## Welcome Introduction to the Web and it's technologies

## **AGENDA**

#### **Agenda**

- Discuss basic Web terminologies
- Overview of the Internet
- Discuss the Internet vs the Web
- A Detail discussion of the Web Architecture
  - HTTP/HTTPS
- Tools
- Basic Web Technologies

## **QUIZ TIME**







### WHAT IS A WEB PAGE?

WHAT IS A WEB SITE?



#### **ANSWER SHEET**

A Web page is electronic
document that is access via a
web browser and is typically used
to present information to
persons who are viewing it.



 A Website is a collection of related web pages.

#### A PHYSICAL DOCUMENT

#### MUTUAL RELEASE

Agreement of Purchase and Sale

BETWEEN Rick Jagger and Terry Hall, as Porchaser(s)

AND: ACME Homes, as Vendor(i)

RE: Agreement of Purchase and Sale between the Vendor(s) and Purchase (s).

ACCEPTED: the Fifteenth day of June , 2001

CONCERMNO: the subject property known as: Lot 1, Concession 7 (2 Sunset Boulevard)

as more particularly described in the fore mentioned Agreement of Purchase and Sale.

DEPOSIT held by: ACME Homes, as deposit holder

WE, he Purchasers and the Vendors in the above noted transaction, healty release each other and the Agent(t) in the proposed transaction, them all liabilities, covenants, obligation, daints and sums of money arising out of the above Agreement of Purchase and Sale, together with any eight and causes of auton that each party may have had against the other and the Agent(t), and we direct the party hadding the depost of 5x thousand Canadian Bollans and zero cents: (\$Coh. \$6,000.00) to disbuse if as follows: full retand by cathled's Areque.

and this shall be their good, full and sufficient and irrevocable authority for so doing.

THE AGENT(S) hereby release(s) both parties from any claim that hethey may have had for commission or other remuneration in the above funcacion, except as may be haretoletten specifically provided. THE RELEASE shall be binding upon the heirs, executars, administration and parties occupied the same.

DATED at	tis	day of		
SIGNED, SEALED AND DELIVERED In the prezence of:	IN WITNESS	whereoff have bereun	to set my hand and s	e at
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Snap Inc.	Careers	News	Investors	Advertisers	
Who We Are	Community	Diversity	Benefits	Offices University	VIEW OPENINGS

#### Who We Are

At Snap, we believe that reinventing the camera represents our greatest opportunity to improve the way people live and communicate. We contribute to human progress by empowering people to express themselves, live in the moment, learn about the world, and have fun together.



### WHAT IS A WEB APP?

WHAT DOES URL MEAN?



#### **ANSWER SHEET**

 A web app is a special type of website that performs functions and tasks. Or, a web app is an app that is accessible via a browser.



URL - Uniform Resource Locator Web Address . Example :

https://www.facebook.com



# WHAT IS A BROWSER AND WHAT IS ITS SIGNIFICANCE IN THE CONTEXT OF WEB?

#### **ANSWER SHEET**

 A browser is a program that allows you to request a web page from a web server and then displays the web page in the screen.



#### POPULAR BROWSERS



#### SUMMARY

- A web page is an electronic document. They
  are files that are stored on a computer that runs
  software called a web server and retrieve via a
  program called a browser.
- A **website** is a collection of related web pages.
- A web app is a special type of website that performs specific tasks.
- A web browser or a browser is a program that retrieves web pages and other web resources from a web server.
- Uniform Resource Locator(URL) is a web address. It is a reference to a web resource that specifies its location on a computer network.

Example: https://www.facebook.com



#### GOOD SO FAR!



## TYPES OF WEBSITES AND WEB APPS

#### TYPES OF WEBSITES AND WEB APPS

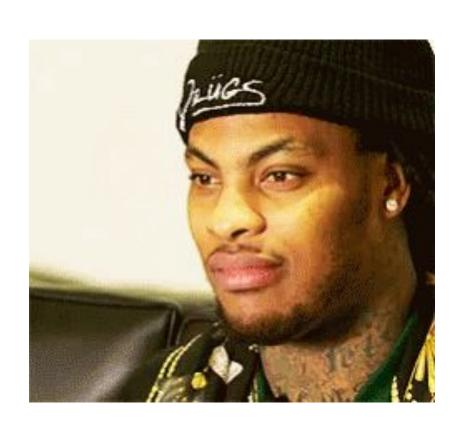
Dynamic Websites
Server Side Web Applications



Static Websites
Client -Side Web Applications



### WAIT, THERE ARE MORE QUESTIONS





## IS THE INTERNET AND THE WEB THE SAME?





## INTERNET

#### The Internet

A global network of computers.

