1.1.1 - The Internet

What is the internet?

The internet is the global system of interconnected computer networks that use the Internet protocol suite to link devices worldwide.

This network is connected and accessed via telephone circuits, coaxial cables, fiber optics or copper wires, Wi-Fi, satellite, and cellular telephone technology (e.g. 3G, 4G)

What is the web?

- The web is an information space: set of publicly available documents hosted on computers connected to the internet
- Access documents via their URLs (Uniform Resource Locators)
  - http://mail.google.com/
  - DNS (Domain Name System)
    - Naming system for computers, services, or other resources connected to the Internet
    - Translates into corresponding IP address (Internet Protocol address) needed for locating and identifying computer services and devices

The Web

- Documents can be interlinked by hypertext (any link on a website that opens a new web page)
- Search engines like google search this information space (the web) based on queries and return matching documents

What is a website?

- A website is a collection of web pages
- Web pages are documents which can be displayed in a web browser such as Firefox or Google Chrome. Examples of these include PDF files, images, and HTML files.

Overview

- Any document on the web is accessed via its URL.
  - We enter this URL in the address bar of a web browser like Firefox or Google Chrome.
- The web browser makes a request to that URL.
- A web server (a computer hosting the website) receives the request and responds with the content (HTML in this case)
- The web browser reads the HTML code and renders the content