

## Internet and Web Designing – Unit - 2

### **Online Chatting**

Online chatting is a text-based communication between two or more people over the network. In this, the text message is delivered in real time and people get immediate response.

Talkomatic was the world first online chat system. It was developed by Doug Brown and David R. Woolley in 1973.

Online chat may refer to any kind of communication over the Internet that offers a real-time transmission of text messages from sender to receiver. Chat messages are generally short in order to enable other participants to respond quickly. Thereby, a feeling similar to a spoken conversation is created, which distinguishes chatting from other text-based online communication forms such as Internet forums and email. Online chat may address point-to-point communications as well as multicast communications from one sender to many receivers and voice and video chat, or may be a feature of a web conferencing service. Online chat in a less stringent definition may be primarily any direct text-based or video-based, one-on-one chat or one-to-many group chat, using tools such as instant messengers, Internet Relay Chat, talkers and possibly MUDs. The expression online chat comes from the word chat which means "informal conversation". Online chat includes web-based applications that allow communication –often directly addressed, but anonymous between users in a multi-user environment. Web conferencing is a more specific online service, that is often sold as a service, hosted on a web server controlled by the vendor.

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On the Internet, chatting is talking to other people who are using the Internet at the same time you are. Usually, this "talking" is the exchange of typed-in messages requiring one site as the repository for the messages (or "chat site") and a group of users who take part from anywhere on the Internet. In some cases, a private chat can be arranged between two parties who meet initially in a group chat. Chats can be ongoing or scheduled for a particular time and duration. Most chats are focused on a particular topic of interest and some involve guest experts or famous people who "talk" to anyone joining the chat. (Transcripts of a chat can be archived for later reference.)

Chats are conducted on online services (especially America Online), by bulletin board services, and by Web sites. Several Web sites, notably Talk City, exist solely for the purpose of conducting chats. Some chat sites such as Worlds Chat allow participants to assume the role or appearance of an avatar in a simulated or virtual reality environment.

Talk City and many other chat sites use a protocol called Internet Relay Chat.

A chat can also be conducted using sound or sound and video, assuming you have the bandwidth access and the appropriate programming.

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### **Chat Etiquette**

**Chat etiquette** defines rules that are supposed to be followed while online chatting:

- Avoid chat slang
- Try to spell all words correctly.
- Don't write all the words in capital.
- Don't send other chat users private messages without asking them.
- Abide by the rules created by those running the chat.
- Use emoticons to let other person know your feelings and expressions.

### **Web Based Chat Services**

Following web sites offers browser based chat services:

Website	Description
Facebook	It was founded by <b>Mark Zuckerberg</b> with his college roommates at Harvard university. Facebook lets the user to create personal profile, post status & photos, and receive notifications.
eBuddy	It is an instant messaging service. It supports multiprotocol instant messaging clients.
Convore	It offers real time web based chat system.
MeBeam	It offers video based chat between the clients to create video conferencing rooms for up to 16 people.
Yahoo! Messenger	It offers PC-PC, PC-phone, Phone-to-PC, file transfer, webcam hosting, text messaging service etc.
WhatsApp	It is an instant messaging service application available on smart phones.
Gmail	It offers instant chatting, sending and receiving mails, and video calling services.

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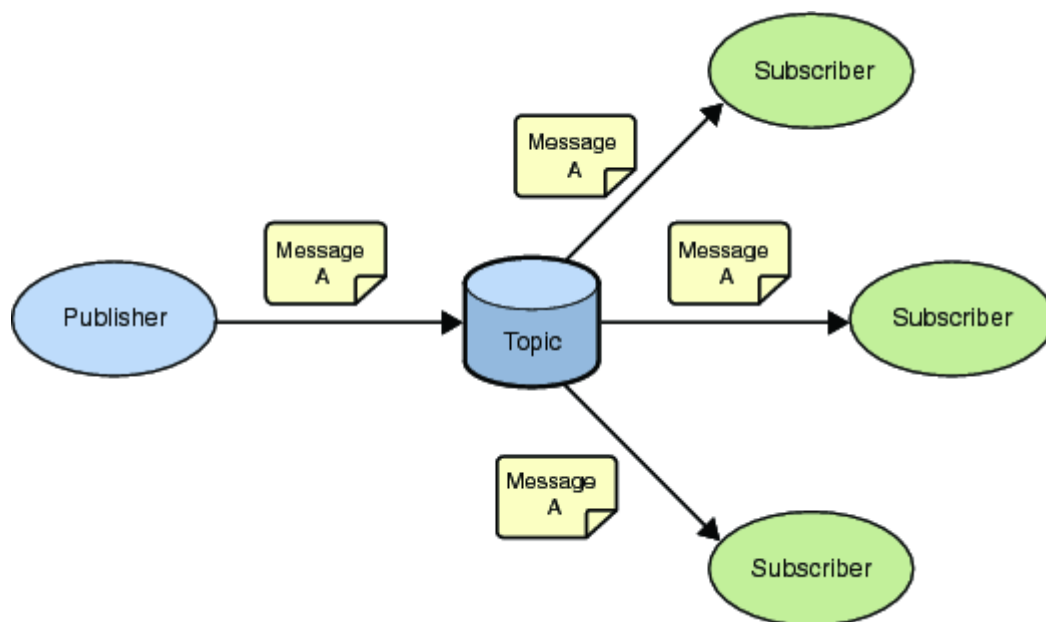
## What is Messaging?

