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CENTER OF INFORMATION TECHNOLOGY AND SCIENTIFIC COMPUTINGDEPARTMENT OF INFORMATION TECHNOLOGY

**Lab one based Assignment**

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**History of Internet**

The Internet began as a United State Department of Defense network to link scientists and university professors around the world. Its main aim was to make it less vulnerable to wartime or terrorist attacks while sharing research data, this lack of centralization was intentional.

In 1957, United States of America creates the Advanced Research Projects Agency (ARPA) with the mission of becoming the leading force in science and new technologies. J.C.R. Licklider head of ARPA and a researchers at MIT proposes the concept of a Galactic Network.For the first time ideas about a global network of computers were introduced. Paul Baran, a member of the RAND Corporation, determines a way for the Air Force to control bombers and missiles in case of a nuclear event. His results call for a decentralized network comprised of packet switches. Due to this problem ARPANET was created and the first switched network that links four different nodes in California and Utah was introduced; one at the University of Utah, one at the University of California at Santa Barbara, one at Stanford and one at the University of California at Los Angeles.

The Stanford University Network was the first local area network connecting distant workstations. In 1981, the NSF expanded ARPAnet to national computer science researchers when it funded the Computer Science Network (CSNET). BBN assumed CSNET operation management in 1984.

ARPAnet adopted the transmission control protocol (TCP) in 1983 and separated out the military network (MILnet), assigning a subset for public research. Launched formally as the National Science Foundation Network (NSFNET) in 1985, engineers designed it to connect university computer science departments across the US. When NSF's fledgling NSFNET adopted the same protocols, ARPAnet technology spread rapidly not only to university campuses across the USA to support the higher education community, but also to emergent Internet Service Providers to support commerce and industry.

The NSFNET eventually became a linked resource for the five supercomputing centers across the US, connecting researchers to regional networks, and then on to nearly 200 subsidiary networks. NSFNET took on the role of internet backbone across the US, with ARPAnet gradually phased out in 1990.

1989 saw a major step forward in internet communications. Tim Berners-Lee of the European

Organization for Nuclear Research (CERN) created the hypertext transfer protocol (http), a standardization that gave diverse computer platforms the ability to access the same internet sites. For this reason, Berners-Lee is widely regarded as the father of the World Wide Web (www). The Mosaic web browser, created in 1993 at the National Center for Supercomputing Applications (NCSA) at the University of Illinois Urbana-Champaign, was a key development that emerged from the NSFNET. Mosaic was the first to show images in line with text, and it offered many other graphical user interface norms we’ve come to expect today (like the browser’s URL address bar and back/forward/reload options for viewing webpages.). Eventually the NSFNET modified its acceptable use policy for commercial use, and by 1995, it was decommissioned. Soon, the internet provider model created network access points that allowed the for-profit, commercial side of the internet to be developed. The internet went from being an obscure research idea to a technology that is used by over 3.2 billion people in less than sixty years.

**Popular Websites Observation**

**Instagram**

Instagram is a free, online photo-sharing social network platform. Instagram allows users to edit and upload photos short videos with captions and location based geo-tags. each instagram users can follow each other. And each post by a user appears on their followers instagram [feeds](https://searchcio.techtarget.com/definition/newsfeed) and can also be viewed by the public when tagged using hashtags or geotags.

**Gmail**

Gmail is a free mail service developed by google. Users can access Gmail on the web or using a third party program that synchronize email contents. The basic service is free to use and more than sufficient for most people’s needs.

**Slack**

Slack is a collaboration hub that can replace email to help you and your team work together seamlessly. It’s designed to support the way people naturally work together, so you can collaborate with people online as efficiently as you do face-to-face. A Slack workspace is made up of channels, where team members can communicate and work together. Keep reading to learn about four key features of Slack.

**Github**

GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere.

**Linkedin**

LinkedIn is a social network for the business community. Founded in 2002, the site is a place for professionals to connect with past and current colleagues, increase their number of business connections, network within their industry, discuss business ideas, search for jobs and look for new hires.

LinkedIn users create professional, résumé-like profiles that allow other site members to learn more about their business background, their areas of expertise, and groups or organizations they belong to. Once users create their profile, they can add other users to their network.

The profiles also include options for including status updates that let people in a user's network know what they're working on and when they might be traveling, or offer advice when needed. There is also a feature that allows those not signed in to LinkedIn to view parts of the profile the user deems allowable.

**12 categories of websites and some examples**

1. **News**

Websites that report new information or something that happened recently are categorized as news websites. Example:-

* 1. **BBC –** <https://www.bbc.com>
  2. **CNN –** <https://www.cnn.com>
  3. **Sky News –** <https://www.skynews.com>
  4. **Google News –** <https://news.google.com>
  5. **Yahoo News –** <https://news.yahoo.com>

1. **Informational**

Websites that are created inorder to provide a customized and branded resources for potential and active customers. Examples

* 1. **Airbnb –** <https://www.airbnb.com>
  2. **Mc Donough –** <https://www.mcdonough.com>
  3. **Mint –** <https://www.mint.com>
  4. **Mosaic Art Now –** <https://www.mosaicartnow.com>
  5. **Polygon –** <https://www.polygon.com>

1. **Business/ Marketing**

Websites that is used to officially represent a brand on the Internet, and which is often used as the landing page for advertising content. Examples

