

ADDIS ABABA UNIVERSITY

ADDIS ABABA INSTITUTE OF TECHNOLOGY

FUNDAMENTALS OF WEB DESIGN AND DEVELOPMENT

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ASSIGNMENT-1

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**The History of the Internet**

The origins of the Internet date back nearly 40 years, with the U.S. military's funding of a research network dubbed Arpanet in 1969. Since then, the Internet has undergone more than just a name change. The number of computers connected to the Internet has grown exponentially, while the number of users has risen from a handful of computer scientists to 1.5 billion consumers. The network's reach has expanded beyond the United States to every corner of the globe. But its popularity has a dark side, as it has evolved from a friendly research network to a hotbed of criminal activity including fraud and identity theft. Internet was based on the idea that there would be multiple independent networks of rather arbitrary design, beginning with the ARPANET as the pioneering packet switching network, but soon to include packet satellite networks, ground-based packet radio networks and other networks.

The internet is not a physical structure; it is the protocols that make this communication possible. The core component of the Internet is the Transmission Control Protocol (TCP) gateway. Proposed in a 1974 paper, the TCP gateway acts “like a postal service.” The development of this technology was an essential building block in the interlinking of networks, as computers could now communicate with each other without knowing the specific address of a recipient; the TCP would figure it all out.

In 1990, Tim Berners-Lee and other scientists at the international organization called CERN (European Center for Nuclear Research) in Geneva, Switzerland, developed a computer protocol called the Hypertext Transfer Protocol (HTTP) that became the standard communications language between a server (a computer program that both stores information on the Internet take place between a server (a computer program that both stores information and transmits it from one computer to another) and a client (also a server). The client is not a person; the person giving instructions to the client is called a user. The first web server in the united states was the Stanford Linear Accelerator Center(SLAC) in Palo Alto, California. To be able to look at retrieved documents, the user’s computer is equipped with browser software. The Programmers at CERN also developed a text-based Web browser that was made public in 1992; they also proposed the name World Wide Web for their system. After that, due to the world wide web’s invention and growth the internet’s growth became unquantifiable.

Another big factor for internet was E-commerce which came to an exponential growth. It burst on the scene in the mid-1990s, and it's been growing ever since - both in total sales and as a percentage of all retail sales. Worldwide e-commerce statistics are hard to find, but the U.S. Commerce Department has been tracking U.S. e-commerce sales since the fourth quarter of 1999.

Generally, the incredible growth of web usage, meaning internet being accessed and used, was in the years between 1984-2013 and the Internet has grown from being used only at a military association of one country to the whole world and each individual working at his house.

**Some websites through the years**

1. Facebook: -is an American social media and technology company based in Menlo Park, California. It was founded by Mark Zuckerberg, along with fellow Harvard College students and roommates Eduardo.

* January 2004: At this time Facebook was more of self-explanatory than a social media. Meaning, it was promoting and adverting itself since it hasn’t that much members. It had a few sections to explore.
* August 08, 2007: This timeline was where Facebook was still a little self-explanatory but way more improve with the additional features like groups, events, newsfeed and marketplace.
* February 03, 2010: Here Facebook had a wiser use of space at the cover page than the previous ones. The incorporation of the like button attracted a lot of customers. And the pages once logged in were a little better than before regarding graphics.
* July 11, 2013: Facebook came with a whole new design at this time of its evolution. It was at year between 2010 and 2013 that the cover photo feature was introduced. Another feature called the feelings/activity feature to express feelings.
* March 30, 2016: Facebooks front page was still a lot like the immediate aforementioned timeline except for the font changes and hints in the signup section being changed. But unlike appearance, features like reactions were introduced as an alternate to the like button.

1. Twitter: -is an American microblogging and social networking service on which users post and interact with messages known as "tweets". Registered users can post, like, and retweet tweets, but unregistered users can only read them.

* March 04, 2007: At this timeline Twitter was somehow poorly designed but understandable since there was no better no knowledge. Though am not sure, it looks like it was only done by html knowledge. Some tweets were viewed on the front page but not in an “inviting to read” way.
* April 21, 2010: Twitter improved its look at this point. It was better looking than the immediate aforementioned one and the tweets on the front page were more attractive.
* October 10, 2013: Here twitter had viewable videos additional to tweets. The favicon of twitter was also changed. This means that the logo was also changed which is the tweeting bird.
* June 17, 2016: Twitter at this timeline as I observed it was present with a lot of new technologies. And it added a lot of contents to be viewed on the front page like never before. The front page could be scrolled up and down like none of the others before which had a fixed page.
* November 04, 2019: comparing the immediate above timeline and this timeline we can see there’s an appearance change. At this timeline, unlike the previous one, it didn’t have the scrolling feature since there are no tweets to be viewed at the front page. And the alignments of the signup/login section and the information or suggestion section were a lot different from the former one.