The term messaging refers to technology that lets computer systems share information without requiring either direct connections or awareness of each other's location. Messaging is also sometimes known as message-oriented middleware, or simply middleware. Messaging is analogous to postal and shipping services. Just as you would hand your letters or packages to a carrier and trust that they will get to where you want them to go, so it is with messaging—your applications hand off information to a messaging system that routes it to whatever other applications you've said you want it to get to.

Messaging is a text-based, one-to-one conversation that usually occurs on a mobile device or platform like Facebook Messenger, WhatsApp, SMS text messaging, or within an app. Unlike web-based chat that occurs in a pop-up screen where both parties must be logged in, messaging is asynchronous, meaning you don't need to stay in a session to send or receive messages. Messaging takes the idea of web chat and moves it to where consumers already spend their time – on SMS, in apps, or on third-party communications platforms like Facebook, Snapchat, or Apple Business Chat. Messaging is convenient, provides context, and allows conversations to be more personal with emojis, gifs, and links to information. Unlike more rigid chat sessions, messaging works best when it's quick, authentic, and personal. Consumers respond well when they know there's another person on the other end of the message to quickly answer their question or provide information through links, videos, or images. This means that in addition to reliable technology, customer-facing associates hold the key to a successful messaging program. They must have brand knowledge and soft skills to successfully operate in this channel.

At its most basic, messaging consists of the following:

- publisher: the entity that sends or publishes the message (also called a producer)
- message: what the publisher wants to say to the subscriber. Messages often contain events, but can also carry queries, commands, and other information.
- subscriber: the ultimate receiver of the message (also called a consumer)



A message typically has a destination that decouples the publisher from the subscriber. In PubSub+ event brokers, a destination can be a topic or a queue:

- topic: used when the message is intended to be consumed by more than one subscriber
- queue: used when the message is intended to be consumed by at most one subscriber

**Messages can be classified as Persistent (Guaranteed) or Non-Persistent (Direct) by the message producer.**

Guaranteed messages are spooled to non-volatile storage on the broker, and are kept until the broker has verified the successful delivery of those messages to all clients and downstream event brokers. Guaranteed messaging is suitable to applications where messages must be:

- processed in the order they are received,
- available to consumers, even if those consumers are off-line.
- able to survive the loss of an event broker.

Direct messages are delivered to subscribing clients in the order in which producers publish them. They are not spooled to non-volatile storage, and do not require acknowledgment. Direct messaging is ideal for applications where:

- extremely high message rates and low latency are required
- consuming clients can tolerate message loss in the event of network congestion

## Conferencing Concepts

Conferencing, participating in a call where more than two parties can communicate, has always been one of the most sought-of service in telecommunication.

Technology for allowing more than two parties to concurrently talk each other (eg, not in a push-to-talk service) is very much different than the one used for "normal" calls with two participants. In a "normal" call, you only care that media streams goes back and forth from caller to callee. Actually you can have (and often you have) the media streams (via RTP) going directly from caller to callee and back, bypassing FreeSWITCH or any other telecommunication server.

Conferencing, on the other hand, needs a server. The most basic function of a conferencing server is mixing, eg merging, the different media streams that are sent by participants. The

resulting merged stream is broadcasted to all participants. So, each participant sends to server its own media stream, and all participants receive from server a media stream...

Traditional conferences mean participants have to travel and stay in a particular place. This takes time and is expensive. But an online conference uses the Internet as a conference venue. This means that participants can access the conference from anywhere in the world and can do this at any time, using standard browser software. Participants will be able to log on as little or as much as they wish - before, after or during office hours. They are given a password to access the various conference and seminar groups as well as closed discussion groups. Anyone with access to the Internet can participate.

We're not saying an online conference is invariably better than a normal, face to face conference (though it can be!), but it is different, and has lots of advantages:

- cheaper - because there is no travel, and no accommodation is required;
- more convenient - you can access it at any time you want, from anywhere with an Internet connection;
- high level of participation - typically, more people will actively participate in an online conference than in a face to face conference, and the standard of the discussions is often higher;
- wider spread of participants - our second Supporting Deaf People conference had delegates from nineteen countries and five continents;
- and there is a permanent record of proceedings.

Online conferences are synchronous, asynchronous, or a combination of both. An example of asynchronous conferencing is the discussion forum type of conference, where people post messages, which the system stores, and which other people can respond to when they log on. This is excellent for carrying on a discussion over some time, typically, in our conferences, a few days (though we are also running some conference forums which last much longer periods, of up to a year).

Examples of synchronous conferencing are live chat, or live web casting. For example, we produced a series of live web casts, where presenters gave talks backed up by PowerPoint presentations. The conference delegates were able to watch, listen, ask questions, etc. Such web casts can be recorded, and viewed later.

## **Features**

Our online conferences are more than just a simple bulletin board. They can include features such as:

- online polls
- mailing lists
- RSS feeds
- Wiki
- web logs
- instant messaging
- collaborative document editing
- personal and shared calendars

## **What is Audio Conferencing?**

Audio conferencing is where at least two individuals in various locations use technology like a conference bridge to hold an audio call. Audio conferencing is not quite the same as a traditional phone in that all participants dial into a central system that connects them rather than directly dialling each other. It aims at accomplishing communications and collaboration at the same time. Many audio conferencing products may accompany online collaboration

elements (similar to screen-sharing capabilities), to additionally enhance the value of audio meetings.

When a number of participants of a meeting use telephonic instruments to communicate with each other then it is known as audio conferencing. An organization can use audio video conferencing instruments according to the nature of their meeting, the number of participants and its resources. The tools normally used for this purpose may include the wired and hand-held phones normally used in every household or office, speaker phones used in conference rooms and mobile or cellular phones normally used for communicating with individuals. So, for this reason, audio conferencing is also known as teleconferencing service

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There are two types of audio conferencing: point-to-point and multipoint conferencing systems. The point-to-point conferencing system enables two people located in different locations to collaborate and communicate whereas multipoint conferencing system has the ability to facilitate communication and collaboration for three or more people located in different places.

