

UNDERSTANDING THE WEB

Overview

- In this module we will discuss about what is internet, different services provide by internet, WWW, generations of wireless network. Then we will understand HTTP, webpage, website, web application, and difference of it.

Agenda

- What is internet?
- Internet Based Services
- World Wide Web (WWW)
- Generations of Wireless Network
- History and Evolution of the Internet
- Pros and Cons of Using the Internet
- Understanding HTTP Basics
- What is a WebPage?
- Types of Web page
- What is Website?
- What is a Web Application?
- Difference between Website and WebApplication

Learning Objectives

- Different Web terminologies for understanding the web
- HTTP concepts
- Website v/s Web application

What is Internet?



<https://sites.google.com/site/tassadar550/web-resource>

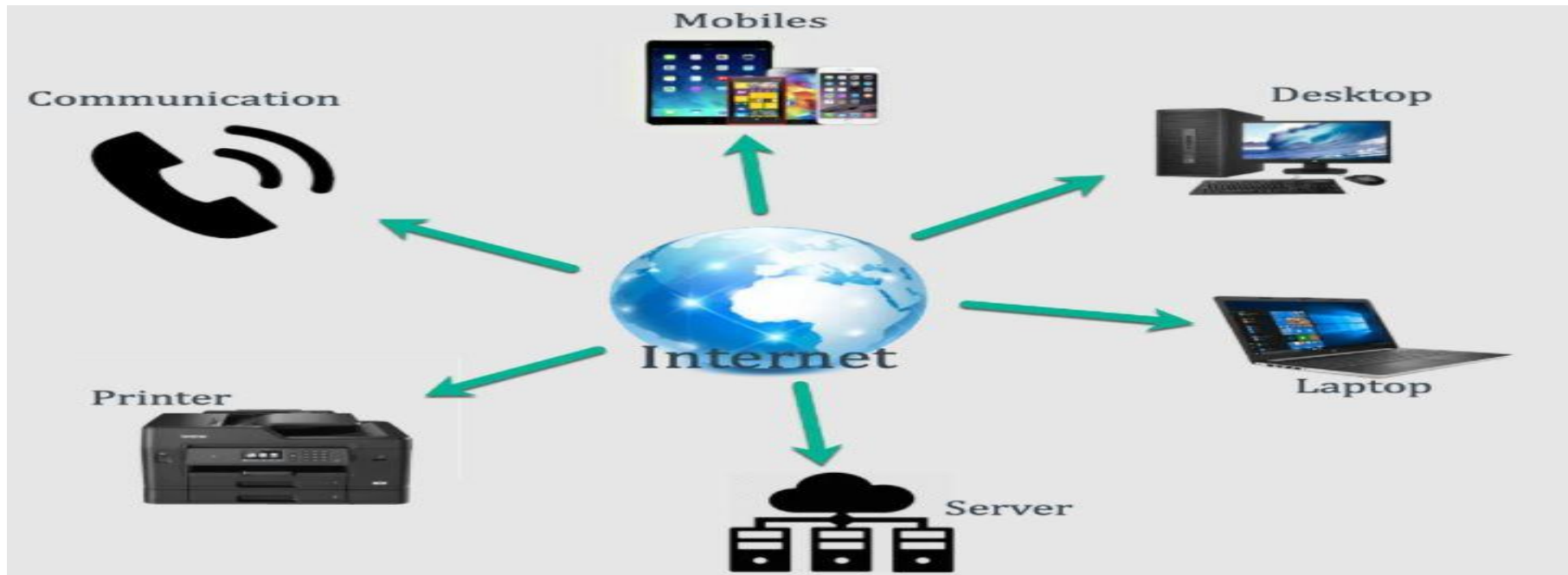
What is Internet?



What is Internet?

Internet is a world-wide global system of interconnected computer networks.

Internet uses the standard Internet Protocol (TCP/IP).



