**Software Architectures**

**Client Server Architecture**

**Q) What is the purpose of DevOps?**

Ans:

To Deliver the application very speedily.

**Scenario:**

**All of you use applications like Instagram Application, WhatsApp, Twitter, Zomato, BookMyShow? Where are you using these applications?**

Ans:

From Mobile Phone will use the applications.

**From Where we are getting these applications?**

From Play Store, we will download this Applications.

**Q) Where is our application is going to store?**

Ans:

When you are talking about the Applications Play Store is just a medium.

From that Play Store Medium we are downloading the Applications.

In Real Time your applications are going to be hosted on Servers.

**Q) What is Client?**

Ans:

Who Sends the Request.

**Q) What is Server?**

Ans:

Who Responds to the Request.

Server serves the services to the End Users.

**Q) What is Application?**

Application is a collection of services.

Ex: Paytm, PhonePe, …. Etc.

**Software Architectures:**

Learning from this:

How the Applications are going to work on the Cloud.

How the Real time will work Actually.

Software Architectures are classified into 4 types:

1. ONE-TIER
2. TWO-TIER
3. THREE-TIER
4. N-TIER

What is the MEANING of TIER over here?

TIER or SERVER or LAYER

Example:

Booking Train Tickets: Paytm

Booking Movie Tickets: BookMyShow

Server: Serves the Services to the End User.

**In Real Time How Many Servers we are going to work on?**

In Real Time, majorly we are going to work on 3 Servers.

1. Webserver
2. App Server
3. DB Server

A diagram with arrows pointing to the center

Description automatically generated

**1) Webserver:**

It is also called as the Presentation Layer.

To show the Application.

Who works: UI/UX Developers, Front-end Developers.

What they use: Web Technologies

Examples: HTML, CSS, JS

**2) App Server:**

To use the application.

It is also called as Logic Layer.

Who Works: Back-end Developers.

What they use: Programming

Examples: Java, Python, C, C++. .Net. Go. …………..

**3) DB Server:**

It is also called as DB Layer.

To store and retrieve data.

Who Works: DB Admins

What they use: SQL

Examples: MySQL, Oracle, SQL Server, PostgreSQL, Arango, MongoDB...

**ONE-TIER ARCHITECTURE: STANDALONE APPLICATION**

We can develop only Standalone Applications.

Application will work on Local Laptop.

All Layers will be on Locally.

It will not require any Internet Connection.

Examples: VLC Media Player

**TWO-TIER ARCHITECTURE: CLIENT-SERVER APPLICATION**

We can develop client-server applications.

Application will work on Local Laptop.

LOCAL: PRESENTATION & LOGIC. DATABASE: INTERNET

It will require Internet Connection

Examples: Banking Applications

**THREE-TIER ARCHITECTURE: WEB APPLICATION (REALTIME)**

Application no need to be on Local.

Everything we can use from Internet.

Examples: WhatsApp, Instagram, BookMyShow, -------