History of the Internet

The Internet started in the 1960s as a way for government researchers to share information. Computers were large and immobile in the '60s and in order to make use of information stored in any one computer, one had to either travel to the site of the computer or have magnetic computer tapes sent through the conventional postal system.

Another catalyst in the formation of the Internet was the heating up of the Cold War. The Soviet Union's launch of the Sputnik satellite spurred the U.S. Defense Department to consider ways information could still be disseminated even after a nuclear attack. This eventually led to the formation of the ARPANET (Advanced Research Projects Agency Network), the network that ultimately evolved into what we now know as the Internet. ARPANET was a great success but membership was limited to certain academic and research organizations who had contracts with the Defense Department. In response to this, other networks were created to provide information sharing.

At a meeting of the International Network Working Group (INWG) at Sussex University, Bob Kahn and Vint Cerf presented their work on connecting ARPANET and other existing networks by using a common internetwork protocol on September 1973. They later published the description of what became to be known as the Transmission Control Protocol/Internet Protocol (TCP/IP) in the May 1974 issue of IEEE Transactions on Communications Technology ("[A Protocol for Packet Network Intercommunication](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=1092259&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs_all.jsp%3Farnumber%3D1092259)”). Shortly thereafter, three independent implementations of the TCP/IP protocol were funded, at Stanford (Vint Cerf), BBN (Ray Tomlinson), and University College London (Peter Kirstein).

On January 1, 1983, all the ARPANET hosts switched to TCP/IP and the date is considered the official birthday of the Internet. Prior to this day, the various computer networks did not have a standard way to communicate with each other. A new communications protocol was established called Transfer Control Protocol/Internetwork Protocol (TCP/IP). This allowed different kinds of computers on different networks to "talk" to each other. ARPANET and the Defense Data Network officially changed to the TCP/IP standard on January 1, 1983, hence the birth of the Internet. All networks could now be connected by a universal language. The online world then took on a more recognizable form in 1990, when computer scientist Tim Berners Lee invented HTML and a text browser, as well as a hypertext graphical user interface (GUI) browser. Then he established the first successful communication between a Hypertext Transfer Protocol client and a server via the Internet. These inventions, put together, were the makings of Web pages as we know them today. Tim Berners Lee also made up the term “World Wide Web.” The web is actually just the most common means of accessing data online in the form of websites and hyperlinks.

Five popular website observations and assessments

apple.com

In 1998, the website didn’t include a navigation bar on the header only images which are linked to some pages as a way of promoting (advertising) the company. There is a searching place at the bottom of the website but it’s in a place less visible since the text field is attached at the bottom of the images and also makes the accessibility less since its located at the bottom for users and at the bottom of the search field it constitutes links leading to other pages making the accessibility very less and I believe the aim of introducing the companies different aspects and pages will have less visibility due to the locations of the menus. The color choice is calm and no risk of bright color is taken giving it a simple and sophisticated look.

In 2000, the website contained a lot of pages as we can view from the header (navigation) part including news, hiring, hardware, software, made4mac, education, creative, small biz, developer and so on making it a bit bulky and too much to check for. At the bottom of the website there is a search button which makes the accessibility less for users. The color choice of grey and black makes the overall view admirable.

In 2003, the website constitutes menus leading to different pages in the navigation bar located on the header part. Still constitutes many menu choices; a bit more modified and contains even more menu choices making it look more bulky and unorganized in the eye of the user. The search field seems a bit far from the images making it more viewable but still is located at the bottom of the page. The calm color choice of black and grey still holds.

In 2005, the header constitutes still the same amount of menu choices giving it a bulkier navigation bar. The bottom of the website contains the search field; this time a bit spacier and more visible but the drawback still holds in less accessibility due to less visibility cause of the place located for a certain user. The color choice of grey and black still holds; looks like the advertisements of their products are the only color.

In 2007, the website’s header had the menu choices smaller in number giving it a simpler look. This time the search field is in the header part making its functionality much more compliant for the user. An image still holds a wider area but this time the image is not linked instead it constitutes a button underneath whether to view or not; making it easily interact able user wise. Overall would be ranked as a blunt website but still holds that simpler and sophisticated choice of color; the images of their product advertisements are the only color making users have more focus on the product.

