

ADDIS ABABA INSTITUTE OF TECHNLOGY

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COMPUTING

FUNDAMENTAL OF WEB DESIGN

ASSIGNMENT ON

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# Questions:

1. History of the internet[The evolution]
2. View the 5-10 popular websites of your choice from web archive URL and put your observation and assessment
3. List 5 website each on the 12 categories you learned and try to view their look in different years web archives
4. What are the guidelines for evaluating the value of a web site? Try to evaluate 2-5 websites based on the guideline and put your judgment

# History of the internet

The Internet had its roots during the 1960’s as a project of the United States government’s Department of Defense, to create a non-centralized network. This project was called ARPANET(Advanced Research Projects Agency Network), created by the Pentagon’s Advanced Research Projects Agency established in 1969 to provide a secure and survivable communications network for organizations engaged in defense related research.

In order to make the network more global a new sophisticated and standard protocol was needed. They developed IP (internet protocol) technology which defined how electronic message were packaged. Addressed, and sent over the network. The standard protocol was invented in 1977 and was called TCP/IP (Transmission Control/Internet Protocol). TCP/IP allowed users to link various branches of other complex networks directly to the ARPANET, which soon came to be called the Internet.

When researchers in other fields began to make use of the network, the National Science Foundation (NSF), which had created a similar and parallel network, Called NSFNet, took over much of the TCP/IP technology from ARPANET and established a distributed network of networks capable of handling far greater traffic. In 1985, NSF began a program to establish Internet access across the United States. They created a backbone called the NSFNET and opened their doors to all educational facilities, academic researchers, government agencies, and international research organizations. By the 1990’s the Internet experienced explosive growth. It is estimated that the number of computers connected to the internet was doubling every year.

Through time when the need for internet is ultimately increase, it results in the increase of bandwidth or the information carrying capacity of communications lines and costs have dropped.

# Popular Websites

## Google

It arrives in 1998.

According to the recent data from Net Share it remains the web’s most pensive search tool accounting for 97% mobile search engine market and 79% of desktop sine use. From NET MARKETSHARE.com January, 2020 market share reports

## Amazon

It began as a humble online bookseller, paving the way for all the e-commerce sites that followed.

It is the retail and technology behemoth, selling everything salad dressing to server space.

* 1. Wikipedia

It has become the defector Internet encyclopedia.

Since Wikipedia articles can be edited by anyone with Internet access, the platform is susceptible to bias or outright inaccuracy. But that hasn’t hindered its popularity: according to Amazon’s analytics site Alexa, it’s the fifth most trafficked website globally.

* 1. Facebook

A website founded by CEO Mark Zuckerberg in the early 2000s as a way to profile Harvard classmates has become the world’s largest social network. The site has also evolved from a way to stay in touch with friends and relatives to medium through which both news and propaganda flow freely, mingling in ways that often make it difficult to tell one from the other. Facebook has pledged to do battle with so-called “fake news,” and says it’s refining the site’s processes to mitigate the spread of misinformation as well as click bait.

* 1. YouTube

You tube turned anyone who have interest into a video publisher. YouTube makes easy to entertain ourselves, learn new skills or keep in touch with far-flung friends. But it can also be a haven for invective and hate speech, a problem the Alphabet-owned site continues to grapple with.

* 1. Craigslist

Craigslist started as an emailed list of sanFrancisco-based events in 1995, which founder Craig Newmark expanded into a classified ads site and online forum. The site remains a popular destination for real-estate and job listing .

* 1. Yahoo

It was a popular search engine before Google came up. It is an early effort to bring order to the chaos of the internet.

Its core idea that something should help internet users cut through all the noise to find a bit of signal – remains an essential tenet of online information duration.

# Types of websites

There are around 12 types of website. Namely portal, news, informational, business, blog, wiki, online social network, educational, entertainment, advocacy, web application and personal.