Each computer on the internet has an Internet
 Protocol address(IP address)



1. Would you be shock if I told you that the Web functions and "behaves" very similar to what is happening with the two men on the right?

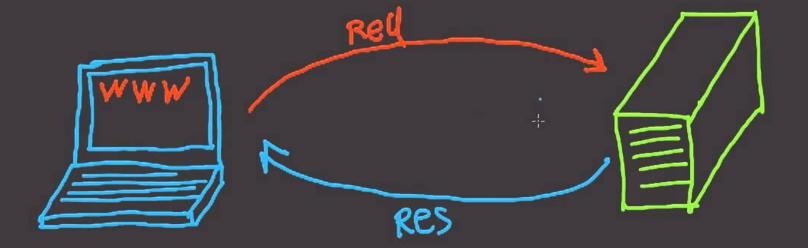


## THE WEB

OR

THE WORLD WIDE WEB

## Client - Server



#### The Web or World Wide Web (WWW)

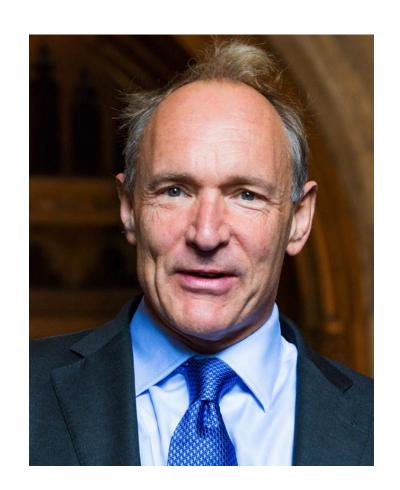
- Is a system or a "digital space" that is composed of billions of connected electronic documents that are stored on computers that run web-server software and that can be viewed by applications called web browsers.
- Resources of the Web are identified via a URL and are accessible over the Internet.

#### More on the Web

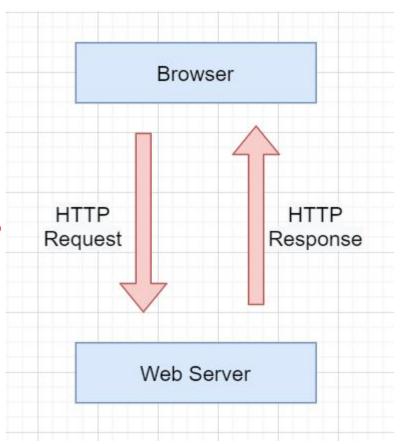
The Web was created by a computer engineer/computer scientist called **Timothy (Aka Tim) Berners-Lee** in 1989.

Tim Berners-Lee also created the World Wide Web Consortium (W3C). The main organization which oversees the continued development and standards of the Web.

The Web is based on a networking Architecture called the Client-Server Model



HOW THE WEB WORKS?



# THE POWERS OF (HYPERTEXT TRANSFER PROTOCOL) HTTP

#### **HTTP Related Terms**

What does the word Protocol mean?

The official procedure or system of rules governing affairs of state or diplomatic occasions

2. What does the word HyperText mean?

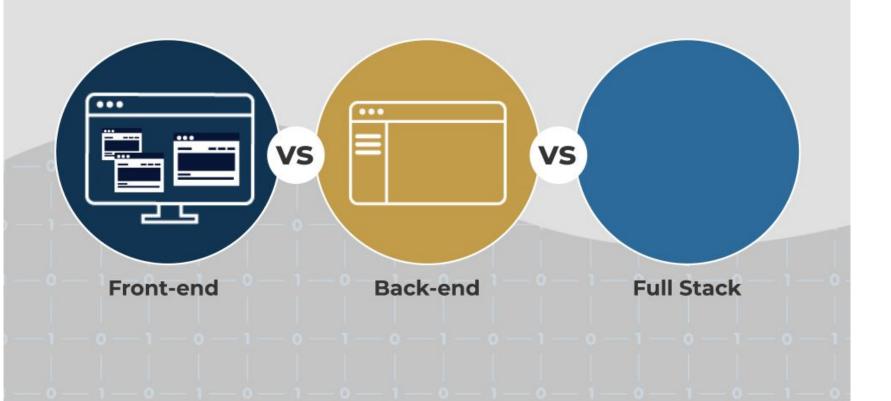
Hypertext is a word or words that contain a link to a website or webpage.

