

# WEBSITE BASICS

**PRESENTED BY**

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# Outline of the Presentation

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# Internet Overview

## Internet

Collection of Computers & other Peripherals



# Brief history of the internet

**USA DOD-1969 (ARPANET)**

ARPANET



USENET-1979



CSNET-1980



BITNET-1981



NSFNET-1985



WWW-1989



NREN-1992



INTRANET -1994

# Web Essentials

## World Wide Web

Vast collection of interconnected documents and other resources, accessible through the internet.

Information Space-URIs

## Key characteristics of the World Wide Web

**Hypertext:** Web pages use hypertext, which allows you to click on links to jump from one page to another related page.

**Uniform Resource Locator (URL):** Each web page has a unique address called a URL (Uniform Resource Locator).

This allows you to easily find and access specific pages using your web browser.

## Example

<http://www.example.com/index.html>

## **Web Essentials(Cont..)**

**Hypertext Transfer Protocol (HTTP):** HTTP is the communication protocol that defines how web browsers and servers interact to exchange information.

**Web browser:** A web browser is a software application that allows you to access and navigate the web.

### **Example**

Chrome, Firefox, Safari, and Edge.

# **Web Essentials(Cont..)**

## **Web Servers**

A Web Server is a program that processes network requests from users and serves them with files that create web pages.

Web servers are computers used to store HTTP files which make up a website..

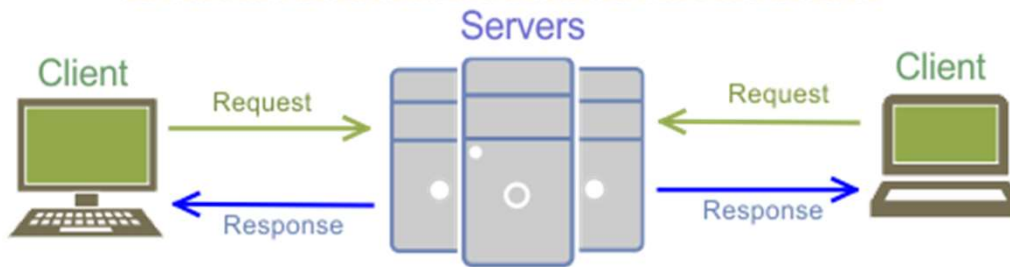
## **Website**

A Website is a collection of web pages and related content that is identified by a common domain name and published on at least one web server.

Websites are typically dedicated to a particular topic or purpose, such as news, education, commerce, entertainment, or social networking

