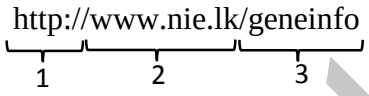
- **Internet**
  The Internet, sometimes called simply "the Net," is a worldwide system of computer networks - a network of networks in which users at any one computer can, if they have permission, toget information from any other computer. There are many services provided by the internet.
  - WWW
  - E-mail
  - Chat and Messaging
  - Telnet
  - Newsgroup
  - E-Commerce
  - E-Learning
  - Blogs
  - Social Networking

- **WWW**
  The World Wide Web (WWW) is a network of online content that is formatted in HTML and accessed via HTTP. The term refers to all the interlinked HTML pages that can be accessed over the Internet. The World Wide Web was originally designed in 1991 by Tim Berners-Lee while he was a contractor at CERN

- **URL**
  A URL (Uniform Resource Locator) is a form of URI and is a standardized naming convention for addressing documents accessible over the Internet and the Intranet. An example of a URL is http://www.nie.lk/, which is the URL for the NIE website.

  Below is some additional information about each of the sections of the http URL for this page.



1 Protocol
2 Domain
3 Webpage

- **Web Browser**
  A web browser is a software program that allows a user to locate, access, and display web pages.
  Eg:-
  - Google Chrome
  - Mozilla Firefox
  - Internet Explorer
  - Opera
  - Safari

- **Web Page**
  A webpage is an independent page of a website. For example, a webpage would be the testimonials page. It can be accessed by typically one URL in a browser. A Web page can be accessed and displayed on a monitor or mobile device through a Web browser.

- **Website**
  A website is a collection of Web pages that are under one domain (such as nie.lk). One website has a many related web pages.
  For example, if there is a school that owns a website that will have several Web pages like Home, About Us, Contact Us, Staff, Teachers, Results, Performance, and others. All of these pages together make up a Website.

- **Download documents, images, audio, video etc.**
  Download is a term used to describe the process of copying data from another computer, either over a network or modem. For example, each time you visit a web page on the Internet, you download the information on the page, including any pictures, to your computer. The term download is often associated with pictures, songs, videos, and programs.

- **Download Image**

Any picture or image on the Internet can be saved to your computer (downloaded). As an example, the following steps will show you how to download the Computer Hope logo that you see to the right.

1. Right-click on the image.
2. From the drop-down menu that appears, select Save image as... or Save Picture as.
3. Choose the location in which you want to save the image.

- **Download Audio**

Downloading an audio file (e.g., an MP3) from a link is just like downloading any other basic file from the Internet. For sites that utilize streaming audio or have the audio embedded into a web page, different downloading techniques must be used, some of which are detailed on the page linked below.

For sites that offer an MP3 download link. Save the MP3 by right-clicking on the link and choosing the option to save link as, save target as, or the Save linked content as link. Once the file is saved, it will appear in you downloads folder.

Download Video

Downloading a movie file (e.g., an MP4) from a link is similar to all other file downloads. Right-click on the link and choose Save link as, Save target as, or the Save linked content as. If the movie is embedded in the web page with an arrow pointing down next to the audio controls, use that link to download the movie. Other streaming movie services that do not have a download link may require additional software to capture the video; the link below has further instructions

Download YouTube video

YouTube has been designed to only allow users to watch and view videos on their website. Many users want to download or save their favorite YouTube videos to their computer so they can watch them without being connected to the Internet or on other devices. Below are the steps required for downloading and watching YouTube videos on your computer for free.

1. First, go to the YouTube page containing the video you want to download. When you have found the page,
2. Type savefrom.net/ in front of any YouTube address (URL).or type ….. between www and the address in the specific URL
3. If done properly, below the link mentioned above, you will see a preview of the video (as shown below), along with a green Download button and the video format. The default format for downloading the video is either Low or Medium quality.

Also, the attention must be given to the following points

- Accessing earth maps
- Trusted and untrusted websites
- Authentic and reliable information

E-mail

Short for electronic mail, e-mail or email is the exchange of information stored in a computer between two users over telecommunications. More plainly, e-mail is a message that may contain text, files, images, or other attachments sent through a network to a specified individual or group of individuals.