1. Google: -is an American multinational technology company that specializes in Internet-related services and products, which include online advertising technologies, search engine, cloud computing, software, and hardware.

* July 02, 2007: Google at this point of time was somehow ugly. The front was too much edgy, dull and didn’t implement a wise use of space. It looks like at this time, appearance wasn’t a concern to google.
* March 16, 2010: Here Google increased the size of the search bar. At the top left of the front page the ‘shopping’ link was added and at the top right of the front page the ‘search settings’ link was added as well. Spaces were also added between the elements in the front page of the website.
* December 02, 2013: At this timeline compared immediate previous one Google added the links ‘Play’, ‘YouTube’ and ‘Drive’ at the top right of the home page. The google sign became of a woman’s involved in it. Last thing is, I have witnessed them trying to advertise a website by the name of ‘Nexus 7.’
* February 17, 2016: Google was exactly unchanged though the years to this timeline with the sole change of returning to the previous google sign that takes the center space of the home page of the website. I noticed that google added his logo as the favicon of the website.
* August 14, 2019: Google became more precise about the contents at its home page and nevertheless becoming more functional. In its search bar, it added a recording like icon so that we can use speech recognition optional to typing. At the top right of the home page it added this menu icon like button that gives alternatives to the new platforms created by the Google company.

1. Yahoo search: -is an American web services provider headquartered in Sunnyvale, California, and owned by Verizon Media. The original Yahoo! company was founded by Jerry Yang and David Filo in January 1994 and was incorporated on March 2, 1995.

* June 07, 2007: At this point Yahoo’s front page’s content was completely at the center and the design looks like one made of only the html knowledge. The coloring of this page was also poor. The concept of branding was totally trashed since there is no consistent coloring system and logo.
* February 22, 2010: Here yahoo had removed the nonsense that were hanging on the search bar. It looks more clean slate but it was still centralized and had a very few features to explore which makes it boring. In the more options at the top of the search bar contained a lot more elements. And last thing, it was on the way of understanding branding.
* March 12, 2013: Yahoo made improvement on the department of using a space wisely. The Yahoo sign moved from right to the left side of the search bar. They had added a kind of quote phrased “Make yahoo! Your home page.” Some of the elements in the more options came out and became placed side the more option and other elements.
* September 09, 2016: Yahoo removed all the options that were at the top of the search bar and the Yahoo sign became placed there instead. On the other hand, Yahoo added a category by the name of “Trending now” where under it laid some samples of websites. This timeline was where we could clearly see the direction of the branding journey of Yahoo.
* April 28, 2019: At last the Yahoo sign came to the top left corner of the front or home page. It was obvious that it has used a lot of the new technologies. The transparent or opaque effect helped the website to be user-friendly. Majorly they placed their elements and contents evenly throughout the page.

1. Amazon: -is an American multinational technology company based in Seattle that focuses on e-commerce, cloud computing, digital streaming, and artificial intelligence.

* May 17, 2007: Amazon at this point of time was by far the most superfluously contented website. The excessive content site can be very overwhelming. Additional to that captions and the pictures look like they were mismatched. If not, very hard to determine which belongs to which. All in all, it was very disorganized.
* July 21, 2010: There was this space at the top of the website which was purposeless and seems like it was a silly mistake. It was also present in the immediate above timeline and wasn’t still corrected. The overwhelming problem was still not solved but at least it was more organized.
* October 18, 2013: The shopping department underlying some elements of grouped items to be sold had been removed from the left side of Amazon, making it less overwhelming. There was a section called ‘Amazon payment products’ that was added in this new website which implies that Amazon had started its own payment system.
* May 03, 2016: Here Amazon had improved a lot and had shown a drastic change. coloring was well implemented and branding, well built. Overall, it was much organized than before. The site had become more than user-friendly.
* August 08, 2019: A recognized timeline in the evolution of the Amazon website I say. You can see that branding was their big concern. It was by far the most ‘inviting to stay and explore’ front page. It had this element which helps you figure out what can possibly have delivered to you based on country you live in. Alignment and coloring were at their best. And last but not least, the website had become more graphical than textual which is preferable for a better attraction.

