

# DevOps Certification Training

Study Material – Application Development  
Fundamental



## What is Web Application :

A Web application (Web app) is an application program that is stored on a remote server and delivered over the Internet through a browser interface.

Web applications include online forms, shopping carts, word processors, spreadsheets, video and photo editing, file conversion, file scanning, and email programs such as Gmail, Yahoo and AOL. Popular applications include Google Apps and Microsoft 365.

## Benefits of Web Application :

Some common benefits of Web apps include: Allowing multiple users access to the same version of an application. Web apps don't need to be installed. Web apps can be accessed through various platforms such as a desktop, laptop, or mobile. The best thing about them is they can be custom-made to fit your needs.

## Types of Web Applications :

There are various types of Web Application, Few of the widely used application types are :

- Dynamic Web Application
- Static Web Application
- Mobile Application
- E-Commerce Application
- Content Management Applications

## What is Multi-tier Application :

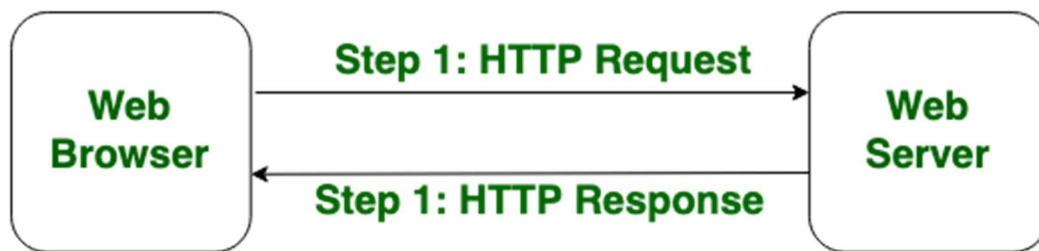
A multi-tier application is **any application developed and distributed among more than one layer**. It logically separates the different application-specific, operational layers. The number of layers varies by business and application requirements, but three-tier is the most commonly used architecture.

## What is 2 tier and 3 tier application?

In two-tier, the application logic is either buried inside the user interface on the client or within the database on the server (or both). In three-tier, the application logic or process resides in the middle-tier, it is separated from the data and the user interface.

### What is meant by client-server communication?

Client/Server communication **involves two components, namely a client and a server**. They are usually multiple clients in communication with a single server. The clients send HTTP requests to the server and the server responds to the client requests called HTTP response. There are three main methods to client/server communication.



### Static Web Page

### What is static and dynamic web application :

A static website is one with stable content, where every user sees the exact same thing on each individual page. On the other hand, a dynamic website is one where content is pulled on-the-fly, allowing its content to change with the user.

### What is meant by monolithic application?

A monolithic app **has all or most of its functionality within a single process or container and it's componentized in internal layers or libraries**. The downside to this approach comes if or when the application grows, requiring it to scale. If the entire application scaled, it's not really a problem

### What is meant by microservice application ?

Microservices are **an architectural and organizational approach to software development where software is composed of small independent services that communicate over well-defined APIs**. These services are owned by small, self-contained teams.

### What is IP Address :

An IP address is **a unique address that identifies a device on the internet or a local network**. IP stands for "Internet Protocol," which is the set of rules governing the format of data sent via the internet or local network.

### What is DNS Server :

The Domain Name System (DNS) Server is **a server that is specifically used for matching website hostnames (like example.com) to their corresponding Internet Protocol or IP addresses**. The DNS server contains a database of public IP addresses and their corresponding domain names.

### RDBMS Systems :

RDBMS stands for **Relational Database Management System**. RDBMS is a program used to maintain a relational database. RDBMS is the basis for all modern database systems such as MySQL, Microsoft SQL Server, Oracle, and Microsoft Access. RDBMS uses SQL queries to access the data in the database.