In 2015, there is no navigation bar only sliding image shows; which is quite admirable. Only images are present in this website with linked pages; all the images are linked to a certain website but still holds that simple look with an edgier look this time thanks to the white color choice and as mentioned in the websites of the past few years their products are the only bright colors.

In 2020, their website still ignores a navigation bar and only constitutes of images linked to certain other pages. Little descriptions are intended to be displayed thus playing a great role in visualization of the users through images and still that calm color choice of black and white gives the website a more sophisticated look and the bright color of only their products give it a great emphasis for the users eye to focus more on the product.

tumblr.com

In 2007, the website included a very simple look with no navigation bar only some captivating small line of motto and the company’s name is displayed with login, signup and FAQs followed after this description. The color choice of light-blue and white gives it a nice blend for the eye of the user but no search field existed which made it in a way a bit odd.

In 2010, the website has made bigger changes; it included a navigation bar with menu choices and a search field which was quite appropriate and had a signing up fields of email address, password and url which made the overall look and purpose of signing up or logging in using this website which I believe has met the goal of the very aim of the company. The way the motto changes when hovered gives it an interactive look which makes user experience great. The color choice has an astonishing texture which makes it amazing in its own way.

In 2014, the website has no navigation bar this time only a simple description of Tumblr and some signup form. The login, terms and privacy are at the bottom of the page which gives it less visibility but could also be captured by the eye since it has a very small content. The overall background of the page is a colorful image which gives it a vibrant look.

In 2016, the website is made more interactive with sliding page descriptions of what really Tumblr is and each page has its own captivating interactive popups or slides or images which makes user experience fun. There is a search field with a wider length at the top of the website which is very acceptable since there is a lot going on. Different color choices are given to each slide giving it an active up-to-date look.

In 2020, Tumblr still went with the sliding shows but this time with a more colorful slides and also has the search field with a wider length which is still acceptable and also the purpose of signing or logging in when visiting this website is met. The overall website makes it user interactive and gives a great user experience.

pinterest.com

In 2010, the website had a very compact view on the top side with very little content and default colored links which doesn’t blend with the background color of light brown. The buttons used are not custom made and indeed gives it a very blunt look. The header title Pinterest had a shadow of blue with the black font color overall giving the page an unpleasant and stiff look and as a photography viewer it needed to have at least some image displays and a vibrant look which didn’t meet its aim at all.

In 2012, the logo was changed to the color red and the website included a navigation bar with some links and a search field which increases the accessibility in a way. And images in arranged columns with simple descriptions were displayed and had a use of introducing their motto more. The background color choice is still the light brown color which is not a very fond of color choice for image backgrounds hence image loses focus in the eye of the user.

In 2014, the website is made lively displaying the images organized in columns sliding down as a background and a simple description and the logo with sign up buttons; which are lacking interactivity through hover; is displayed with an image as a background and links are located this time on the bottom of the page.

In 2016, the website display is still left with images and links still at the bottom of the page. The buttons are made to give an interactive response on hover but still lacks the blended look making it stiff and unattractive in a way. Instead of the whole name being displayed a simple description and the logo sign was used in this page.

In 2018, the website had the description and sign in form with a white background; with the buttons customized and blended this time while the background of the whole page are sliding images. More links were added to the page and a simpler comment looking content with a red background gives it a more attractive appearance.

In 2020, the website includes a navigation bar with few menu choices and changeable images at the bottom of a header description giving it a lively and interactive impression on users experience. The bottom of the website includes some links. The website is made to have a very simple display with the color choice of white and some colorful font colors for the changing heading texts.

ted.com

In 1996, the website constituted of partitions with a white horizontal line throughout the page of a black background color. It was a single page website with a simple description of what TED really is. Overall the website was very straight forward and thus doesn’t create a captivating view which made it very blunt.

In 2000, the website constituted links connecting to other pages on the right side of the page and also had a description note under the heading of the name TED; it also had an advertisement right under the main heading which in a way creates annoyance in the eye of the user. The color choice of mainly red for the links and their arrangement of the links doesn’t create a pleasant view.

In 2005, the website constituted of very less content with certain links associated in the middle alongside with the short hand representation TED. The background color choice of light brown makes the page look a bit messier especially with the white colored links located right at the bottom which makes it tough in distinguishing the links thus decreasing accessibility and interactivity with users.