**The different types of website**

1. Blog – is an online journal or informational page that is regularly updated.

Examples: -

* TechCrunch: <https://techcrunch.com/>
* is an American online publisher focusing on the tech industry.
* Boing Boing: <https://boingboing.net/>
* is a website, first established as a zine 1988, later becoming a group blog. Common topics and themes include technology, futurism, science fiction, gadgets, Gadget Hack wrench, intellectual property, Disney, and left-wing politics.
* Talking Points Memo: <https://talkingpointsmemo.com/>
* is a left-leaning web-based political journalism website created and run by Josh Marshall that debuted on November 12, 2000.
* Mashable: <https://mashable.com/>
* is a digital media website founded by Pete Cashmore in 2005.
* Lifehacker: <https://lifehacker.com/>
* is a weblog about life hacks and software that launched on January 31, 2005.

1. Corporate (informational) – is used to officially represent a brand on the internet, and which is often used as the landing page for advertising content.

Examples: -

* International Energy Agency: <https://www.iea.org/>
* is a Paris-based autonomous intergovernmental organization established in the framework of the organization for Economic Co-operation and Development in 1974 in the wake of the 1973 oil crisis.
* CERA: <https://ceraglobal.org/>
* is a global association of actuarial bodies that can award the **CERA** credential to their members.
* **Sunshine Construction:** <https://www.sunshineinvestmentgroup.net/>
* was founded in 1984, as a sole proprietorship and later in 1993 transformed into a private limited company.
* Moleskine: <https://us.moleskine.com/>
* is an Italian manufacturer, papermaker and product designer founded in 1997 by Francesco Franceschi, based in Milan, Italy.
* Roundhouse: <https://www.roundhouse.org.uk/>
* is a performing arts and concert venue situated at the Grade II\* listed former railway engine shed in Chalk Farm, London, England.

1. Ecommerce (business/marketing) – or sometimes known as an online store allows you to take online payments for products or services.

Examples: -

* Apple Inc. :<https://www.apple.com/>
* :is an American multinational technology company headquartered in Cupertino, California, that designs, develops, and sells consumer electronics, computer software, and online services.
* Amazon :<https://www.amazon.com/>
* :is an American multinational technology company based in Seattle that focuses on e-commerce, cloud computing, digital streaming, and artificial intelligence.
* Alibaba Group Holding Limited :<https://www.alibaba.com/>
* :is a Chinese multinational technology company specializing in e-commerce, retail, Internet, and technology.
* eBay :<https://www.ebay.com/>
* is an American multinational e-commerce corporation based in San Jose, California, that facilitates consumer-to-consumer and business-to-consumer sales through its website.
* Sheromeda :<https://sheromeda.com/>
* is an Ethiopian diasporas online shopping site.

1. Portfolio (Personal) – is a type of website used to display and promote examples of previous work.

Examples: -

* Ben Mingo :<http://www.benmingo.com/>
* is a portfolio of graphic and interactive designer **Ben Mingo**, currently based in Southern California.
* Rachel Cheng :<https://www.rhtcheng.co/>
* is a portfolio of a product Designer Rachel Cheng.
* Kuon Yangi :<https://kuon.space/>
* is a portfolio of a web designer / markup engineer Kuon Yangi.
* Euegene So :<https://www.eugeneso.com/>
* is a portfolio of a graphic and interaction designer & developer at Rhode Island School of Design (RISD) Euegene So.
* Stephen Calvillo :<http://stephencalvillodesign.com/>
* is a portfolio of a product designer at LYFT in San Francisco Stephen Calvillo.

1. Content aggregator – is an individual or organization that gathers web **content** (and/or sometimes applications) from different online sources for reuse or resale – is a type of website that gives your company or product a web presence and acts as an online version of a business card.

Examples: -

* Flipboard: <https://flipboard.com/>
* :is a news aggregator and social network aggregation company based in Palo Alto, California, with offices in New York, Vancouver and Bejiing.
* Pocket: <https://getpocket.com/>
* is an application and web service for managing a reading list of articles and videos from the Internet.
* Google News: <https://news.google.com/>
* is a news aggregator app developed by Google. It presents a continuous, customizable flow of articles organized from thousands of publishers and magazines.
* Feedly: <https://feedly.com/>
* is a news aggregator application for various web browsers and mobile devices running iOS and Android.
* Techmeme: <https://www.techmeme.com/>
* is a technology news aggregator.

1. Crowdfunding (Advocacy) – is a type of website that provide a way for a large number of people (the crowd) to provide money in small increments (the funds) in support of a person, project or entity.

