

What is APPLICATION?

Application is a program which can able to perform the task. It is a intermediate between the User and Computer.

What is SDLC?

The SDLC is nothing but the lifecycle which is used to create a software. It includes 6 phases. Various methodologies such as Waterfall, Agile, and DevOps are commonly used within the SDLC framework to manage and execute the development process.

6 Phases of the Software Development Life Cycle



What is agile?

Agile methodology is a project management framework that breaks projects down into several dynamic phases, to divide the given project.

Waterfall model:-

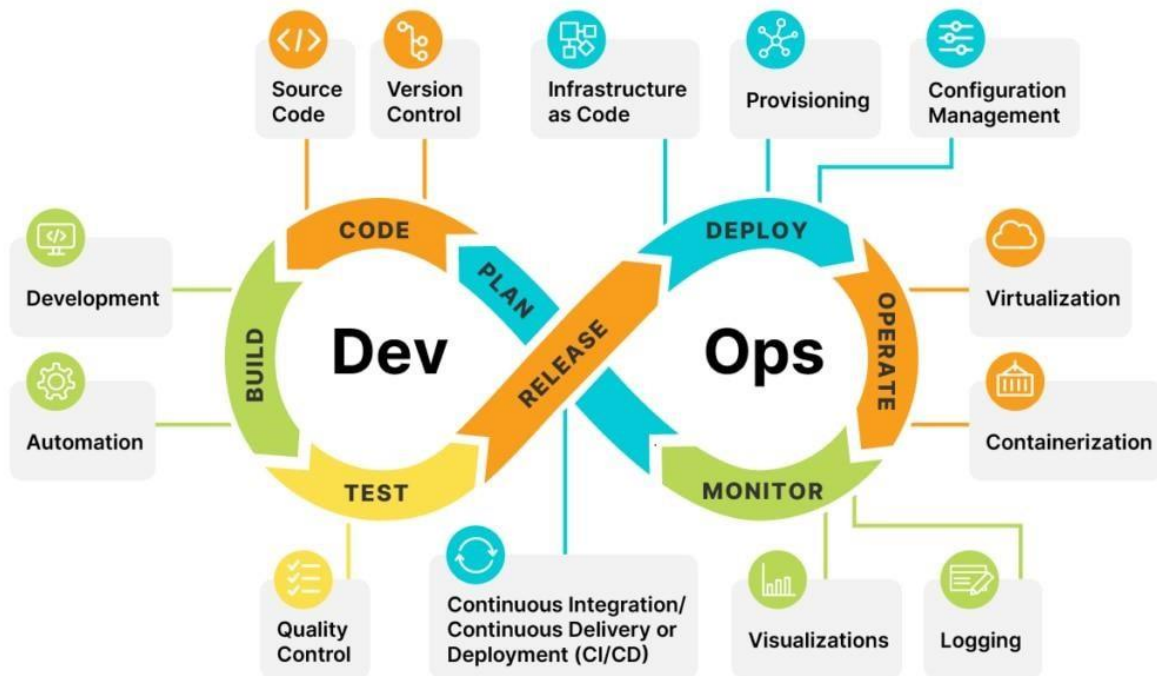
The Waterfall model is a sequential development process that flows like a waterfall through all phases of a project (analysis, design, development, and testing, for example), with each phase completely wrapping up before the next phase begins.

The Waterfall Method



DevOps:-

DevOps is the combination of "development" and "operations," which is used to improving collaboration, communication, and integration between software development teams and IT operations teams.



What is API?

APIs are mechanisms to communicate between the two applications.

Types of API :-

APIs (Application Programming Interfaces) can be categorized into several main types based on their functionality and purpose. Here are some of the main types of APIs:

Web APIs (HTTP/RESTful APIs):

These are APIs accessed via HTTP protocols over the web.

Representational State Transfer (REST) APIs are a common type of web API that follows REST architectural principles.

RESTful APIs use standard HTTP methods (GET, POST, PUT, DELETE) for performing CRUD (Create, Read, Update, Delete) operations on resources.

They typically return data in formats like JSON or XML.

SOAP APIs:

SOAP (Simple Object Access Protocol) APIs use XML for message formatting and rely on other protocols like HTTP or SMTP for message negotiation and transmission.

SOAP APIs are known for their strict standards, including WSDL (Web Services Description Language) for defining service contracts.

RPC APIs (Remote Procedure Call):

RPC APIs allow a program to execute procedures or functions in another address space (commonly on a remote server).

RPC APIs are generally language-specific and may use various protocols for communication, such as JSON-RPC or XML-RPC.

GraphQL APIs:

GraphQL is a query language for APIs developed by Facebook.

Unlike REST APIs where clients receive fixed data structures, GraphQL APIs allow clients to request only the data they need.

Clients can specify their data requirements using a single query, reducing over-fetching and underfetching of data.

Library-Based APIs:

These APIs are included in software libraries and frameworks, allowing developers to access functionality and resources within the library.

Examples include the standard libraries in programming languages like Python, Java, or C++.

Hardware APIs:

These APIs provide access to hardware features and functionalities of devices.

Examples include APIs for accessing camera features, sensors, GPS, etc., in mobile devices.

Cloud APIs:

Cloud APIs provide access to various cloud services and resources, such as storage, computing power, databases, etc.

Examples include APIs provided by AWS, Google Cloud Platform, Microsoft Azure, etc.

Open APIs (Public APIs):

Open APIs are publicly available APIs that allow third-party developers to access certain functionalities or data of a service or platform.

Examples include APIs provided by social media platforms like Twitter, Facebook, or payment gateways like PayPal.

Private APIs:

Private APIs are used within an organization and are not exposed to external developers.

They are often used for internal integration between different systems or services.

What is Frontend?

The layer above the back end is the front end and it includes all software or hardware that is part of a user interface. Human or digital users interact directly with various aspects of the front end of a program, including user-entered data, buttons, programs, websites and other features.

What is Backend?

Backend Usually work on behind the scenes. As it handles the server data as well as data from the Database.