# Clients Servers Communication

## Client Server Architecture



*The Client makes request for service to server.*

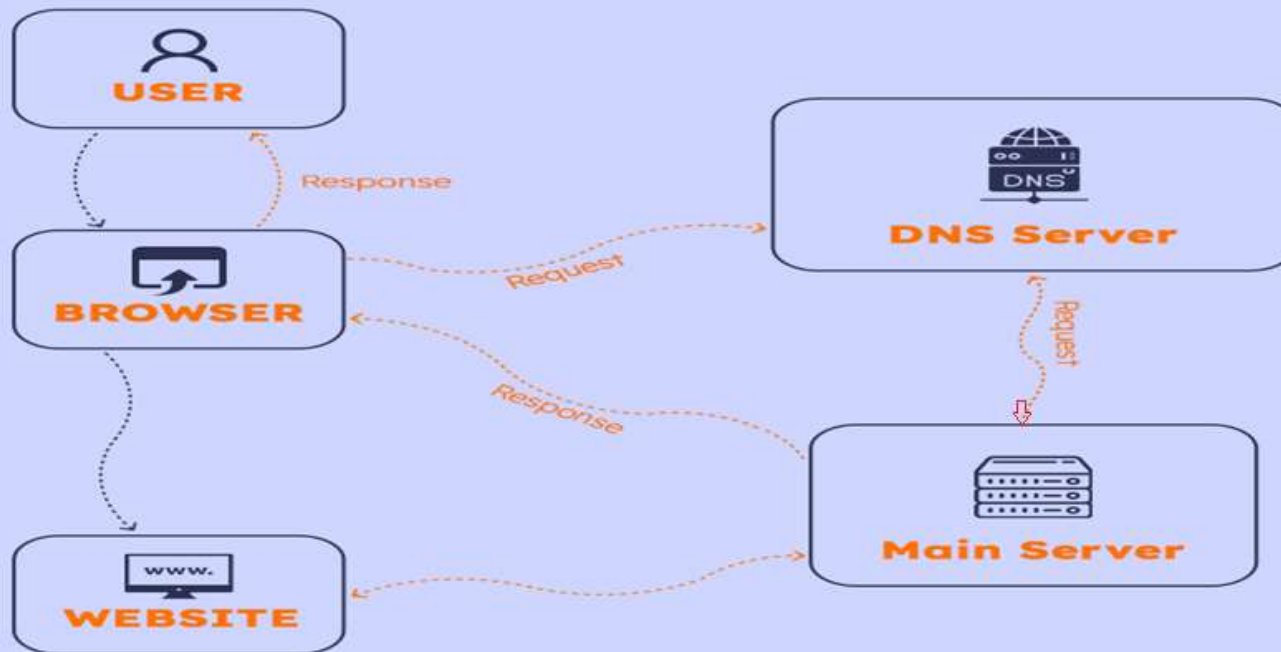
*The Server responds to that request.*

## Real Time Examples

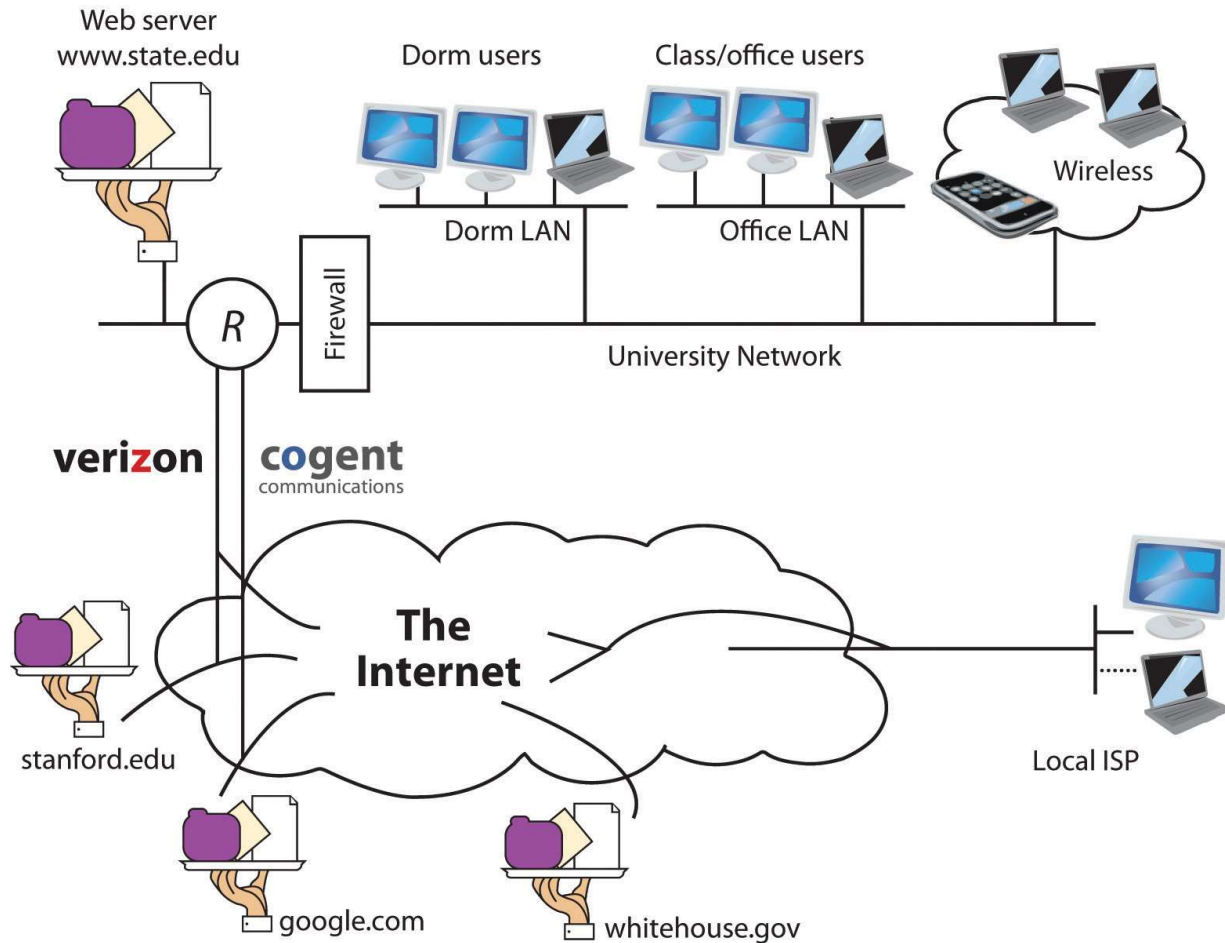
- **Email:** email client (the client) sends the email to an email server (the server).
- The email server delivers it to the recipient's email server.
- The recipient's email client then retrieves the email from the server
- **Online banking:** your web browser (the client) sends a request to the bank's web server (the server).
  - The server sends you the information you requested.- your account balance & transaction history.
- **Online gaming:** your gaming client (the client) sends your input to the game server (the server).
  - The server updates the game state based on your input and then sends the updated game state to all of the players.



# HOW DOES A WEBSITE WORK



# Example: How Websites and Webpages Work



# Program:Simple Interactive Login Form

```
<!DOCTYPE html>
<html>
<head>
  <title>Login Form</title>
</head>
<body>
  <h1>Login Form</h1>
  <form id="loginForm">
    <label for="username">Username:</label>
    <input type="text" id="username" name="username" required><br><br>
    <label for="password">Password:</label>
    <input type="password" id="password" name="password" required><br><br>
    <button type="submit">Login</button>
  </form>
```

# Program: Simple Interactive Login Form(Cont..)

```
<div id="message" style="display: none;"></div>
<script>
    document.getElementById('loginForm').addEventListener('submit',
function(event) {
    event.preventDefault(); // Prevent form submission

    // Get form data
    var username = document.getElementById('username').value;
    var password = document.getElementById('password').value;
```

# Program: Simple Interactive Login Form(Cont..)

```
// Check credentials
```

```
    if (username === 'user' && password === 'password') {  
        document.getElementById('message').innerText = 'Login successful!';  
        document.getElementById('message').style.color = 'green';  
    } else {  
        document.getElementById('message').innerText = 'Invalid username or password.';  
        document.getElementById('message').style.color = 'red';  
    }  
    document.getElementById('message').style.display = 'block'; // Display message  
});
```

```
</script>
```

```
</body>
```

```
</html>
```

[Output](#)

**YOUTUBE VIDEO**

**How Websites Work**

***THANK YOU***