## Portal

A portal is a web site type that brings information from diverse sources. Most of the portals to offer these free services: search engine, news, sports and weather, web publishing, reference tools such as yellow pages, stock quotes, and maps, shopping, and email and other communications services.

There are different types of web portal like banking and insurance portals, patient portals, government portals, student and faculty portal…

* Government portal: these included primary portals to the governments as well as portals developed for specific branches like government ministry, department or agency.

E.g. <http://www.Disability.gov.au.com/>

<http://www.USA.gov.com/>

<http://www.Health-EU.com/>

<http://www.National>

<http://indian.gov.in>

## News

A news website contains interesting material including stories and articles relating to news, money, sports, life and time. Many magazine/newspaper sponsor websites that offer summaries of printed articles, as well as the items not included in printed versions.

## Informational

Informational websites are those sites which are created in order to provide a customized and branded resource for potential and active customers, members, investors and so forth.

## Business/marketing

A business/marketing website contains that promotes or sells products or services. Almost every company has a website of business/marketing.

And this type of website should include

* The company name
* Choose an easy way to remember and type web address
* Use a simple site map to easily navigate customers

E.g. [www.amazon.com/](http://www.amazon.com/)

http://[www.CNN](http://www.CNN) Money.com/

[www.Yahoo](http://www.Yahoo)! Finance.com

[www.Bloomberg.com/](http://www.Bloomberg.com/)

[www.MSN](http://www.MSN) MoneyCentral.com

## Blog

A blog short for weblog is informal website consisting of timestamp, or post articles, a diary or journal format, usually listed in reverse chronological order which means the latest posts appearing first. It is also a platform where even a group of writers share their views on an individual subject. So the main purpose of a blog is to connect you to the relevant audience. A blog that contains video clips called a video blog or vlog. A micro blog allows users to post short messages, usually between 100 and 200 characters, for other to read.

Blog is becoming one of the popular website type because of:

* It became a mainstream source of information
* Through blogging, companies keep clients and customers up to date
* Through a blog, visitors can comment and interact with you or your brand
* You can earn money through blogging

Twitter is a popular micro blog

<https://www.Twitter.com/>

<https://firstsiteguide.com/>

<https://firstsiteguide.com/wp-content/>

## Online Social Network

An online social network, also called a social networking web site, is a site that encourages members to his community to share their interests, ideas, stories, photos, music, and videos with other registered users. Most include chat rooms, newsgroup, and other communications services.

E.g. <http://www.Facebook.com/>

## Wiki

A wiki is a collaborative web site that allows users to create, add, edit, or delete the contents of web site using their browser. Many wikis are open to modification by the general public.

E.g. <http://www.Wikipedia.com/>

## Educational

An educational website offers exciting avenues, stimulating teaching and formal and informal learning. In this type of web people can practice different skill like how to cook meal.

E.g. wikiHow

## Entertainment

An entertainment site offers an interactive and engaging environment. Popular entertainment sites offer music, video, sports, games.

E.g. <http://www.miniclip/>

## Advocacy

An advocacy site contains content that describes a cause, opinion or idea. These websites usually have views of a particular group or association.

E.g. <http://wwf.panda.org/>

## Content Aggregator

A content aggregator is an individual or organization that gathers web content from different online sources for reuse or resale. Those who simply gather news from various sources for their websites and distribute news for customers. A content aggregator website is a site that collects data from other sources across the internet and puts the information in one place where users can access it. The data collected is based on a keyword or a group of related keywords.

After registering for a domain name and finding a hosting platform, follow the steps outlined below to create your aggregator website.

The first step in creating an aggregator website is choosing the method you will use to create your aggregator feed. You can build an aggregator as you develop your site by using a web design framework, such as Microsoft’s ASP.NET, or install Word Press or Drupal’s aggregator module after you build the site.

The next step involves searching the web to find the sites you will use for aggregate fodder. Keep in mind your target audience and the goal of your website so you only pick content that will be useful to them.

Also, consider what type of content fits your brand's personality and values. The last thing you want is contradictory content that confuses your audience.