In 2010, the website had included the main streams of the show as in the themes, speakers, talks and so on the header part of the page as in the navigation bar; also a search field was included this time which meets the aim of the site being able to spread talks worthy of being hosted on their website through easy search and access. Sub streams for addressing a video of choice is aligned on the left hand side of the website and videos are displayed in an organized manner in the middle of the page and takes up much more space and is indeed righteous since the website aims at spreading TED Talk videos mainly. Email subscription was made possible on the footer part through a newsletter signup.

In 2015, the website includes different categories aside from videos which makes the site more exploring and interesting still the search field area and categories are included in the header part. The website contains more contents but still concedes a great organization in the orders of the different categories giving it an admirable look. Additional events and initiatives were added more on the footer part with a subscription on email. The color choice is till simple with a lot of white and color on the images, books and videos giving it more emphasis to focus on these contents.

In 2020, the website contains more contents in an organized manner and also a simple header with a navigation bar of the hamburger type gives it a more simple and sophisticated look. The footer part of the page still has the programs and also TED recommends are now available in a question manner followed by a button giving it a more categorized and organized look. The color choice of mainly white and headlines in red being the only colors are the images and videos makes it more focused and gives a great user experience.

spotify.com

In 2011, the website had a simpler look in requesting for an email address at the top of the page and other descriptions of the website is aligned with an image and a short description below at the center of the page and also a video is included on top of these descriptions in which adobe flash player is required to play the video decreasing accessibility. At the bottom of the page is included links over a background of a light blue color. The color choice of green headlines and mostly white gives it a nice blend but the page has a bit of indifferences throughout giving a somehow odd look.

In 2013, the website is much more confined in its description just displaying a download button and a web player button with a find out more link. The big motto description and icon on top gives it a very simple look with small contents displayed on the page. Bottom part of the pages include terms & conditions of Spotify. The color black seems to fit the website with the green color highlights. The buttons used are not custom made giving the website a blunt look.

In 2015, the website includes more content and bright colors giving it a more lively and vibrant look creating a great user experience. The custom buttons used made it more interactive and the bottom of the website this time is made to contain some links to other pages and social media accounts. The header part includes a simple navigation bar with a white color background and an image slide show. Overall the website has met the goals in creating an impression and short captivating descriptions.

In 2018, the website has a premium background color of black for the navigation bar and footer and the colorful gradients of orange and pink for the contents in the middle section background giving it a more strong and up to date feature. The logo color of Spotify was changed this time from light green to white which is a nice color choice with the black background at the navigation bar. Certain contents are made more interactive through hover. The website has an overall more sophisticated and common color feature to it.

In 2020, the color choice still remains the same but with very small content this time decreasing interest for first time users of the website. The navigation bar is still left clean with no visible menu choices due to the choice of hamburgers and more other links are located at the footer part of the page.

Lists of five websites on each of the twelve categories with simple descriptions

Educational:

* + - edx.org: is an online learning destination, offering high-quality courses from the world's best universities and institutions to learners everywhere. Out of the 90 universities, it includes top global rankers.
    - coursera.org: is a user-friendly website where students can find big universities and a sharable electronic Course Certificate which assures the website. Courses include recorded video lectures, auto-graded and peer-reviewed assignments, and community discussion forums.
    - khanacademy.org: is an online coaching website in which students who cannot afford a coaching can refer to this website. It gives a win-win situation to the students by giving them the liberty to learn on their pace, as it has a personalized dashboard to gauge the progress report. Moreover, it has lessons from kindergarten to calculus, all at one stop.
    - udacity.com: is an online learning website with courses in programming, data science, artificial intelligence, digital marketing, and more; in which it’s built with industry leaders.
    - duolingo.com: with the free mobile app or web and a few minutes a day, everyone can learn 30+ languages online with bite-size lessons based on science.

News:

* + - news.google.com: a website that assures comprehensive up-to-date news coverage, aggregated from sources all over the world by Google News.
    - cnn.com: is a website in which the latest breaking news and information on the top stories, weather, business, entertainment, politics, and more.
    - bbc.com: a website that provides trusted World and UK news as well as local and regional news.
    - nytimes.com: a website where breaking news, multimedia, reviews & opinion on business, sports, movies, travel, books, jobs, education, real estate and so much more can be explored.
    - news.yahoo.com: a website in which the latest news and headlines from Yahoo! News are delivered; breaking news stories and in-depth coverage with videos and photos.