* 1. **Forbes -** <https://www.forbes.com>
  2. **CNN Money –** <https://www.cnnmoney.com>
  3. **All Business –** <https://www.allbusiness.com>
  4. **Bloomberg Business –** <https://www.bloomberg.com>
  5. **Business Insider –** <https://www.businessinsider.com>

1. **Educational**

Websites that contain resources that act as tools to enhance learning and supplement classroom teaching. Example:

* 1. **W3schools –** <https://www.w3schools.com>
  2. **Code Academy –** <https://www.codeacademy.com>
  3. **Solo Learn –** <https://www.sololearn.com>
  4. **EDX –** <https://www.edx.org>
  5. **Stack Overflow –** <https://www.stackoverflow.com>

1. **Entertainment**

Websites that are used to entertain users with funny, educational and other contents such as photos, videos, articles. Example:

* 1. **Hulu –** <https://www.hulu.com>
  2. **Netflix –** <https://www.netflix.com>
  3. **Memes Everywhere –** <https://www.memeseverywhere.com>
  4. **Youtube –** <https://www.youtube.com>
  5. **Game Watcher –** <https://www.gamewatcher.com>

1. **Advocacy**

Websites that are mostly owned by charity organization that support some type of cause.

* 1. **World Advocacy –** <https://www.worldadvocacy.com>
  2. **Green Peace –** <https://www.greenpeace.org>
  3. **Sierra Club –** <https://www.sierraclub.org>
  4. **Move On –** <https://www.moveone.org>
  5. **Stand for Children –** <https://www.stand.org>

1. **Blog**

Are online journals or information pages that are regularly updated. This type of websites are managed by and individual referred as blogger or a small group of bloggers. Example:

* 1. Medium – <https://www.medium.com>
  2. Dev Community – <https://www.dev.to>
  3. Wire Cutter – <https://www.thewirecutter.com>
  4. The Verge – <https://www.theverge.com>
  5. CNET – <https://www.cnet.com>

1. **Wiki**

A knowledge based website on which users collaboratively modify and structure the content directly from their web browser

* 1. **About Us –** <https://www.aboutus.com>
  2. **WikiHow –** <https://www.wikihow.com>
  3. **Catawiki –** <https://www.catawiki.com>
  4. **HitchWiki –** <https://www.hitchwiki.com>
  5. **LyricWiki –** <https://www.lyricswiki.com>

1. **Social Network**

Websites that helps users connect by sharing information about themselves and their surroundings.

* 1. **Facebook –** <https://www.facebook.com>
  2. **Twitter –** <https://www.twitter.com>
  3. **Instagram –** <https://www.instgram.com>
  4. **Telegram –** <https://www.telegram.org>
  5. **Eskimi –** <https://www.eskimi.com>

1. **Community Forum Websites**

An online “meeting place” that is used to engage with others to debate, share knowledge and communicate with others about a wide range of topics participants are interested in discussing.

* 1. **Quora –** <https://www.quero.com>
  2. **Stack overflow –** <https://www.stackoverflow.com>
  3. **Github Community Forum –** <https://www.github.community>
  4. **Intelligent Community Forum –** <https://www.intellgentcommunity.com>
  5. **Joomla Community –** <https://forum.joomla.com>

1. **Personal**

Are pages created by an individual that contain content of a personal information rather than content relating to a company, organization or institution. Examples,

* 1. **Gary Sheng –** <https://www.garysheng.com>
  2. **Raf Derolez –** <https://www.rafderolez.com>
  3. **Pascal Van Gemert –** <https://www.pascalvangemert.com>
  4. **Brandon Johnson –** <https://www.brandonjohnson.com>
  5. **Quniton Harris –** <https://www.qunitonharris.com>

1. **Portal**

It’s a specially designed website that bring information from diverse sources together in a uniform way

* 1. **West bend –** <https://www.westbend.com>
  2. **Allianz –** <https://www.allianz.com>
  3. **Britam –** <https://www.britam.com>
  4. **Carrefour –** <https://www.carrefour.com>
  5. **AvMed –** <https://www.avmed.com>

**Guidelines for evaluating the value of a Web site**

It's so easy to find information on most any topic on the Internet. Whether or not that information is reliable, up-to-date and unbiased is really the big question for anyone doing research on the web. So by using the five important criteria we can get reliable information.

1. **Accuracy**
   1. Make sure author provides e-mail or a contact address/phone number.
   2. Know the distinction between author and Webmaster.
2. **Authority**
   1. What credentials are listed for the authors)?
   2. Where is the document published? Check URL domain.
3. **Objectivity**
   1. Determine if page is a mask for advertising; if so information might be biased.
   2. View any Web page as you would an infommercial on television.
   3. Ask yourself why was this written and for whom?
4. **Currency**
   1. How many dead links are on the page?
   2. Are the links current or updated regularly?
   3. Is the information on the page outdated?
5. **Coverage** 
   1. If page requires special software to view the information, how much are you missing if you don't have the software?
   2. Is it free or is there a fee, to obtain the information?
   3. Is there an option for text only, or frames, or a suggested browser for better viewing?

**Reference**

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* Web Archive, <https://www.archive.org>, march 5, 2020
* CCCOnline Library Guide, <http://www.ccconline.org/library>, march 5, 2020
* Science Node , <https://sciencenode.org/>, march 5, 2020