For audio conferencing to occur, all the users must have the conferencing software installed in their computers or phones. The computers or phones for conferencing must also have speakers and microphones, and a fast internet or data connection.

## **What is Video Conferencing?**

When at least two individuals utilize digital platforms to communicate and collaborate with each other in order to accomplish a common goal adequately then it is known as a video conferencing. A unified and simple video conferencing solution which not just makes communication easy... Yet, it additionally lower the chances of having too many overlapping applications, simplifies troubleshooting and maintenance and saves everyone time and energy by lowering training needs.

When two or more people use digital platforms communicate and collaborate with each other to achieve a common goal effectively then it is known as a video conferencing mode of communication or a tool of face-to-face conferencing. Today various types of video audio conferencing tools are gaining popularity as they can be used for exchanging visual elements with the participants like presentations and screens of the laptops with the participants of the meeting. Today audio & video conferencing software like ezTalks Meetings etc. are also used for training the remotely placed employees as it not only reduces the cost of training as well as saves the time required for traveling to the institutes etc.

## **Benefits of Audio and Video Conferencing in Business:**

### **1. Reduces Travel Costs:**

It was not that long ago when all business meetings happened face-to-face, which involved travel, expense and time.

However, through **audio and video conferencing** an organization can save a lot of time and money.

### **2. Keep Connected to Your Employees:**

If you have employees working from home or out on the road, through audio video conference system you can stay in touch with them consistently.

It's an extremely helpful way to keep in touch.

### **3. Increases Productivity:**

If collaboration is done well – it can increase productivity essentially.

**Audio and video conferencing** can be conducted at any time, so you don't need to waste additional time sorting out the meeting as you did in past.

You can easily begin an audio and video call through your PC, mobile or another device essentially, increasing effectiveness and productivity.

#### **4. Improves Teamwork:**

If you have large teams or members of staff at various locations, video conferencing will assist to unite them.

Employees can share data and collaborate to make a better-informed decision, which will prompt better working relationships internally.

#### **5. Effective Communication:**

Not just would you be able to hear people's voices, through video conferencing you can likewise see the people you are communicating to, see their expressions, instant responses and body language.

By hopping on a quick virtual meeting, people can define tasks, goals and actions in detail so that every other person is on the same page.

It's likewise an open door for people to ask questions, which is very significant as it can lessen human error essentially.

#### **6. Training Many People at a Time:**

Organizations spend a lot of time and money on internal training programs.

They tend to utilize traditional strategies for training their employees – such as a classrooms style session.

However, a ton of time goes into arranging these sessions and guaranteeing there are sufficient resources for everyone.

For example, we need to train 100 people but, we have a training room available for 20 people.

In this case, you may have to conduct 5 different sessions or more to cater to everyone – which is a time consuming process.

By using an audio video conference system, you can easily overcome such kind of situations and save a lot of time.

### **Main differences between audio and video conferencing**

In order to get the optimum benefit of an online communication tool, you must know which one is beneficial for you audio or video conferencing tools. The difference between the two forms of online conferencing tools, provided here under, can help you in choosing the best one for your business.

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**Environment:** An engaging environment is more important for video conferencing whereas it has nothing to do with the audio conference. There must be good lighting and attractive surroundings for video conference but for an audio conference, the environment should be stimulating and helpful for the participants.

**Network:** It is essential to have a quality telephone and a clear network for a successful audio conferencing whereas a high-speed internet connection with a compatible device is required for video conferencing. You may or may not need an internet connection for audio conferencing.

**Presentation:** Certain things like sharing information and documents, setting up an agenda or sharing backgrounds that can affect the proceedings of the audio conference have to be done in advance before calling for a meeting through the post, courier or email. But such things can

be shared instantly at the time of online video conferences by using some web conferencing tool like ezTalks Meetings software etc.

**Technology:** You will have to invest in high-quality tools of communication like microphone,web camera,computer,quality battery backup and speakers along with technology used for video conferencing. On the other hand,no special tools are required for audio conferencing.

**Cloud Solutions:** In order to reduce the cost of online communication with remotely laced participants various types of cloud based communication tools are used for video conferencing like ezTalks Meetings etc. but you may or may not need such tools in audio conferencing solutions.

**Flexibility:** The usage of audio conferences is limited to verbal communication whereas video conference allows you to use it in various manners like converting it into audio only conference and sharing various types of files and screens along with allowing the users for instantmessaging and chattingwith the participants of your choice.

**Easy accessibility:** The tools used in audio conferences are easily accessible whereas video conferencing tools are protected through various tools like firewall etc. So you will have to follow a proper channel to access a video conferencing tool for sharing information or inviting for a conference.

### **Technology requirements for video/audio conferencing:**

- Computer with access (ideally broadband) to the Internet.
- Browser.
- Speakers to hear audio.
- Microphone (to contribute audio).
- Web camera to contribute video.

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## **Instant Messaging (IM)**

Instant messaging is a software utility that allows IM users to communicate by sending text messages, files, and images. Some of the IMs also support voice and video calls.