Entertainment:

* + - youtube.com: is a website in which the videos and music you love are explored, upload original content, and share it all with friends, family, and the world.
    - netflix.com: a website where Netflix movies & TV shows online or stream are watched right to your smart TV, game console, PC, mobile, tablet and more.
    - spotify.com: is a digital website with music service that gives you access to millions of songs.
    - foodnetwork.com: is a website in which the best recipe ideas, videos, healthy eating advice, party ideas and cooking techniques from top chefs are found.
    - tmz.com: The “Thirty Mile Zone” is a celebrity news website that covers what the stars are talking about in and around Hollywood; their scandal coverage includes the high focus professions of fashion and sports too.

Wiki:

* wikihow.com: is a popular wiki for anyone who wants to [learn how to do something](https://www.makeuseof.com/tag/best-how-to-sites/). The content on offer is extremely varied including topics such as **Sports and Fitness**,**Pets and Animals**, **Relationships**, and **Philosophy and Religion**.
* wikibooks.com: is one of the wiki websites with an incredible repository of open-content textbooks, annotated texts, instructional guides, and manuals. It does not include fiction, primary research, or published texts.
* wikispecies.com: is a wiki website that aims to be a complete catalog of all **Animalia**, **Plantae**, **fungi**, **bacteria**, **archaea**, and **Protista** (i.e., life forms!) in the world.
* gamepedia.com: is an umbrella brand that covers hundreds of wikis about games; each wiki is packed with game-specific guides, plotlines, facts, trivia, in-game images, and more.
* wikitravel.com: is a much better source of information which is overseen by a team of administrators; they can roll back unwanted edits, delete pages, lock pages, and generally keep the information on the site accurate and free of spam.

Social Network:

* + - twitter.com: is a social networking website that enables you to post short text messages (called tweets), containing a limited number of characters (up to 280), to convey your message to the world. Twitter also makes it possible to promote your businesses and even shop directly through tweets.
    - instagram.com: was launched as a unique social networking platform that was completely based on sharing photos and videos. This photo sharing social networking website thus enables you to capture the best moments of your life, with a camera, and convert them into works of art.
    - reddit.com: is a social media platform which enables you to submit content and later vote for the content; the voting determines whether the content moves up or down, which is ultimately organized based on the areas of interest (known as subreddits).
    - wechat.com: is an all-in-one communications website for messaging and calling that enables you to connect with the people of your choice.
    - tumblr.com: serves as a social media cum micro [blogging platform](https://makeawebsitehub.com/choose-right-blogging-platform/) that can be used to find and follow things that you like. You can also use it to post anything, including multimedia, to a short-form blog. Moreover, it gives you the flexibility to customize almost everything.

Portal:

* + - Allianz.com: is a wealth management/insurance portal; with the "My Insurance Portfolio" customer site, users have the ability to retrieve historical records of purchased products and services along with integrated features to facilitate policy payments and renewals. The site also features easy-to-update contact information and communication preferences.
    - Medimpact.com: is a benefit program portal; MedImpact provides pharmacy benefit programs to hundreds of organizations, each with their own unique combination of offerings for members. MedImpact’s portal centralized authentication and authorization control across numerous sites that had been previously built to supply and manage various benefit programs.
    - Avmed.org: is a consolidated payer portal; able to create unique user portals with a single sign on, helping to serve a wide variety of unique users quickly and in a single location.
    - Britam.com: is a financial advertisement portal; built a financial advisor portal, a customer service portal and a partner service portal on a single platform.
    - Westbend.com: is an agent and customer portal; their new customer portal offers a seamless self-service experience for policyholders and their improved agent portal empowers agents to provide policy quotes in a few minutes, in comparison to an hour previously.

Informational:

* + - Ted.com: is a website which constitutes influential videos from expert speakers on education, business, science, tech and creativity, with subtitles in 100+ languages.
    - tripadvisor.com: is a website which functions as like a city guide search engine that helps you find the city’s best restaurants and “things to do” while you are away from home. It’s an excellent informative website for people who love travelling as it provides detailed and genuine information.
    - who.int: a website that provides disease outbreak news, information about emergencies and disasters, factsheets and related information.
    - [www.nobelprize.org](http://www.nobelprize.org/): one of the informative websites, especially for students and scholars this website can encourage you.
    - [guinnessworldrecords.com](http://www.guinnessworldrecords.com/): is the official website of Guinness World Records. Guinness World Records has been inspiring, engaging and entertaining.

