

# COMPUTING SYSTEMS AND NETWORKS- The Internet





### **Overview**

### The Internet

- -You should also know that <u>Information technology</u> (I.T.) includes <u>computers</u> and <u>things that work with computers.</u>
- -You should also know that information and data can be shared by devices across networks.
- -The <u>internet is a network of networks</u> that is used around the world.
- -The <u>World Wide Web</u> is a system on the internet that has websites and webpages.
- -Some content is <u>protected</u> on the internet. It is important to know that not all information on the internet is <u>accurate</u>, <u>honest</u>, <u>or legal</u>. Websites and their content are created by people.

### **Networks and The Internet**

- -Networks connect different devices to one another, allowing for information sharing.
- -Networks can also connect to other networks in different places, using a router.
- -The internet is a network of networks that are all connected together.

Router: A router is something that finds a route between networks, connecting them.



The Internet: The internet is a network of networks, that is used around the world to share information and communicate.



Protection: Networks have security features that mean they can block or allow messages and requests. This means that information and data can be kept safe.



# The World Wide Web

#### The World Wide Web

- -The World Wide Web is the part of the internet where we can visit web pages and websites.
- -Information can be shared in the form of things <u>we can see or hear</u> (e.g. things we can read, music, sounds, or videos, etc.).
- -When we use the world wide web, routers help us to journey to different networks in different parts of the world.
- -We can use traceroute tools to track the journey between routers.
- -Web browsers, e.g. Google Chrome and Internet Explorer, let us look at different pages on the internet.

### Website and Webpages

- -Websites are a set of webpages.
- -Webpages may contain different features, e.g. a title, links to other pages, images, videos, and text.
- -Websites and webpages can be found using web addresses (domains), normally split into three parts:
- 1. www (world wide web).
- 2. Name of the organisation/ topic.
- 3. Type of organisation/ location.



 A web address may also be called a URL (Universe Resource Locator). This is the text you type into your internet browser when you want to visit a website.

## **Ownership and Reliability**

- -The content on the internet may <u>belong</u> to different people or companies, for example the person who wrote it or the company who published it.
- -The content may be <u>copyrighted</u>, meaning that others cannot copy or use it without permission.
- -Not all of the information that we see or hear on the internet is <u>reliable</u>. Some of it may be <u>inaccurate</u> due to people lying or misunderstanding things.
- -Inaccurate information can <u>quickly spread</u>. This has become known as '<u>fake news</u>.' We should check multiple sources that we can trust to <u>verify information</u>.



#### **Important Vocabulary**

Network Router Network Security Network switch Server Wireless access point (WAP) Browser World Wide Web Content Links Files Download Sharing Ownership Permission Information