Application	Description
Nimbuzz	It is native iPhone app. It supports voice and video chats, file sharing, and group chats with panache.
eBuddy	eBuddy IM helps to have all your buddies from multiple IM accounts in one single list.
Imo.in	It has capability to link all your IM accounts together. You can log on to all of your IM accounts by just logging into imo.in.
MeBeam	It offers video based chat between the clients to create video conferencing rooms for up to 16 people.
Yahoo! Messenger	It offers PC-PC, PC-phone, Phone-to-PC, file transfer, webcam hosting, text messaging service etc.
GoogleTalk	It is an IM by Google and one of the most widely used.
Lync	Lync is an IM developed by Microsoft. It is widely used in corporate sector for internal and external communication as well.

Instant messaging (IM), form of text-based communication in which two persons participate in a single conversation over their computers or mobile devices within an Internet-based

chatroom. IM differs from “Chat,” in which the user participates in a more public real-time conversation within a chatroom where everyone on the channel sees everything being said by all other users.

In its simplest form, instant messaging (IM) seeks to accomplish two goals: monitoring presence for the purpose of sending presence-based alerts to users in the chatroom and messaging. The software relies on a central server or servers to monitor presence. When a user logs on to an IM system, the login is recognized, and other online users who have that address listed as a “buddy,” or friend, are notified of the user’s presence. The software establishes a direct connection between users so they can talk to each other synchronously, in real time.

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IM allows effective and efficient communication, allowing immediate receipt of acknowledgment or reply. However IM is basically not necessarily supported by transaction control. In many cases, instant messaging includes added features which can make it even more popular. For example, users may see each other via webcams, or talk directly for free over the Internet using a microphone and headphones or loudspeakers. Many applications allow file transfers, although they are usually limited in the permissible file-size.

It is usually possible to save a text conversation for later reference. Instant messages are often logged in a local message history, making it similar to the persistent nature of emails.

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## **Examples of Instant Messaging Services**

There are many instant messaging services available for free and as a licensed product for professional users. Some of these include:

- Facebook Messenger (formerly Facebook Chat)
  - Apple iMessage
  - Snapchat
  
  - WeChat
  - WhatsApp
  
  - Viber
  - Tango
  - Skype
  - Microsoft Teams
  - Google Hangouts
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## **Usenet newsgroup Concepts: Reading Usenet newsgroups**

### **Usenet (USER NETwork)**

Like mailing lists Usenet is also a way of sharing information. It was started by Tom Truscott and Jim Ellis in 1979. Initially it was limited to two sites but today there are thousands of Usenet sites involving millions of people. Usenet is a collection of user-submitted notes or messages on various subjects that are posted to servers on a worldwide network. Each subject collection of posted notes is known as a newsgroup. There are thousands of newsgroups and it is possible for you to form a new one. Most newsgroups are hosted on Internet-connected servers, but they can also be hosted from servers that are not part of the Internet. Usenet’s original protocol was UNIX-to-UNIX Copy (UUCP), but today the Network News Transfer Protocol (NNTP) is used. Most browsers, such as those from Netscape and Microsoft, provide Usenet support and access to any newsgroups that you select. On the Web, Google and other sites provide a subject-oriented directory as well as a search approach to newsgroups and help you register to participate in them. In addition, there are other newsgroup readers, such as Knews, that run as separate programs. **Usenet** is a kind of



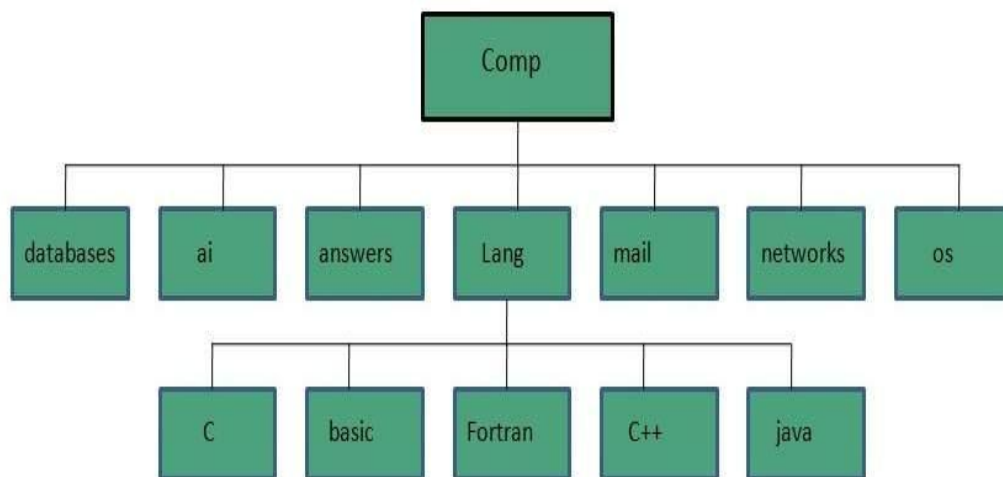
discussion group where people can share views on topic of their interest. The article posted to a newsgroup becomes available to all readers of the newsgroup.

## Newsgroup Classification

There exist a number of newsgroups distributed all around the world. These are identified using a hierarchical naming system in which each newsgroup is assigned a unique name that consists of alphabetic strings separated by periods.

The leftmost portion of the name represents the top-level category of the newsgroup followed by subtopic. The subtopic can further be subdivided and subdivided even further (if needed).

For example, the newsgroup **comp.lang.C++** contains discussion on C++ language. The leftmost part **comp** classifies the newsgroup as one that contains discussion of computer related topics. The second part identifies one of the subtopic **lang** that related to computer languages. The third part identifies one of the computer languages, in this case C++.



