

2.7 Multi-Tier Architecture

Application for Business operation can usually have following processes.

- 1).Take the data entered by the user as input.
- 2).Process the input data as per the business logic.
- 3).Storing the data or outputting it to the user.

Therefore, all application are having three element within them.

1).User-Interface

Through which user interact with the application. It is used for accepting input from the user and present the output to the user.

2).Business Rule/Application Logic

It is the 2nd element of any application.

3).Data Storage Element

It is used to store and retrieve the data.

These three(3) element decide the Architecture/ Model of an application which are:-

- 1).Single-Tier Architecture.
- 2).Two- Tier Architecture.
- 3).Three/Multi/n-tier Architecture.

1).Single-Tier Architecture OR Monolithic Architecture. Time Technique

- 1). Single-Tier Architecture are the most common is Desktop application.
- 2).It is also known as Monolithic Architecture.
- 3).In this architecture, everything runs on a Single-user Machine.
- 4).In Single-Tier Architecture all the three elements of an application :- User-Interface, Data Storage, Business Rule are packed in a Single executable.
- 5).If the Multi-user wants to use the application, the application has to installed all each and every user machine.
- 6).Even the database is copied to each and every machine. Because of the changes made in one database cannot be reflected in another database.
- 7).The machine on which these Monolithic application need to distributed have to be very powerful and highly configured because all the three layer(tier) have to be processed in a single machine.