Examples: -

* Kickstarter: <https://www.kickstarter.com/>
* is an American public benefit corporation based in Brooklyn, New York, that maintains a global crowdfunding platform focused on creativity.
* Patreon: <https://www.patreon.com/>
* is a membership platform based in the United States that provides business tools for creators to run a subscription content service.
* CircleUp: <https://circleup.com/>
* is a financial technology company based in San Francisco that focuses on consumer goods startups.
* GoFundMe: <https://www.gofundme.com/>
* is an American for-profit crowdfunding platform that allows people to raise money for events ranging from life events such as celebrations and graduations to challenging circumstances like accidents and illnesses.
* LendingClub: <https://www.lendingclub.com/>
* is an American peer-to-peer lending company, headquartered in San Francisco, California.

1. News – is an online version of a news, either a stand-alone publication or as the online version of a printed periodical.

Examples: -

* British Broadcasting Corporation: <https://www.bbc.com/news>
* is a British public service broadcaster.
* Associated Press: <https://apnews.com/>
* **is** the definitive source for independent journalism from every corner of the globe.
* CNN: <https://edition.cnn.com/>
* is an American news-based pay television channel owned by AT&T's WarnerMedia.
* Cable-Satellite Public Affairs Network: <https://www.c-span.org/>
* is an American pay television network that was created in 1979 by the cable television industry as a nonprofit public service.
* National Public Radio: <https://www.npr.org/>
* is a privately and publicly funded American non-profit membership media organization based in Washington, D.C.

1. Social medias – refers to websites that are designed to allow people to share content quickly, efficiently, and in real-time.

Examples: -

* Facebook, Inc.: <https://www.facebook.com/>
* is an American social media and technology company based in Menlo Park, California.
* Instagram: <https://www.instagram.com/>
* is an American photo and video-sharing social networking service owned by Facebook, Inc.
* Twitter: <https://twitter.com/>
* is an American microblogging and social networking service on which users post and interact with messages known as "tweets".
* WhatsApp: <https://web.whatsapp.com/>
* is a freeware, cross-platform messaging and Voice over IP service owned by Facebook, Inc.
* Tumblr: <https://www.tumblr.com/>
* is an American microblogging and social networking website founded by David Karp in 2007 and currently owned by Automattic.

1. Entertainment (video streaming) – the former is original episodic content produced for broadcast via the internet and the latter is content sent in compressed form over the internet and displayed by the viewer in real time.

Examples: -

* Spotify Technology S.A.: <https://www.spotify.com/>
* is an international media services provider.
* IMDb: <https://www.imdb.com/>
* is an online database of information related to films, television programs, home videos, video games, and streaming content online – including cast, production crew and personal biographies, plot summaries, trivia, fan and critical reviews, and ratings.
* Netflix, Inc.: <https://www.netflix.com/>
* is an American media-services provider and production company headquartered in Los Gatos, California, founded in 1997 by Reed Hastings and Marc Randolph in Scotts Valley, California.
* Pogo.com: <https://www.pogo.com/>
* is a free online gaming website that offers over 100 casual games from brands like Hasbro and PopCap Games.
* TMZ: <https://www.tmz.com/>
* is a tabloid news website that debuted on November 8, 2005.

1. Educational – is a type of website that has games, videos or topic related resources that act as tools to enhance learning and supplement classroom teaching.

Examples: -

* The Internet Archive: <https://archive.org/>
* is an American digital library with the stated mission of "universal access to all knowledge."
* Big Think: <https://bigthink.com/>
* is a multimedia web portal founded in 2007 by Victoria Brown and Peter Hopkins.
* Brightstorm: <https://www.brightstorm.com/>
* is an online learning platform for teenagers. It features thousands of study videos as well as other study tools and resources such as Math Genie and College Counseling.
* Howcast: <https://www.howcast.com/>
* is a website that provides instructional short-form how-to video and content that combines practical information with various filmmaking techniques such as humor, claymation and animation.
* Khan Academy: <https://www.khanacademy.org/>
* is a non-profit educational organization created in 2008 by Salman Khan with the goal of creating a set of online tools that help educate students.

1. Portal – is a type of website that is solely created for the internal purposes within businesses, schools, or institutions.

Examples: -

* The state of Indiana website: <http://in.gov/>
* is the official **website** of **the State of Indiana** and your place to find information, services, news and events related to **Indiana**
* Network Solutions, LLC: <https://www.networksolutions.com/>
* is an American-based technology company and a subsidiary of Web.com, the 4th largest .com domain name registrar with 6,722,545 registrations as of August 2018.
* MyGov: <https://my.in.gov/>
* is a citizen engagement platform founded by the Government of India to promote the active participation of Indian citizens in their country's governance and development.
* Vision ease: <https://www.visionease.com/>
* is a site that complements your existing capabilities or expand lens processing options.
* CopperPoint: <https://www.copperpoint.com/>
* is Arizona’s largest provider of workers compensation insurance and wanted to provide a better user experience for their policyholders and agents.

