Client Tier)

The Presentation tier is the topmost layer and responsible for the user interface and user experience of the application. It interacts directly with the end user and handles user input execution, web pages, and presenting data to the user. Common technologies used in this tier include HTML, CSS, JavaScript, and various UI frameworks and libraries. The primary goal of this layer is to

Provide a natural and user-friendly interface for the user to interact with the application.

- 2) Application Tier:- (Middle Tier)

The Application Tier is also known as Middle Tier OR Business logic Layer where most of the application's processing and logic occur. It manages the application's functionality, business rules, and data processing without being connected with the presentation or data storage details. Common components in this layer include application servers, web servers, and databases. The Middle Tier communicates with both the presentation tier and the data tier to process user requests, retrieve and manipulate data, and return results.

- 3) Data Tier:- (Backend Tier)

The Data Tier is responsible for managing and storing the application's data. It serves as the backend of the application. It can consist of one or more databases, data storage systems, where information is stored and retrieved. The layer is responsible for data storage, retrieval, and management to ensure data consistency, security, and integrity. Common data base technologies used in this tier include SQL DATA BASE and NO-SQL DATA BASE.