<https://img.webnots.com/2019/02/Overview-of-Internet.png>

Internet Based Services









1. Electronic Mail (e-mail)
2. World Wide Web
3. File Transfer Protocol (FTP)
4. Chat Rooms
5. Mailing list
6. Instant Messaging
7. News Groups

<https://www.slideshare.net/sahilnagpal79025/services-provided-by-the-internet-46923539>

World Wide Web (WWW)



Generations of Wireless Network

 <h2>1G</h2> <p>1ST GENERATION <i>wireless network</i></p> <ul style="list-style-type: none"> • Basic voice service • Analog-based protocols 	 <h2>2G</h2> <p>2ND GENERATION <i>wireless network</i></p> <ul style="list-style-type: none"> • Designed for voice • Improved coverage and capacity • First digital standards (GSM, CDMA) 	 <h2>3G</h2> <p>3RD GENERATION <i>wireless network</i></p> <ul style="list-style-type: none"> • Designed for voice with some data consideration (multimedia, text, internet) • First mobile broadband 	 <h2>4G</h2> <p>4TH GENERATION <i>wireless network</i></p> <ul style="list-style-type: none"> • Designed primarily for data • IP-based protocols (LTE) • True mobile broadband 
T H E N E E D F O R S P E E D <i>in kilobits per second</i>			
2.4 <i>kbps</i>	64 <i>kbps</i>	2,000 <i>kbps</i>	100,000 <i>kbps</i>