1. Wiki or community forum – the former is a type of website where a community of people who collaborate towards a shared knowledge base and the latter is an internet forum, or message board, is an online discussion site where people can hold conversations in the form of posted messages.

Examples: -

* Gamepedia: <https://www.gamepedia.com/>
* is the largest video game wiki platform on the web, featuring thousands of community-driven wiki projects.
* WikiHow: <https://www.wikihow.com/Main-Page>
* is an online wiki-style community consisting of an extensive database of how-to guides.
* WordReference: <https://www.wordreference.com/>
* is a online translation dictionary for, among others, the language pairs English-French, English-Italian, English-Spanish, French-Spanish, Spanish-Portuguese and English-Portuguese.
* The Wikimedia Foundation, Inc.: <https://www.wikimedia.org/>
* is an American non-profit and charitable organization headquartered in San Francisco, California.
* Baseball-Reference: <https://www.baseball-reference.com/>
* is a website providing baseball statistics for every player in Major League Baseball history.

Website Evaluation

Guidelines for evaluation

1. Authority

* Is it clear who is responsible for the contents of the page?
* Is there any indication of the author's qualifications for writing on a particular topic?
* Is the information from sources known to be reliable?

1. Accuracy

* Are the sources for factual information clearly listed so they can be verified in another source?
* Is the information free of grammatical, spelling, and other typographical errors?

1. Objectivity

* Does the content appear to contain any evidence of bias?
* Is there a link to a page describing the goals or purpose of the sponsoring organization or company?
* If there is any advertising on the page, is it clearly differentiated from the informational content?

1. Appearance

* Does the site look well organized?
* Do the links work?
* Does the site appear well maintained?

IMDB

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

1. Authority

* It is not clear who is responsible for the contents of the page.
* There’s a way of verifying its legitimacy.
* There’s no clear indications of the qualifications of the authors of the contents.
* The information from sources is known to be reliable.

1. Accuracy

* The sources for factual information are clearly stated so that they can be verified in another source.
* The site seems to be free of grammatical, spelling and other typographical errors.

1. Objectivity

* The sites first pages show the photos of only white peoples.
* There is no link to a page that gives informations about a company.
* The site’s monetizing mechanism by advertising doesn’t disturb the contents in the site.

1. Appearance

* The site looks a bit disorganized.
* All the links in the site are up to date.
* Generally, the site appears well maintained.

YouTube

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

1. Authority

* Every detail of who is responsible for the contents is clearly stated.
* Contents are presented with their authors qualifications.
* The site contains informations from the most reliable to the least reliable sources.

1. Accuracy

* You can check the factuality of the informations on the site either within the site itself or other sites.
* The site contains some grammatical errors but not because of the weakness of the site but because of the inaccuracy of the individuals that contribute and participate to and in the site.

1. Objectivity

* The contents in the site don’t reflect any form of bias in any way.
* It’s hard to find any information about the sponsoring organizations if any on the site.
* The site is sometimes annoying because of its content disturbance by the adverts hosted by the site.

1. Appearance

* The site is a well-organized one. In fact, one of the best.
* Some of the links are up to date and some are not but all the links do actually work.
* The site is one of the most well maintained sites.

Best Electronics

<http://best-electronics-ca.com/>

1. Authority

* I couldn’t know clearly who was responsible for the contents of the page, in fact I couldn’t name out anyone associated with the contents at all.
* Since you can’t see who the authors of the pages are and so as their qualifications too.
* The site is the complete opposite of reliable.

1. Accuracy

* The sources of the informations on the site is not clearly state and therefore couldn’t check their factuality.
* The site is full of typographical errors which makes it hard to understand the information they are trying to put out there.

1. Objectivity

* The contents in the site don’t reflect any form of bias in any way.
* There is no link that takes to an informational website to their sponsoring organization. Even if there is, it’s hard to tell which is it
* There may be no adverts on the site at the moment But there is no appropriate way to post some if present in the future.

1. Appearance

* It is the one of the most disorganized sites until now.
* All the links may work but they tiresomely slow to load.
* The site is completely broken off and need a huge maintenance or better yet if it’s built again.

<https://www.expertmarket.co.uk/web-design/different-types-of-websites>