In order to use email facility you are required to create an email account using an email software such as Gmail, yahoo, Hotmail etc.

Advantages of e-mail

There are a number of advantages of e-mail and the usage of e-mail versus postal mail. Some of the main advantages are listed below.

- Free delivery - Sending an e-mail is virtually free, outside the cost of Internet service. There is no need to buy a postage stamp to send a letter.
- Global delivery - E-mail can be sent to nearly anywhere around the world, to any country.
- Instant delivery - An e-mail can be instantly sent and received by the recipient over the Internet.
- File attachment - An e-mail can include one or more file attachments, allowing a person to send documents, pictures, or other files with an e-mail.
- Long-term storage - E-mails are stored electronically, which allows for storage and archival over long periods of time.
- Environmentally friendly - Sending an e-mail does not require paper (paperless), cardboard, or packing tape, conserving paper resources.

Video Conferencing

Videoconferencing (or video conference) means to conduct a conference between two or more participants at different sites by using computer networks to transmit audio and video data. Video calls are no longer a luxury but more of a necessity. After all, face to face conversations definitely add more personal touch to conversations than just simple audio calls. Be it catching up with our parents, best friends or partner, it definitely reduces geographical distances between us and our loved ones.

Video Conference

Skype

Undoubtedly the most popular name on this list, Skype has been around for a long time now. Skype has a come a long way, and has only been notching up in offering the best video calls over the years. The Skype interface is still the same, simple and easy to use, but has with time added many more useful features. Skype offers both free and paid call facility. The paid version allows the user to call any number across the world at a nominal price. You can not only make voice calls but also video calls. So, stay in touch with your loved ones by downloading the software on your Windows PC

Viber

Viber is one of the popular social media. It has multiple features despite a simple interface. The app is cost free and allows you to call any Viber user across the globe. Apart from video calls, the software lets user chat with other Viber users. It has some of the most adorable stickers that you can send while chatting with your loved ones. You can also sync your mobile Viber app with your Windows PC. To start exploring what Viber has in store for you, click on:

Web page

A web page is a document commonly written in HyperText Markup Language (HTML) that is accessible through the Internet or other network using an Internet browser. A web page is accessed by entering a URL address and may contain text, graphics, and hyperlinks to other web pages and files
To view a web page requires a browser (e.g., Internet Explorer, Edge, Safari, Firefox, or Chrome). Once in a browser, you can open a web page by entering the URL in the address bar.

Website
A website refers to a central location that contains more than one web page. For example, Computer Hope is considered a website, which includes thousands of different web pages

The difference between a website and a web page is that a website is a collection of web pages with information on a subject, and a web page is a smaller part of a larger website usually containing more specific information.

HTML

HTML is the standard markup language for creating Web pages.

- HTML stands for Hyper Text Markup Language
- HTML describes the structure of Web pages using markup
- HTML elements are the building blocks of HTML pages
- HTML elements are represented by tags
- HTML tags label pieces of content such as "heading", "paragraph", "table", and so on
- Browsers do not display the HTML tags, but use them to render the content of the page

Basic HTML Tag

- The <html> element is the root element of an HTML page
- The <head> element contains meta information about the document
- The <title> element specifies a title for the document
- The <body> element contains the visible page content
- The <h1> element defines a large heading
- The <p> element defines a paragraph

Heading Tags

Headings are defined with the <h1> to <h6> tags.

<h1> defines the most important heading. <h6> defines the least important heading.