History and Evolution of the Internet

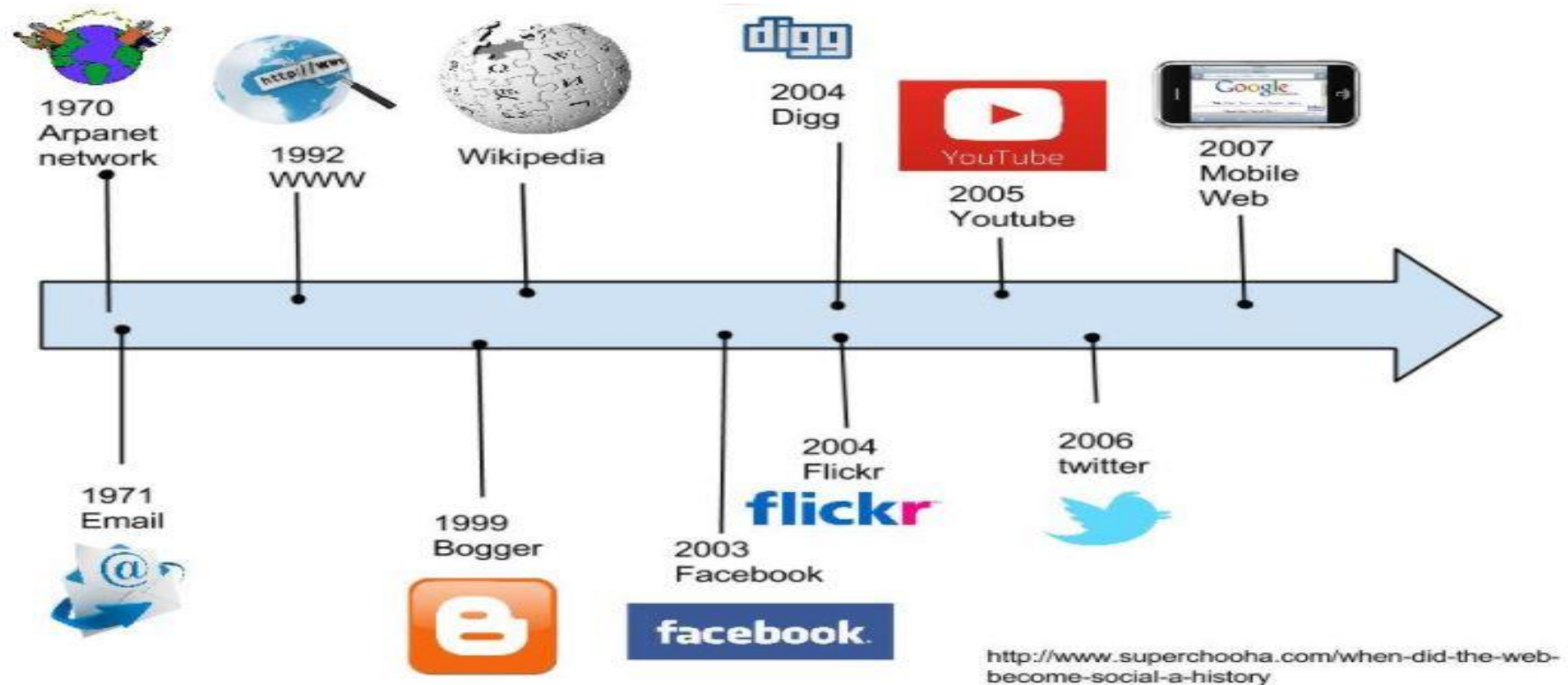


Image : Evolution of Internet

<https://zaiiglock.files.wordpress.com/2013/11/internet-timeline-bbbb.jpg>

Pros and Cons of Using the Internet

ADVANTAGES

- Sharing information
- Communication
- Entertainment
- Advertisement
- News
- Customer support and service
- Feedback from users
- Collection of information

DISADVANTAGES

- Viruses
- Theft of personal information
- Immorality
- Wastage of times
- Pornography
- Spamming
- Language problems

<https://pt.slideshare.net/kirankurianphilip/internet-merits-demerits-features/3?smtNoRedir=1>

Understanding HTTP Basics

- Stands for "**Hypertext Transfer Protocol**."
- HTTP is based on a request and a response.
- HTTP is the protocol used to transfer data over the web.
- HTTP is the protocol that is used by web servers and browsers to communicate.

