-: N-Tier Architecture :-

→ In Any Application development usually we find three types of code.

1. UI designs and Validations code
2. Business Logic code.
3. Data Access code.

1. UI designs And Validations Code :-

This code is related to Creating UI Elements like Textboxes, buttons, labels, comboboxes etc. And Validations code like User should Enter digits only / Textbox should accept letters only / Password should be minimum 6 characters etc.

This UI design and Validation code will change based on Type of Application i.e. In Windows forms Application We Write some type of code in Web Application We Write othes type of code in Mobile Applications We Write othes type of code etc.

2. Business Logic Code:-

→ Business logic code is based on the type of domain we are computerizing. This code will change for each domain i.e being computerized.

→ for banking domain one kind of business logic code for health domain other kind of business logic code for telecom domain different kind of business logic code we write.

3. Data Access Code:-

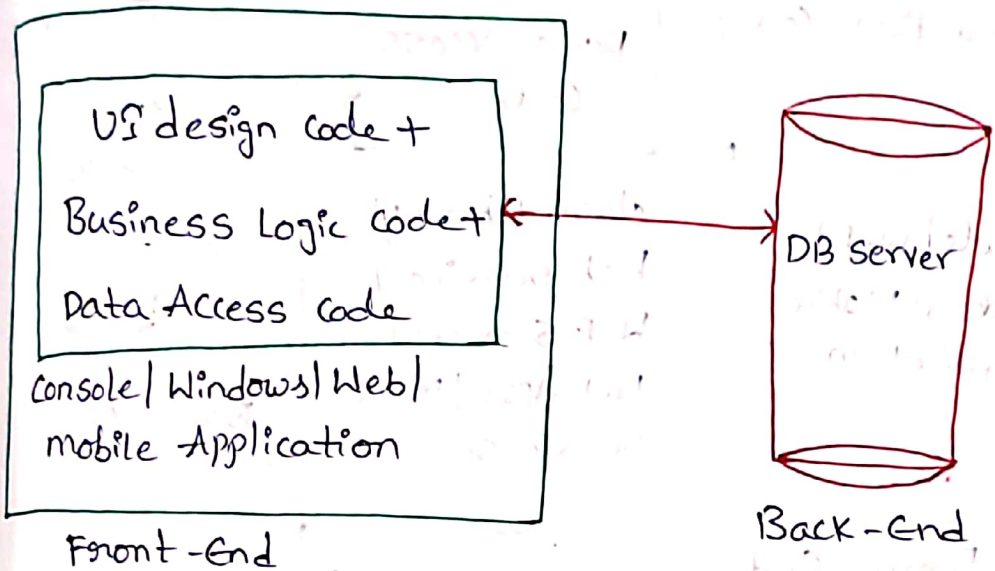
This code is related to, database connectivity i.e. connecting to database, retrieving the data to database and updating the data to database.

Usually this code will change based on ~~Type of Application~~ ~~that~~ And that data provider we use. database

—: 1-Tier Architecture :-

→ An entire Front-End Application code that is all three parts of the code i.e. UI design code and validation code, Business logic code and data Access code is developed using one Application only. Then it is known as 1-Tier Architecture.

→ The Application can be only one From Console Application or Windows forms Application or Web Application or mobile Application.



-: 2-Tier Architecture :-

→ If Entire Front-End Application code is divided into two layers Then it is known as 2-Tier Architecture.

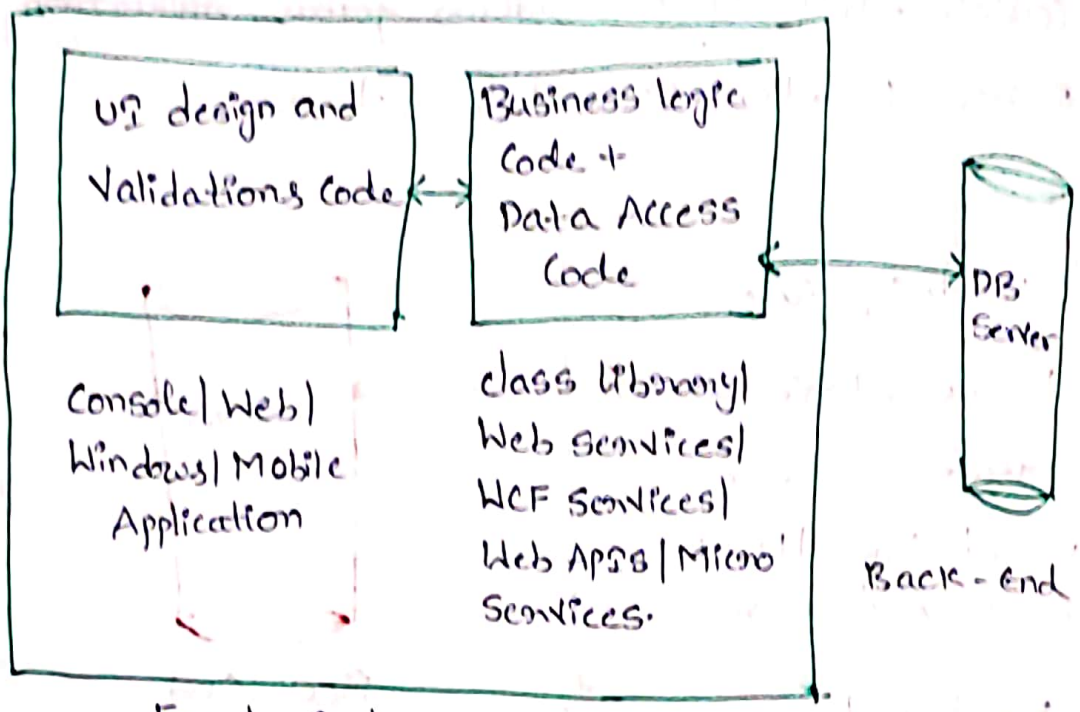
→ First part (or) first layer will contain UI design and Validations code, second part (or) second layer contails Business Logic code And Data Access code..

→ First layer usually can be develop using Console | Windows | Web | mobile Applications.

→ Second layer can be develop using class libraries | Web Services | WCF Services | Web APIs | Micro Services.

→ In this Architecture usually First layer will Interact With second layer only. First layer can Never Interact With database. And second layer

only responsible to Interact with database.



:- 3-Tier

Architecture :-

→ In this Method complete front-end Application Code is divided into 3 layers.

→ First layer will contain UI design and Validations code, second part contains Business logic code, third part contains Data Access Code.

→ First part is usually called as presentation layer. Second layer is known as Business logic layer. Third layer is known as Data Access layer.

→ Usually presentation layer is developed using Console Application (or) Windows forms | Web | mobile Application.

→ Business logic layer can be developed using class libraries | Web services | WCF services | Web API's | Micro services.

→ Data Access layer can also be developed using class libraries | Web services | WCF services | Web API's | Micro Services.

→ In 3-Tier Architecture usually presentation layer is ~~developed~~ responsible to interact with Business logic layer only and presentation layer can Never Interact With Data Access layer. Business logic layer is responsible to interact With Data Access layer only and Business Logic layer Will Never interact With Data base. Data Access layer is responsible to Interact With Data Base.