Tag	Examples	Display
<h1>	good	**good**
<h2>	good	**good**
<h3>	good	**good**
<h4>	good	**good**
<h5>	good	**good**
<h6>	good	**good**

Heading Tags

Step by step to create a simple web page

Example 1 (ex1.html)

step 1: Open a note pad

step 2: Type the following tags

```
<html>
        <head>
                <title>First Page </title>
        </head>
        <body>
                <h1>My first web page</h1>
                <h1>Welcome every one</h1>
        </body>
</html>
```

Step 3: save with .html extension (ex1.html)

Step 4: Go to the saved location

Step 5: Double click the file icon that you save or right click→ open with → click the browser name

Text Formatting tags

Tag	Description	Example	Display
	Define Bold Text	good	**good**
	Define Italic Text	good	*good*
<u>	Define Underline Text	<u> good</u>	<u>good</u>

Text formatting tags

 tag use for brake line

Example 2 (ex2.html)

```
<html>
        <head>
                <title>Text formatting</title>
        </head>
        <body>
                <h1>Animals</h1><br>
                <b>  Elephant<b><br>
                <u>  dog</u><br>
                <i>  cat</i>
        </body>
</html>
```

Insert image

Images can improve the design and the appearance of a web page. In HTML, images are defined with the <img> tag. The <img> tag is empty, it contains attributes only, and does not have a closing tag. The src attribute specifies the URL (web address) of the image:

<img src="image name with extension"> image and the file be same folder

Color

In HTML, a color can be specified by using a color name (red, tomato, orange, gray, blue, violet, slate blue). HTML supports 140 standard color names.

Change the web page color with bgcolor attribute

<body bgcolor="red">

Example 3 (ex3.html)

step 1: Open a note pad

step 2: Copy a cat image and paste it same folder that you save html file and rename as cat

step 3: Type the following tags

```
<html>
        <head>
                <title>Image </title>
        </head>
        <body bgcolor="violet">
                <h1>Cat</h1>
                <img src="cat.jpg">
        </body>
</html>
```

Cat

Step 4: save with .html extension (Ex3.html)

Step 5: Go to the saved location

Step 6: Double click the file icon that you save or right click→ open with → click the browser name

HTML List

Basically there are two types of lists.

Unordered List:

Unordered HTML List starts with the <ul> tag. Each list item starts with the <li> tag.

- cat
- dog
- elephant

```
<ul>
        <li>cat</li>
        <li>dog</li>
        <li>elephant</li>
</ul>
```

Ordered List:

Ordered HTML List starts with the <ol> tag. Each list item starts with the <li> tag.

1. cat
2. dog
3. elephant

```
<ol>
        <li>cat</li>
        <li>dog</li>
        <li>elephant</li>
</ol>
```

Example 4 (ex4.html)

```
<html>
	<head><title> List </title>
	</head>

	<body>
		<h2>Unordered List</h2>
		<ul>
			<li>cat</li>
			<li>dog</li>
			<li>elephant</li>
		</ul>
		<h2>Ordered List</h2>
		<ol>
			<li>cat</li>
			<li>dog</li>
			<li>elephant</li>
		</ol>
	</body>
</html>
```

Unordered List

The list items will be marked with bullets (small black circles) by default:

HTML Links - Hyperlinks

HTML links are hyperlinks.
When click on a link and jump to another document.
When you move the mouse over a link, the mouse arrow will turn into a little hand.

In HTML, links are defined with the <a> tag:
link text

Example 5 (ex5.html)

Conform ex1, ex2, ex3, ex4, ex5, cat.jpg, header.jpg, picture2.jpg in same folder

```
<html>
	<head><title> website  </title>
	</head>

	<body bgcolor="tomato">
		<img src="header.jpg">

		<h2>My first Website </h2>
		<ul>
			<a href="ex1.html"><li> Heading</li><a>
			<a href="ex2.html"><li> Formatting</li><a>
			<a href="ex3.html"><li> Image </li><a>
			<a href="ex4.html"><li>List</li><a>
		</ul>
		<img src="picture2.jpg">
	</body>
</html>
```

Malware

Malware, or malicious software, is any program or file that is harmful to a computer user. Malware includes computer viruses, worms, Trojan horses and spyware. These malicious programs can perform a variety of functions, including stealing, encrypting or deleting sensitive data, altering or hijacking core computing functions and monitoring users' computer activity without their permission.

Types of malware

There are different types of malware that contain unique traits and characteristics. A virus is the most common type of malware, and it's defined as a malicious program that can execute itself and spreads by infecting other programs or files.

A worm is a type of malware that can self-replicate without a host program; worms typically spread without any human interaction or directives from the malware authors.