Content Aggregator:

* + alltop.com: is the most popular content aggregation website that gathers top headlines from popular topics around the web; It covers the latest trending story from mainstream news sites and also tech, sports, entertainment, health, lifestyle, business, autos, science, and religion.
  + flipboard.com: is a personal magazine and news aggregator that pulls in the content from websites on a variety of topics using RSS aggregator tool.
  + popurls.com: is one of the best content aggregators that pulls in latest posts from a different kind of websites such as social networks, blogs, and news publications.
  + digg.com: is one of the oldest news aggregators that features the best articles, videos, and link to the original content site. This aggregator collects contents from categories such as technology, news, entertainment, sports or science.
  + feedly.com: It is another RSS freed aggregator tool that collects related items of content for your interest topics.

Personal:

* + verenamichelitsch.com: a personal website of Verena Michelitsch, an independent designer and art director.
  + [melaniedaveid.com: is a personal website of Melanie Daveid; a UX Designer and Art Director.](http://melaniedaveid.com/)
  + [brandoncjohnson.com: a personal website of Brandon Johnson; an Associate Professor in the Department of Earth, Atmospheric, and Planetary Sciences at Purdue University.](https://brandoncjohnson.com/)
  + [garysheng.com: is a personal website of Gary Sheng; Co-founder of Civics Unplugged, Ex-Google software engineer, Duke and IMSA alumnus and Co-founder of Dancing Pineapple.](http://www.garysheng.com/)
* [seanhalpin.io: a personal website of Sean Halpin, an Irish Web Designer based in Toronto, Canada.](http://seanhalpin.io/)

Business/Marketing:

* + etyellowpages.com: is a complete business directory website for Ethiopian communities; connecting local businesses and consumers with manufactures, importers and retail stores.
  + allbusiness.com: is a website that features articles, advice, forms, agreements, and videos covering small business topics, venture capital, angel financing, sales and marketing, careers, and more. The site offers over 33,000 articles written by experts from many different fields.
  + businessinsider.com: is a business news website; the articles and videos cover the markets, technology, companies, personal finance, venture capital, investing, start-ups as well as more commercial stories on culture and entertainment.
  + forbes.com: a website that has great and comprehensive content across every business category: the stock market, entrepreneurship, personal finance, M&A, technology, careers, and more. It contains many popular lists, including “The World’s Billionaires” and the “Most Valuable Brands.”
  + marketwatch.com: is a comprehensive business related news website covering stocks, bonds, commodities, U.S. and international markets, personal investing, real estate, and media.

Advocacy:

* + worldadvocacy.com: is a website of Online Legal Media that does not endorse any legal responsibility for any information provided by, or course of action suggested by any group to influence public policy, laws and budgets by using facts, their relationships, the media, and messaging to educate government officials and the public.
  + greenpeace.org: has been sailing the world's oceans protecting our planet and fighting for environmental justice.
  + stand.org: is a website focused on ensuring all students receive a high quality, relevant education, especially those whose boundless potential is overlooked and under-tapped because of their skin color, zip code, first language, or disability.
  + stopextinction.org: is an official website of the Endangered Species Coalition which is a national network of hundreds of organizations working to protect our nation's disappearing wildlife and last remaining wild places.
  + dredf.org: is a website in which its main aim is to advance the civil and human rights of people with disabilities through legal advocacy, training, education, and public policy and legislative development.

Blog:

* + [breakingintoStartups.com](http://breakingintostartups.com/): is a very inspiring blog website that contains motivational stories about startups and the people who work in them and create them.
  + erickimphotography.com: is a friendly, clear, easy to read and inspiring website; they cover the simple things about photography with posts like “Shoot Different” and “Why your smart phone is the best camera”.
  + pinchofyum.com: is a food blog which is down to a fine art, not just with the writing but also in knowing how to make money from blogging.
  + wetheparents.org: is a blog website aiming in making parents’ lives easier by doing the research for them. It can be a pain trawling through Google and to find the best products, so this mom and dad team get geeky finding out which products are the best for the whole family.
  + knowtechie.com: **is a blog website for people who love tech, but live outside the bubble;** It’s nice to see a tech blog that has lowered the entry level to tech news unlike other blogs which are a bit too technical and full to the brim of jargon.