Newsgroup hierarchy of 'Comp'

The following table shows the top-level hierarchies of Usenet Newsgroup:

Comp.*	Computer related topics including computer hardware, software, languages etc.	Comp.lang.java.beans Comp.database.oracle
News.*	Newsgroup and Usenet topics	News.software.nntp
Rec.*	Artistic activities, hobbies, or recreational activities such as books, movies etc.	Rec.arts.animation

Sci.*	Scientific topics	Sci.bio.botany
Soc.*	Social issues and various culture	Soc.culture.india
Talk.*	Conventional subjects such as religion, politics etc.	Soc.politics.india
Humanities.*	Art, literature, philosophy and culture	Humanities.classics
Misc.*	Miscellaneous topics i.e. issues that may not fit into other categories	Misc.answers Misc.books.technical

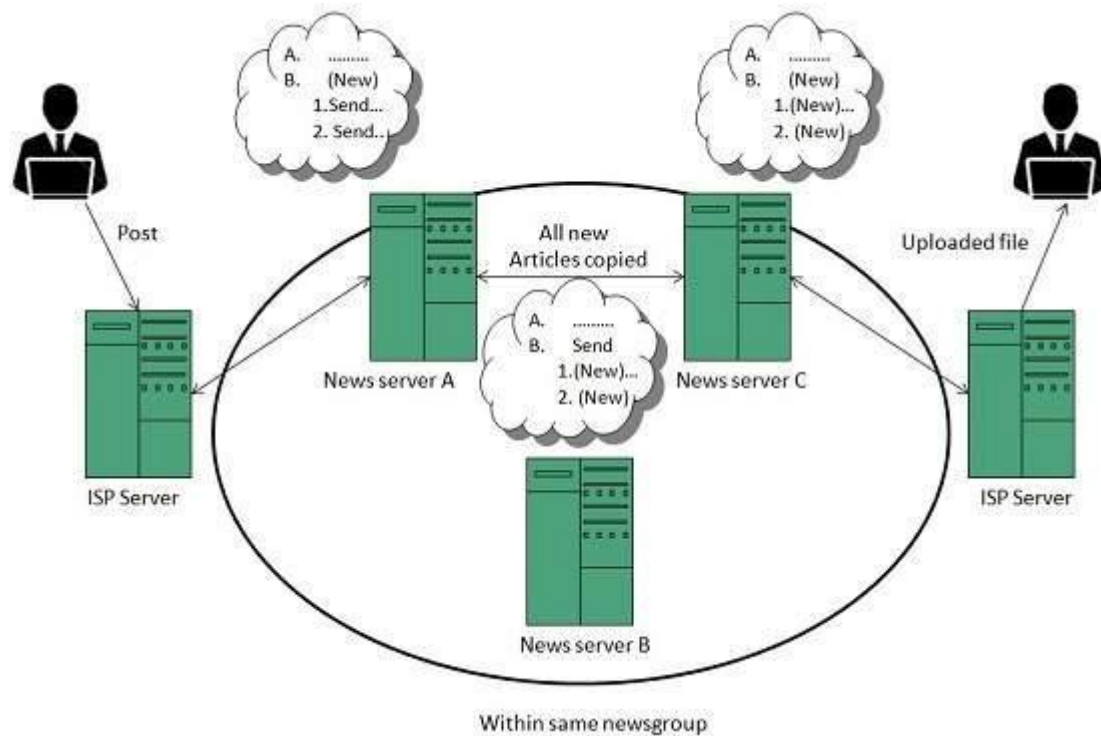
## Working of Usenet Newsgroup

When a newsreader such as outlook express connects to a news server, it downloads all the new messages posted in the subscribed newsgroup. We can either reply a message after reading or post a news article to the news server.

The article posted to a news server is appended to the file maintained for that newsgroup. Then the news server shares article with other news servers that are connected to it.

Then each news server compares if both carry the same newsgroup. If yes, then by comparing the files it checks that if there are any new articles in the file, if so they are appended to the file.

The updated file of the news servers is then sent to other news servers connected to it. This process continues until all of the news servers have updated information.



## Reading Articles

If user wants to read article, user has to connect to the news server using the newsreader. The newsreader will then display a list of newsgroups available on the news server where user can subscribe to any of the news group. After subscription the newsreader will automatically download articles from the newsgroup.

After reading the article user can either post a reply to newsgroup or reply to sender by email. The newsreader saves information about the subscribed newsgroups and articles read by the user in each group.

## Posting an Article

In order to send new article to a newsgroup, user first need to compose an article and specify the names of the newsgroup to whom he/she wants to send. An article can be sent to one or more newsgroup at a time provided all the newsgroups are on same news server.

It is also possible to cancel the article that you have posted but if someone has downloaded an article before cancellation then that person will be able to read the article.

## Replying an Article

After reading the article user can either post a reply to newsgroup or reply to sender by email. There are two options available Reply and Reply group. Using Reply, the reply mail will be sent to the autor of the article while Reply group will send a reply to whole of the newsgroup.

## Cancelling an Article

To cancle an article after it is sent, select the message and click Message > Cancel message. It will cancle the message from the news server. But if someone has downloaded an article before cancellation then that person will be able to read the article.

## Usenet netiquette

While posting an article on a newsgroup, one should follow some rules of netiquette as listed below:

- Spend some time in understanding a newsgroup when you join it for first time.
- Article posted by you should be easy to read, concise and grammatically correct.

- Information should be relevant to the article title.
- Don't post same article to multiple newsgroups.
- Avoid providing your business email address while subscribing to a newsgroup as may be used by spammers.
- Avoid using capital letters as someone may interpret as shouting.
- Prefer to use plain text wherever possible in your article.