A Trojan horse is a malicious program that is designed to appear as a legitimate program; once activated following installation, Trojans can execute their malicious functions.
Spyware is a kind of malware that is designed to collect information and data on users and observe their activities without the users' knowledge.

- **Hacking :**
  Hacking is unauthorized intrusion into a computer or a network. The person engaged in hacking activities is generally referred to as a hacker. This hacker may alter systems or security features to accomplish a goal that differs from the original purpose of the system.

- **Virus attacks**
  The most potent and vulnerable threat to computer users is virus attacks. Virus attacks hamper important work involved with data and documents. It is imperative for every computer user to be aware about the software and programs that can help to protect the personal computers from attacks
- **Software piracy**
  Software piracy is all but impossible to stop, although software companies are launching more and more lawsuits against major malpractices. Originally, software companies tried to stop software piracy by copy-protecting their software.

How to prevent unauthorized computer access

Most users are interested in taking steps to prevent others from accessing their computer. Whether it be to protect yourself from malware or to ensure that your private information is safe, having a secure computer can definitely provide peace of mind. The following sections detail many ways by which you can secure your computer against others. To proceed, you may read through each section or choose one that interests you from the list below.

- **Passwords**
  Make sure a password has been set for your computer's operating system. The best way to keep someone out of your accounts and personal information is to not let them on your machine in the first place. You can always create additional accounts for guests. Information on how to carry out these actions can be found in the following linked pages.

- **Get a hardware or software firewall**

  Computer users are recommended to install a firewall in their computers. There are two ways a firewall can protect your computer and network.

  Hardware firewall - A hardware firewall is a physical device that is connected to your network. Often, many users who have a home network can use their network router as a firewall solution.

  Software firewall - A software firewall is a software program that you install on your computer to help protect it from unauthorized incoming and outgoing data. Keep in mind that a software firewall is only going to protect the computer on which it has been installed. Additionally, many antivirus scanners include their own version of a firewall program.

- **Malware protection**

  Trojans, viruses, spyware, and other malware can monitor your computer and log keystrokes to capture sensitive data such as passwords and credit card information.
  To help protect your computer from these threats, we suggest installing both virus and spyware protection programs.

- **Know how to handle e-mail**

  Today, e-mail is one of the most popular features on the Internet. Being able to identify threats sent through e-mail can help keep your computer and your personal information safe. Below are some of the most common threats you may encounter while using e-mail.

  Attachments - Never open or run e-mail attachments from addresses with which you are not familiar. Viruses, spyware, and other malware are commonly distributed through e-mails that have attachments. For example, an e-mail may want you to open an attachment of claiming to be a funny video, when it's really a virus.

  Phishing - Phishing or an e-mail phish is a message that appears to be from an official company (such as your bank) indicating you need to log onto the site to check your account settings. However, the e-mails are really sites set up to steal confidential information such as your passwords, credit card information, social security information, etc. See the phishing definition for additional information about this term as well as examples of these e-mails.

- **Alternative browser**

  Before the release of Microsoft Windows XP SP2 and Internet Explorer 7.0, Microsoft Internet Explorer was notorious for security and spyware related issues. Although it has improved since then we still highly recommend considering an alternative browser such as Mozilla's Firefox or Google's Chrome.

- **Install Antivirus Software**

  Antivirus is other means to protect the computer. It is software that helps to protect the computer from any unauthorized code or software that creates a threat to the system. Unauthorized software includes viruses, key loggers, Trojans etc. This might slow down the processing speed of your computer, delete important files and access personal information. Even if your system is virus free, you must install antivirus software to prevent the system from further attacks of virus.

  Antivirus software plays a major role in real time protection; it is an added advantage of detecting threats helps.

- **Install Anti-Spyware Software**

  Spyware is a software program that collects personal information or information about an organization without their approval. This information is redirected to a third party website. Spyware are designed in such a way that they are not easy to be removed. Anti-Spyware software is solely dedicated to combat spyware. Similar to antivirus software, anti-spyware software offers real time protection. It scans all the incoming information and helps in blocking the threat once detected. Comodo Free Antivirus comes with spyware protection built in.