HTTP was designed for communication between web browsers and web servers. It is a client Server protocol



#### WHAT ARE THE PILLARS OF WEB DEVELOPMENT





## **FRONT-END**

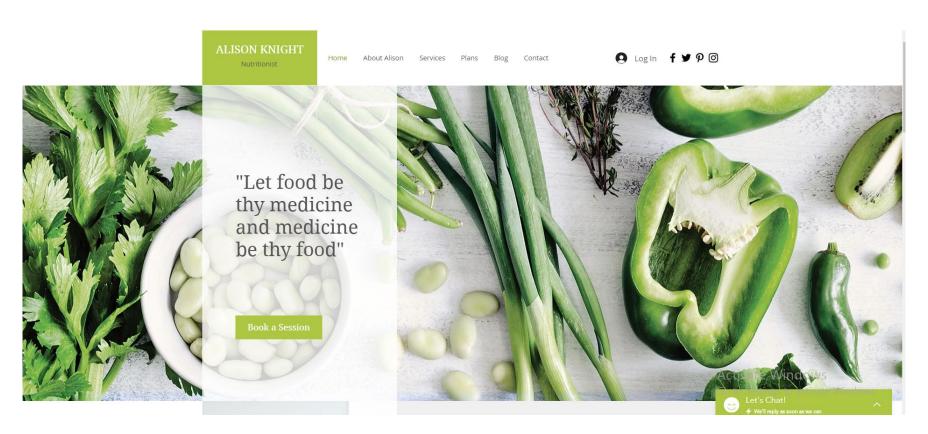
#### Front-End Web Development

The Front-End of a website is the part that the users will see and interact with; in other words, the browser where the user interface appears. The Front-End is also known as the presentation layer.

What can you build as a Front-End Developer?



#### **Static Websites**



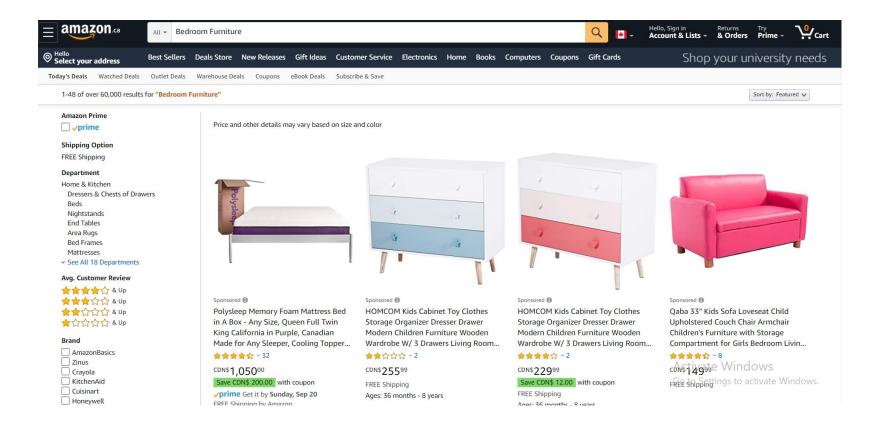
## **BACK-END**

### Back-End Web Development

The back-end is the part of the website that users don't see. It refers to the server side, which is responsible for returning the page, and for storing or fetching user data. It's also known as the data access layer. What can you
build as a
Back-End
Developer?

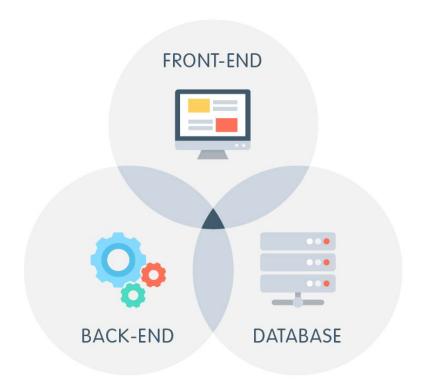


#### **Dynamic Websites or Server Side Based Applications**



## **FULL STACK**

### **FULL-STACK DEVELOPMENT**



# MAIN **FRONT-END TECHNOLOGIES**

#### MAIN FRONT-END TECHNOLOGIES







#### HyperText Markup Language (HTML) & Cascading Style Sheets (

- Always the first thing to learn.
- HTML is used to set and define the structure of web page.
- CSS is used to style the structure of the web page. Thus CSS deals with the aesthetics of the website and/or web application.

#### JavaScript

- JavaScript is used to add interactivity and functionality to the interface of websites and web application.
- With JavaScript your websites can perform arithmetic, user validation, timed image scroller, animation, etc

## **TOOLS**

#### **Browsers**



**Browsers market share statistics** 

#### Code Editor



# SEE YOU AT THE NEXT CLASS