## Mailing list vs. Newsgroup

S.N.	Mailing List	Newsgroup
1.	Messages are delivered to individual mailboxes of subscribed member of group.	Messages are not posted to individual mailboxes but can be viewed by anyone who has subscribed to that newsgroup.
2.	Working with mailing list is easier than newsgroup. It is easy to compose and receive emails.	Working with a particular newsgroup requires proper knowledge of that newsgroup.
3.	In order to send or receive mails, you required an email program.	It requires a newsgroup reader.
4.	Messages are delivered to certain group of people.	Messages are available to public.
5.	Mailing list does not support threaded discussion.	Newsgroup supports threaded discussion.
6.	Messages delivered to listed subscribers can not be cancelled.	Article posted on a newsgroup can be cancelled.

**You can read newsgroups with a news reader client.** A newsreader is an application program that reads articles on Usenet distributed throughout newsgroups. Newsreaders act as clients which connect to a news server, via the Network News Transfer Protocol (NNTP), to download articles and post new articles. In addition to text-based articles, Usenet is also used to distribute binary files, generally in dedicated "binaries" newsgroups.

The term *newsreader* is sometimes (erroneously) used interchangeably with *news aggregator*.

Newsreaders that help users to adhere to the established conventions of Usenet, known as netiquette, are evaluated by the Good Netkeeping Seal of Approval (GNKSA).

**Searching.** Searching is always a powerful information sorting function. For example, you can search a newsgroup for messages that have senders or subjects that match certain keywords of interest to you. This can be useful if the newsgroup has a lot of messages so you can quickly find those discussing subjects you are interested in. Once you find a message you want to read, you can highlight that message, sort the message window by sender (see below), and then read any other messages by the same author.

The newsgroup search function is typically under an application menu item like "Edit / Find" or "Edit / Search Messages". Some news readers will even let you search through the contents of the messages without downloading them, by sending a message to the news server which does the search and returns the results.

**Sorting.** You usually select a newsgroup by clicking on its name in the newsgroup list of your news reader. Typically a window will open that lists all of the messages posted to that newsgroup in the past several days. You can then sort the list by clicking on the title at the top of the column that you want the list to be ordered by, such as those listed below:

- **Date.** Sorts the list from first to last by the time they arrived on your news server. News servers usually normalize all message times according to the GMTdate of their origination, so that later messages are consistently listed after earlier messages.
- **Lines.** Orders the messages from smallest to largest, so that you can see approximately how much space each one takes up.
- **Sender.** Orders the messages so that all those sent by the same sender are collected together, so that you can see successive messages by the same person.
- **Subject.** Sorts the list into an alphabetical listing by subject, with similarly spelled subjects grouped together.

**Email.** The site News2mail.com will forward newsgroups postings to your email account, which can be handy if you have email access to the *Internet* but not newsgroup access.

## **Types of Newsreaders**

There are several different types of newsreaders, depending on the type of service the user needs—whether intended primarily for discussion or for downloading files posted to the alt.binaries hierarchy

### **Desktop newsreaders**

Designed to integrate well with common GUI environments, and often integrated with a web browser or email client. Examples: Windows Live Mail, Mozilla Thunderbird, Xnews, Forté Agent, Unison, Newswatcher and Pan.

### **Traditional newsreaders**

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Designed primarily for reading/posting text posts; limited and often cumbersome binary attachment download functionality. Gnus, as well as more specialized newsreaders such as slrn, nn and tin.

### **Binary downloaders**

Although Usenet originally started as a text-based messaging system without any file attachment ability, many Usenet users today do not participate in discussion groups, as was common during the 1980s and 1990s and only use Newsgroups for downloading files such as music, movies, pornography, software and games. Therefore, streamlined clients have been developed for quickly grabbing binary articles, and without the extraneous clutter of text reading and posting features for which file downloaders have little use.

## **Web-Based Chat Rooms and Discussion Boards**

Chat Room or also called Chat Channel are terms that describe a virtual place for online communication between users with a common topic. It can be a chat room for friends, another one for family and the third can be for dog lovers. Lots of these chat rooms are built into the websites and many of them use web cameras.

A web chat room is a place for online communication. It is intended for users interested in the same topic. It can be a room especially for close people, but also more broadly – just for people with the same interests. Rooms can be embedded in websites. It is a designated virtual channel where users communicate with each other through the Internet, traditionally in plain text only. More recent developments in Web technology now allow the transmission of images and emoticons in a chat room as well. The term can mean online chatting, instant messaging and online forums using either synchronous or asynchronous conferencing. Some chat rooms require a username and password combination in order to log in or join a conversation, allowing for privacy among the users.

## Discussion Board:

A discussion board is an online tool that allows groups to communicate asynchronously. A discussion board is made up of forums, which are folders containing messages on a particular subject. Forums contain threads. Threads are a series of messages relating to a particular question or topic. Each individual contribution to a conversation is called a message.

Also known as forum, message **board**, and bulletin **board**. For the purpose of exchanging information only. A Website location where users may post text communication for one another. Not sensitive to time constraints or structures.

