web hosting and domain names
An internet service provider (ISP) provides internet services. A common internet service is web hosting. Web hosting means storing your website on a public server. Most often than not, it includes email services. Typical connection speeds with an ISP are faster, come with powerful hardware that can handle load balancing and any necessary backup servers, have more uptime and great virus protection.
a web hosting service allows individuals and organizations to make their website accessible to others.

The host usually provides storage space on a server as well as internet connectivity.

Theoretically, any computer can serve as a web host, but it needs to always be on and implement measures for security and stability.
when selecting consider: disk space, the more the better - but you hardly ever need more than a few gb, how fast data is transferred in other words what are your bandwidths capabilities, the web host reliability or up time, and overage. Some charge extra once you go beyond your data limits while others provide you with a hard cap.

sometimes when selecting a host consider whether it has cms capabilities, mail boxes and customer support.
You can host websites via Windows hosting, which is a web service that runs on the Windows operating system. Use this if you plan to use Active Server Pages (ASP) as server scripting or if you plan to use Microsoft Expression Web.

Unix hosting means that the web service runs on the Unix operating system.

You can also host via Linux and much more...
you can find free web hosting but often you can not control the domain name and there is limited support

you can host via shared (virtual) hosting which is cost effective but has reduced security and often has restricted database support

you can get dedicated hosting which is often powerful, secure and more expensive*
content management system

cms is typically a web application designed to make it easy for non technical users to add, edit and manage a website

often cms are used to run websites containing blogs, news, and shopping

cms serve as a central repository containing documents, movies, pictures, phone numbers, data and can be used for storing, controlling, revising, semantically enriching and publishing documentation

typically cms have two elements: content management application (cma) and content display application (cda)
content management system

cma is the front end user interface that allows a user to add, modify, and remove content from a web site without the intervention of a web master.

cda compiles that information and updates the website.

CMS - content management system. ie wordpress, drupal, joomla, expression engine, radiant cms
domain names serve as memorable references to internet resources

domain names are used to identify internet protocol (ip) addresses

An ip address is an identifier for a node - a computer or a device on a network

domain name system (DNS) translates domain names to numerical ip addresses

DNS distributes the responsibility of assigning domain names and mapping those names to ip addresses by designating authoritative name servers for each domain
**Authoritative name server** is a name server that gives answers in response to questions asked about names in a zone.

Every domain name has a suffix that indicates which **top level domain (TLD)** it belongs to.

TLDs are grouped as follows: Country-code top-level domains, Internationalized country code top-level domain, Generic top-level domains, Infrastructure top-level domain.

TLD is the last segment of a domain name, i.e., nyu.edu.
generic top-level domains initially consisted of:

- GOV - Government agencies
- EDU - Educational institutions
- ORG - Nonprofit organizations
- MIL - Military
- COM - Commercial business
- NET - Network organizations

Some of these, such as .com and .net, are no longer restricted to their original intended usage.

More generic TLDs have since been added and are being added today.
ICANN (Internet Corporation for Assigned Names and Numbers) is the organization that governs domain name system (DNS) management. When you register a domain name, you are not its owner, rather you have the exclusive right to use it. Some factors to consider when selecting a domain name: relevance to site, communicability, availability.

Domain name registrars: www.internic.net/alpha.html
Search engine optimization is the process of making your site easy for others to locate.

You do this by improving the ranking of a website in search engines. The higher or more frequently a website is displayed, the more visitors you can expect.

The more thoughtfully and selectively you add keywords to your pages, the better your search rankings.

There are several factors that help your website to rise in search results.
On-page techniques are the methods you can use to improve search results for your site.

This involves identifying and implementing keywords in seven particular places in your page:

1. Page title
2. URL
3. Headings
4. Text
5. Link text
6. Image alt text
7. Page descriptions
Search engines also look at the number of other sites that link to yours to determine search ranking.

This is especially so when the content of a referring site is similar to yours.

It’s ideal when the words that appear in links to your site also appear in the text of the page that the site links to.

Finally, as more people visit your site, the search ranking will also improve.
you can submit your site to search engines especially if it is new

Google: http://www.google.com/addurl.html

Yahoo: http://search.yahoo.com/info/submit.html


Once people start visiting your site, it’s helpful to know!

Analytics tools allow you to observe data about the traffic your site receives.

This can include the following information: Number of visits, Geographic location of visitors, Time spent on pages, Referring web page, Browser information, Real-time activity.