

## 1.What is web development?

A. Web development is meant for creating, building and maintaining of websites. It includes aspects such as web design, web publishing, web programming, and database management. It is the creation of an application that works over the internet.

Web Development can be classified into two ways:

### Frontend Development

The part of a website where the user interacts directly is termed as front end. It is also referred to as the client side of the application.

### Backend Development

Backend is the server side of a website. It is part of the website that users cannot see and interact with. It is the portion of software that does not come in direct contact with the users. It is used to store and arrange data.

## 2.What are types of applications, explain each with one example.

A. There are mainly 4 types of applications. They are

- Desktop applications
- Mobile applications
- Web applications
- Enterprise applications

### Desktop applications:

Applications that can be installed and run on desktop are called desktop applications.

Ex: Microsoft word, power point, Camera, clock etc.

### Mobile applications:

Applications that can be installed and run on small, wireless devices such as mobile phones and tablets are called mobile applications.

Ex: Games, Social media, e-commerce apps like Flipkart, Amazon etc.

### Web applications:

Web applications are the applications that run on the web browser. These are used to provide services and exchange information remotely and securely.

Ex: Gmail, Shopping websites etc.

### Enterprise applications:

The applications that are used for the large scale and complex business needs with high secure environments are called enterprise applications.

Ex: HR management systems, Project management tools etc.

### 3.What are types of domains and examples?

A. A domain is a text that is used by a user to access the particular website on the browser. It is the address of a website. Examples of domain extensions that are used in url are

Generic top level domains:

.com, .gov,.edu, .mil, .info, .ee, .org, .net, .biz, .

Country code top level domains:

.cn(China)

.ru(Russia)

.uk(UK)

.in(India)

.de(Germany)

.br(Brazil)

.au(Australia)

.nl(Netherlands)

### 4.Hosting and hosting plans.

A.Web hosting is an online service that is used to publish websites or applications on internet.

When you sign up for a web hosting service, you basically rent some space on a physical server where you can store all the files and data necessary for your website to work properly.

A hosting plan is a product you must purchase in order for your website to display online. When you purchase a hosting plan, you are assigned a server. There are mainly 6 types of web hosting.

Shared hosting

VPS hosting

Dedicated server hosting

Cloud hosting

Managed hosting

Colocation

Examples:

Hostinger –For beginners and small sites.

ScalaHosting – For enterprise.

inMotionHosting – For speed, reliable and flexible deployments.

### 5.Difference between web and enterprise applications.

A. Web applications are accessed over the internet and run on a web server.

Enterprise applications are installed on local server or accessed through a private network.

Enterprise application is a suite of programs, whereas a web app is a piece of software. They differ in their core function and purpose.

Web apps are accessed using a web browser over the Internet. Most web apps are general-purpose software.

But enterprise applications are large-scale software. It addresses an entire organization's needs rather than an individual.

Enterprise architecture is large and complex, containing many processes and functions compared to web apps. It aligns IT resources with the business goals of a company.

Users need enterprise applications for various purposes in an organization. Enterprise applications have different levels of access for users. Further, it has specific functionality for specific roles. Thus, contributes to the digital transformation of the organization.

## 6. Difference between web server and application server.

A. Web servers deliver static content like HTML pages, images, videos, and files. Application servers deliver dynamic content like real-time updates, personalized information, and customer support.

A web server hosts websites and delivers responses to simple requests.

Application servers have a more complex set of tasks. Application servers handle business logic to generate dynamic content by connecting with enterprise systems, services, and databases.

The protocols web servers use are HTTP, FTP and Simple Mail Transfer Protocol (SMTP). These protocols facilitate file storage and transfer as well as email.

Application servers use additional communication protocols to communicate with other software components. They may use remote method invocation (RMI) and remote procedure call (RPC).

Web servers mostly deliver static content. Static content is content that a server doesn't need to modify or process before delivering. For example, image files (like PNG, GIF, and JPEG), downloadable documents (PDFs), videos, and HTML files are all static content.

Application servers mostly deliver dynamic content. Dynamic content is content that changes based on how the user interacts with it. For example, dynamically generated reports, customized data representations, personalized UIs, database results, and processed HTML are all dynamic content.

## 7. What is URL?

A. URL stands for Uniform Resource Locator. It is used to locate a resource on the internet. It is also called as web address. URL contains 4 parts, protocol, sub domain, domain name, domain.

Ex: <https://www.amazon.in>

https – protocol

www – sub domain

amazon – domain name

in - domain

## 8. What is Protocol and explain.

A. A protocol is a set of rules and guidelines for communicating data. Rules are defined for each step and process during communication between two or more computers. Networks have to follow these rules to transmit data successfully.

Network protocols can be broadly classified into three main types:

1. Communication
2. Network management
3. Network security

Some of the common types of network protocols are

1. **Transmission control protocol (TCP) or internet protocol (IP)**
2. **Hypertext transfer protocol (HTTP)**
3. **User datagram protocol (UDP)**
4. **Internet relay chat (IRC)**
5. **Internet control message protocol (ICMP)**
6. **Simple network management protocol (SNMP)**
7. **Secure file transfer protocol (SFTP)**
8. **Secure sockets layer (SSL)**
9. **HTTP secure (HTTPS)**
10. **Post office protocol (POP)**
11. **Internet message access protocol (IMAP)**
12. **Dynamic host configuration protocol (DHCP)**

9.What are cookies?

A. Cookies are small pieces of text sent to a browser by a website. They help that website remember information about visit, which can both make it easier to visit the site again and make the site more useful to users.