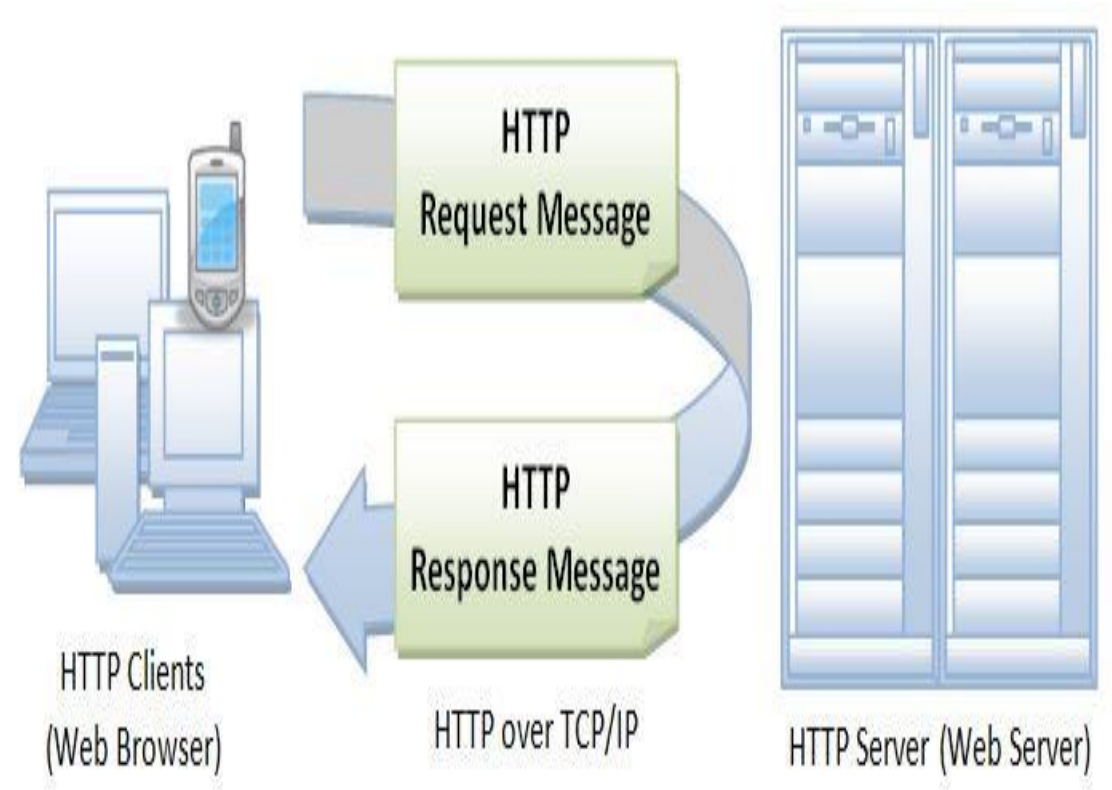


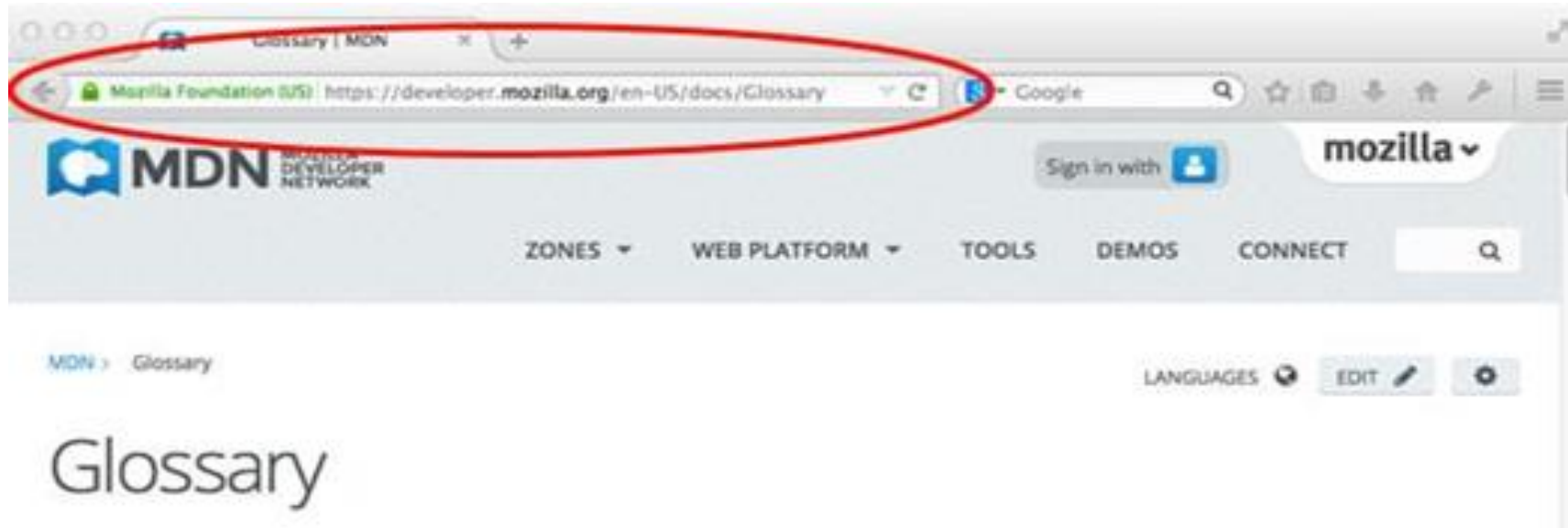
Fig : HTTP

https://www3.ntu.edu.sg/home/ehchua/programming/web/programming/HTTP_Basics.html

What is a Web Page?

A web page can contain huge information including text, graphics, audio, video, and hyperlinks.

These hyperlinks are the link to other web pages.