The third step is to enter the address of the syndication site into your aggregator module and then direct the aggregator to use the feed. You can now provide any additional information required by the site. If you plan to use a number of sites with similar subject matters, you should set your aggregator to avoid linking to duplicate stories.  Look for the site's syndication when entering the address of the website into the aggregator. You can also opt to use a syndication directory such as Syndic8m to look for feeds instead of doing it manually.

* E.g. Alltop. Founded by startup legend Guy Kawasaki, Alltop is one of the biggest names in content aggregation and deservedly sits in first place on this list. ...
* Popurls. ...
* The Web List. ...
* WP News Desk. ...
* Blog Engage. ...
* Travel Blogger Community.

## Personal

A family often not associated with any organization or private individual can maintain a personal site or a single web page. People to publish personal web pages for a variety of reasons. Some are job hunting. Others simply want to share life experiences with the world.

These sites are ideal for individuals to help share information and photos with friends. The domain registrar offers free space, and thus you use that advantage to create a personalized site. The first part of your URL have the ISP name (Internet Service Provider), and the last part has your name as a person. These sites have limited server capabilities and are not search engine optimized and hence not ideal for marketing business. Check out [these](https://legibra.com/our-work/) examples for a better understanding.

# Guide lines for evaluating websites

This is the era of e-marketing. Marketing is one of the ways to reach the likely customers. In this digital world most of the business houses have their own websites. Only creating website is not enough as there are thousands of websites already exist. For websites to help in business they should reach to netizens. One of the most popular ways to reach the netizens is through search engines. Only creating and hosting the website is not sufficient but it should be search engine optimized. Search Engine Optimization (SEO) is the technique which can help the websites by increasing number of visitors to it, increasing browsing time of each visitor and high ranking placement in the search result of search engines. This ranking by search engine is based on what is highly relevant to user search keywords. Once the website appears on the first page of the search engine result page then it will be automatically visited by most of the users.

And based on the following criteria websites can be evaluated.

## Accessibility

This refers to quick and easy approach to the website. From user point of view websites should have simple and good interface, should have very less downloading time, page weight, there should not be many redirecting links etc. other factor like making website content should interesting and relevant also play an important role. From search engine point of view, increasing its visibility to search engines by increasing its rank. Users are happy with the websites where web pages download quickly. There are lots of efforts spend by the web designers to speed up the download time of a web page. This is an important attribute in website popularization as users are turned off by slow-loading pages

## Design

Web designing techniques are flourishing the market nowadays, Started from simple HTML static pages to CSS and Scripts and many more. Mobile internet access has increased so there is need for web design that can change depending on the device accessing the website. Website structure should be adjustable and should give good resolution even when used on cell phones or tablets. This type of web designing is called responsive design. Responsive sites are more popular as easily available to the users through the cell phones. Users need the webpage's which easily navigable on their PC,s, smart phones or tablets if a webpage does not have good access or it not visible properly then user will navigate away from such webpage's, So its need of time for business websites to be responsive. Due to the adaptability of responsive web design there is no need to create separate websites for cell phones which automatically increases the SEO of the website. As developing a separate website for different devices will have different URL's. Here there is only one website with different UR's thus decreasing the SEO of the website as search engine rank will be different for different URL's thus the ranking of the website will be decreased. Other factors may be use of CSS, embedded scripts, Meta tags etc. It’s a need of business owners to have their websites with good usability, appearance and ranking so SEO and web designing has to go together.

## Texts

A web page should have good and informative text on it. From user point of view web page should not be loaded with text , keywords can be highlighted, should provide easy navigation, hyperlinks, title tags, anchor text etc. Anchor text is the tools to name the links with some attractive and short label. Usually all the links have a URL address attached to it which one may not want to read and click, using anchor text these links can be given a short and informative name which describes the link. Thus making it user friendly as user will be interested in clicking anchor text rather than URL text.

