

Framework

----- Vs -----

Library



@_codevalley



Zuhaib Asif

A Framework and a Library are both collections of pre-written code that developers can use to speed up the development process and avoid re-inventing the wheel. However, there are some key differences between the two in Next Slide:





Framework:

A Framework is a set of pre-built functions and classes that provide a structure for building a specific type of application. A framework defines a set of rules and conventions that must be followed, and it often includes a built-in development environment.

Library:

A Library is a collection of pre-written functions and classes that can be used to perform specific tasks. A library is typically focused on a specific problem or set of problems, and it allows developers to call its functions and classes as needed.



Difference:

- **Inversion of Control**

In a Framework, the flow of control of the application is determined by the framework. Developers are required to follow the framework's structure and conventions.

In a Library, the flow of control is determined by the developer. They can call the library's functions and classes in any order or context.

- **Flexibility**

Frameworks tend to be less flexible than libraries because they dictate the structure of the application and the developer is required to follow the framework's conventions.

Libraries tend to be more flexible than frameworks because they provide pre-built functionality but don't dictate the structure of the application.



Advantages:

- **Frameworks**

Frameworks provide a structure for building an application, which can help developers organize their code and make it more maintainable. Frameworks can also provide a built-in development environment, which can speed up the development process.

- **Libraries**

Libraries provide pre-built functionality that can save developers time and effort. They can also be easily reused across multiple projects.