<https://developer.mozilla.org/enUS/docs/Learn/Commonquestion/Pagessitesserversandsearchengines>

Type of Web Pages

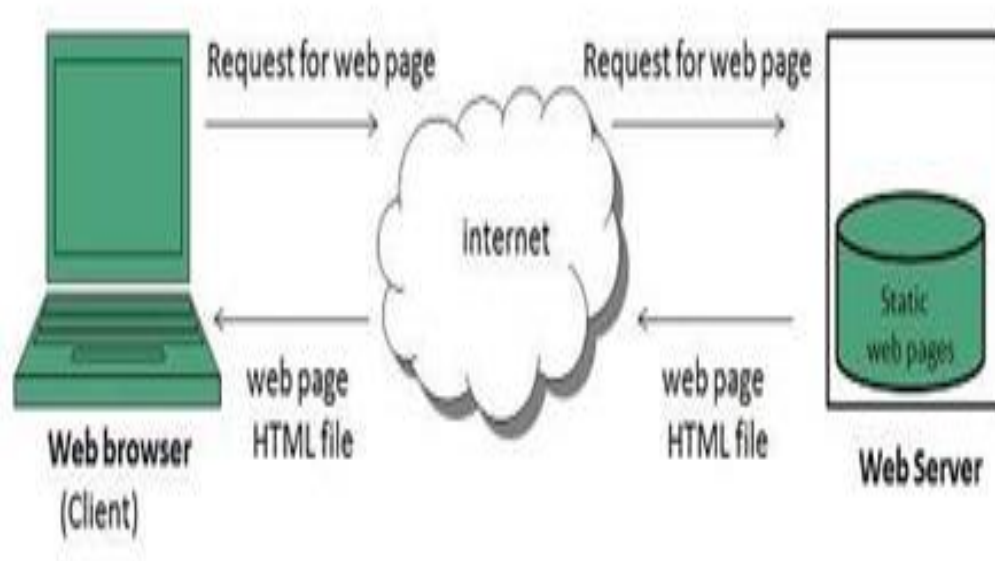


Image: Static Web page

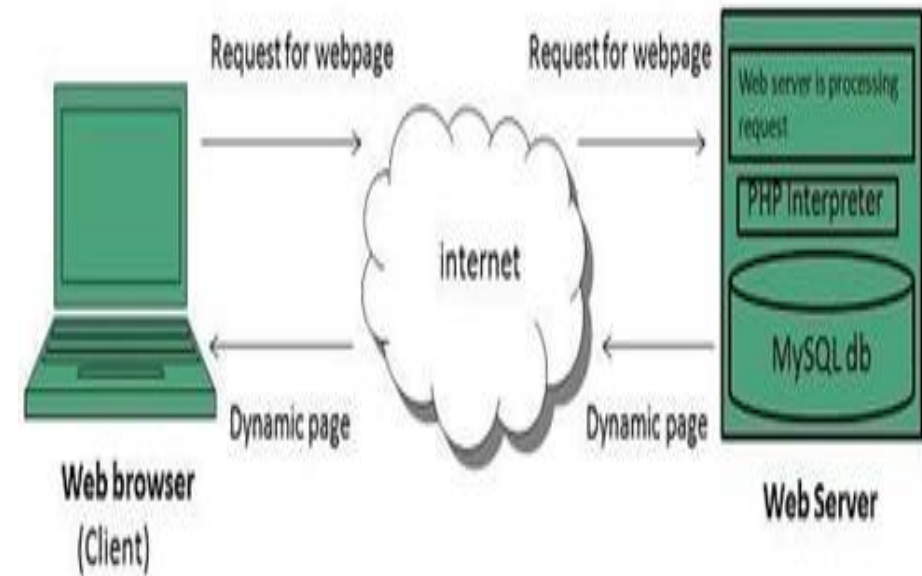


Image: Dynamic Web page

https://www.tutorialspoint.com/internet_technologies/web_pages.htm

What is a Website?

A website is a collection of linked web pages that shares a unique domain name.



<https://developer.mozilla.org/enUS/docs/Learn/Commonquestion/Pagessitesserversandsearchengines>

What is a Web Application?

Web application is a client-side and server-side software application in which the client runs or request in a web browser.



<https://www.appverticals.com/blog/web-app-vs-website/>

Difference Between Web application & Website



<https://www.spaceotechnologies.com/webapplication-vs-website-difference/>

Conclusion

We have learned and covered the following topics in this module:

- Understanding web concepts
- HTTP concepts for understanding client server architecture
- Basics of Website and Web application

THANK YOU