Text to code ratio is the ratio of front end text appearing on the web page to the html code behind the page. Text on the page represents its content. This content should be informative as there are content based searches carried out by some search engines like Google panda. There ranking is content based. Another advantage of good text to code ratio is it increases the loading speed of page as code is small. Users are happy with the speed and also it is considered by search engines in ranking the webpage. More plain text provides search engines easy way to crawl and index the website.

## Multimedia

It is all about pictures, animations, sound files, video's etc. on a web page. Multimedia plays an important role in delivering the information in easy way and also provides easy access to physically challenge. To make multimedia SEO friendly sounds difficult as till now everything was concerned with text. But it’s very easy as text associated with the multimedia in the form of filenames, tags, captions etc. In short text surrounding the multimedia can be made SEO friendly to increase the page rank.

## Networking

Networking is network of Links. It deals with two types of links external and internal. Internal links are the connections of web pages of the same website where as external links are connection of web pages to another or different websites. External links tells what others say about you and internal links tells what you say about yourself. Links are like streets between web pages. A website having links from other websites are called external links. These links point to external domain and are also links coming from external domain. External links are important as they pass link juice and is one of the parameter considered by search engines in ranking the web page. In fact external links decides the popularity of the webpage. A website's links having links to its own pages are internal links. These links helps in building website structure. These structures help the web crawlers by providing them paths to crawl. Availability of main link navigation access to search engines increases page's search engine index.

## Authority

Authority reveals that the person, institution or agency responsible for a site has the qualifications and knowledge to do so. Evaluating a web site for authority:

* Authorship: It should be clear who developed the site.
* Contact information should be clearly provided: e-mail address, snail mail address, phone number, and fax number.
* Credentials: the author should state qualifications, credentials, or personal background that gives them authority to present information.

## Purpose

The purpose of the information presented in the site should be clear. Some sites are meant to inform, persuade, state an opinion, entertain, or parody something or someone. Evaluating a web site for purpose:

* Does the content support the purpose of the site?
* Is the information geared to a specific audience (students, scholars, general reader)?
* Is the site organized and focused?
* Are the outside links appropriate for the site?

Does the site evaluate the links?

## COVERAGE

It is difficult to assess the extent of coverage since depth in a site, through the use of links, can be infinite. One author may claim comprehensive coverage of a topic while another may cover just one aspect of a topic. Evaluating a web site for coverage:

* Does the site claim to be selective or comprehensive?
* Are the topics explored in depth?
* Compare the value of the site’s information compared to other similar sites.
* Do the links go to outside sites rather than its own?
* Does the site provide information with no relevant outside links?

## CURRENCY

Currency of the site refers to:

1) How current the information presented is, and

2) How often the site is updated or maintained.

It is important to know when a site was created, when it was last updated and if all of the links are current. Evaluating a web site for currency involves finding the date information was:

* First written
* Placed on the web
* Last revised Then ask if:
* Links are up-to-date
* Links provided should be reliable. Dead links or references to sites that have moved are not useful.
* Information provided so trend related that its usefulness is limited to a certain time period?
* The site was under construction for some time?

## OBJECTIVITY

Objectivity of the site should be clear. Beware of sites that contain bias or do not admit its bias freely. Objective sites present information with a minimum of bias. Evaluating a web site for objectivity:

* Is the information presented with a particular bias?
* Does the information try to sway the audience?
* Does site advertising conflict with the content
* Is the site trying to explain, inform, persuade, or sell something?

## ACCURACY

There are few standards to verify the accuracy of information on the web. It is the responsibility of the reader to assess the information presented. Evaluating a web site for accuracy:

* 1. Reliability

Reliability answer, Is the author affiliated with a known, respectable institution?

* 1. References

This refers to answering the following questions:

* Does the reading you have already done on the subject make the information seem accurate?
* Is the information comparable to other sites on the same topic?
* Does the text follow basic rules of grammar, spelling and composition?
* Is a bibliography or reference list included?

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