- An online forum for college students to generate, converse, and implement ideas, as well as reflect upon issues presented in the course.
- Similar to a Internet forum or message **board**, that allows for students to create posts, read posts, and communicate publicly.
- An online forum for students to generate, converse, and implement ideas as well as reflect upon issues presented in the course.
- **Discussion** is a tool for sharing thoughts and ideas about class materials, and it is made up of forums and threads in the course shells in Black**board**.
- A virtual sharing forum to which instructors post questions and students post responses.
- A **discussion board** is an application on the World Wide Web for holding **discussions**. A sense of virtual community often develops around forums that have regular users. **Discussion Boards** are also commonly referred to as Web forums, message **boards**, Internet forums, **discussion** forums, **discussion** groups, bulletin **boards**, or simply forums.
- Online learning management system platform allowing a framework for communication between class participants within a course.
- A online structure that enables participants to engage in a synchronous or asynchronous conversation by posting comments in response to those generated by other participants.
- An online forum that allows individuals to post information and receive replies. Learning management systems include **discussion boards** for use within courses.
- The **discussion board** allows students to post threads (comments or responses) to forums usually created by the instructor. The posted threads (comments, responses) can be viewed and responded to by the instructor and other students enrolled in the course.
- It is a method of asynchronous online communication or an electronic message center. Users connect with the center via a modem or other devices, they can read messages posted by others and respond or leave messages on other topics.
- A website or section of a website that is used for public **discussion** of a specific topic and on which users can submit or read messages.
- An electronic forum that forms part of Black**board** Academic Suite version 7.0 that promotes participation and collaboration among students in delayed forums.
- Online text message center that displays answers to questions and follow-up comments.
- An online learning tool for asynchronous written conversations among users.

## Benefits of Using Discussion Boards:

- Students can continue an in-class discussion outside normal time-tabled classes.
- All students can participate so they are democratic.
- Some students are not confident enough to speak out in face-to-face classes but are willing to contribute to discussion boards.
- They give students time to reflect on their thoughts before contributing.

- They allow students to work on their reply and check for grammar and spelling before posting - particularly useful for students whose first language is not the one used in the discussion.
- They allow students to practice their writing skills in a more informal way.
- They offer peer learning opportunities - this takes some of the workload away from the tutor.
- They foster a learning community. “As new technologies emerge, instructional designers and educators have unique opportunities to foster interaction and collaboration among learners, thus creating a true learning community.”

## Streamlining Browsing

Streamlining Browsing means that user experience a high class ease while accessing any website. To ensure this experience a browser must allow some special feature like

1. As we know ads are everywhere , after sometime we feel irritated , this process takes some time to remove ads manually . For this we need a tool that automatically blocks ads and saves time for the users.
2. Nowadays we know hackers are trying to steal data from a single mistake of users, so we must be careful to provide personal data on authenticated websites. To ensure this authenticity ,our browser must be capable of identifying the fake website and block it
3. Another feature of privacy is most important , As we have to give information on various websites and sometimes it requires permission to save our data on their server. We must ensure that our browser does not leaks or sell the data to others which is stored by us for the short period of time.
4. Sometimes we need to work on multiple tabs simultaneously . so user needs no lag while switching the tabs. So user need smooth flow between the Tabs
5. We know our internet speed somewhere depends on the browser's uploading and downloading speed .so it is important to meet up the desired speed of internet connection.
6. As internet doesn't know how mature is user , so which type of website is available for access is become important , so parental control is important
7. As internet becomes media to reach millions of people in single click, so as per concern of content ,it must be authenticate and valid for all age groups user, so browser needs to apply its security feature to control visibility of contents.
8. Government periodically makes some amendments in IT ACT 2000, Govt takes a decision to make smooth access to the beneficial website to the users, and harmful websites are blocked by the government. So our browser must adapt in a manner to implement the govt rules strictly and in a timely bound manner.

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### 1. Get Rid of Dead or Duplicate Bookmarks

There's a quick way to instantly get rid of every link that shows up twice in your folders or no longer works. Just download AM-DeadLinks, free software that detects dead and duplicate links. Once you've done that, you might feel more motivated to clear out all of the links that still work but you don't need (let's face it, you're never using that elaborate, hand-rolled pasta recipe).

### 2. Figure Out What You Should Be Bookmarking—and What You Shouldn't

Most professionals have many more bookmarked links than they need. But you should rely only be saving a link if you're going to come back to it repeatedly (think your email client, sites you use for work, or your calendar). However, many of us use bookmarking to save pages we want to look at later. Say you stumble on a great article but don't have time to read it just then, so you bookmark it. Usually you never go back to the article—or even if you do, you forget to delete it. Ultimately, you end up with a ton of random links cluttering up your bookmarks bar, making it harder to find the ones you *do* need.

Rather than saving things you want to come back to as bookmarks, use a tool like Evernote's Web Clipper. This free tool lets you clip articles, text, and pictures straight from the web into

Evernote. As a bonus, even if the original website is deleted or modified, once it's in Evernote, your clipping will remain unchanged. Or, try Pocket, a free site that lets you store media for whenever you've got time to digest it. You don't even need an internet connection! Go through and clear out any bookmarks that were things you just wanted to "check out later," leaving only the sites you're regularly coming back to.

### **3. Organize Your Remaining Bookmarks**

You could change the default title of bookmarks, and it helped clear up a *ton* of space. Just right-click on any link in your bookmarks bar.

Choose "Edit."

Re-name it to something short and sweet.

If you've ever gotten frustrated because you haven't been able to fit all of the links you wanted into your bookmarks bar—boom. Problem solved. And it looks cleaner, too!

Another quick way to fit more in your bookmarks bar—while making it look even cleaner? Use folders to organize. I've seen friends who have separate folders to collect all the sites they need for work, personal use, side projects, fun, and the like. It's super nice to be able to just browse commonly used sites based on what you're working on.

### **4. Clean Up Your Extensions**

Extensions, such as Any.do or Mailtracker, are super handy when it comes to productivity. Unfortunately, they can be too much of a good thing when they start slowing down your browser and clogging up your screen.

I solved this problem by downloading Extensity, which, ironically, is an extension. It lets you quickly and painlessly edit which extensions you want to use, either by temporarily disabling them or deleting them altogether. Within five minutes, I took my extension list from 12 to five, decluttering my browser and speeding it up.

### **5. Close Your Tabs**

Speaking of simplifying: How many tabs do you have open right now? Most people keep three to eight going at one time, according to a Mozilla Firefox study. This harms your concentration and productivity; plus, having multiple tabs open is an assault on your eyes. Downloading OneTab, which compresses all of your open pages into one hyperlinked list, is a five-minute fix with long-lasting results.

### **6. Use Momentum**

Momentum lets you set daily goals, tells you the weather, and has a cool clock feature.

### **7. The Links in Your Main Navigation**

A general rule of thumb is to limit the number of menu items in your main navigation to no more than seven links. If your website has a high number of links across the top, there's a good chance your visitors will skip over important items.

By limiting your top level navigation to seven or fewer of your most important links, you're giving more prominence to each and increasing the likelihood that visitors will consider them.

### **8. Cut the Copy Fat**

Here's a secret: Your website does not need to explain every intricacy of your business.

Remember the primary purpose of copywriting: *you want your visitors to take a specific action*. Keep the copy digestible. Be concise. Get to the point and let your visitors know how to get more information. If there is more informational content that you think is valuable to your market but may be less essential to your value proposition, consider including this in a blog post, video or white paper.

### **9. Find and Eliminate Overlapping Messaging**

This one might seem obvious, but I see the issue all the time. A business has a certain approach, process or customer service angle that it's using as a differentiator. This aspect of the business is described to some extent on the website's homepage, then in a slightly different but overlapping form on the About Us page, then again in various forms on their Services and Process pages. If your visitors need to visit multiple pages on your site to grasp a concept that could be communicated in one page, your site needs to be streamlined.

### **10. Utilize Data to Tweak the Layouts**

Whatever the action you want your visitors to take contacting you for a quote, requesting a free brochure, etc. your layout should make it as easy as possible for anyone to take this action at all entry points. Analytics will be a crucial tool in using data to understand visitor



behavior. Some real time analytic platforms like Clicky also include heatmap features, which record cursor paths and thus give you a good idea of what visitors are looking at on each page. Use this information to optimize your layouts so the most important content isn't missed.

### **11. Remove Extra Features that Aren't Needed**

Extra features are not helping your site if they're distracting to your visitors. If you're selling wholesale fabric to retail companies, your product pages should provide only those things your customer will want to make an informed decision about purchasing price, shipping, description etc. Features like social media links, newsletter signups, sharing widgets and so on may make sense on your homepage, but they should be avoided on the product pages as they won't matter as much to someone at the purchasing stage.

It's tempting to treat your website as something that you continue to build and add-on to. Remember that it should be designed to get your users to take specific actions; content that isn't working toward this goal may be working against it.

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## **Keeping track of Favorite Web Sites**

A social bookmarking service (like delicious) replaces your browser's "Favourites" collection with a set of bookmarks that are available on any computer you use, and organized in a way that makes it easier for you to store and retrieve links.

Sometimes, you may have to pause reading the article in the middle due to other reasons. In such a case, you will completely forget the article, or you may not be able to find it again. In such a case, all the time you spent on that article may be a loss. However, if you used to keep track and have marked the status of what you read, you can easily reaccess them.

You can give personal ranking to your article list, and you can revisit your favorite article easily. Also, you can tag/ categorize the articles and access them later by tag/ category.

List of methods that you can use to track your online reading. You can use the best method which meets your requirements and the way you want to retrieve your list.

### **1. Bookmarking in your web browser**

This is the easiest method to save your web page/ blog post links. You can do it just by 1-2 clicks. The bookmarking options are included in all modern browsers. Other than mere bookmarking, you can move your links to different folders based on your categorization. You can use bookmarking not only to track reading but also to access your online tools and frequently used web sites more easily.

You can access the **Google Chrome** Bookmark Manager through **Menu > Bookmarks > Bookmark Manager**. In the Bookmark Manager, you can create folders, drag and drop existing bookmarks between folders, rename the bookmarks, etc...

By login to your browser, you can synchronize your bookmark across multiple devices. Then you can access them at any time with any devices.

### **2. Google Bookmarks**

Google Bookmarks is different from Google Chrome Bookmarks. You can access it through your Google Account. With Google Bookmarks, you can save your link and add names, tags, and notes. Later you can use these fields to sort and filter the bookmarks list.

### **3. Pocket**

Pocket is an application and web service developed by Mozilla Corporation for managing a reading list of articles and videos from the Internet. It is available for **macOS, Windows, iOS, Android, Windows Phone, BlackBerry, Kobo eReaders, and web browsers**.

Pockets offer several features that help you to retrieve the saved articles easily. Basically, with Pocket, you can tag saved articles and videos, and later you can access them by tags.

Once you save a link, it is available on all of your devices synchronized to your Pocket account. You can also share the articles with others.

By adding Pocket browser extensions, you can add your articles to the pocket account just by one click. In Firefox, Pocket is a built-in feature. You can see the Pocket icon () at the RHS of your address bar.

Using the Pocket Mobile Apps, you can **listen to the articles** using the built-in text-to-speech option. This is a beneficial feature when your eyes and hands are busy.

#### 4. Evernote

Basically, Evernote is a note-keeping app. You can create notebooks and save notes inside notebooks. For example, you can save the articles you read as notes. With Evernote, you can find everything instantly on any device you have, no matter where you are. So, you can use this track your reading on any device.

Evernote has a lot more features than Pocket. The Evernote features include **Web Clipper**, Search Handwriting, Templates, Document Scanning, **Multi-Device Note Sync**, **Notebooks and Tags**, PDF and document Search, Integration with other Apps, and Centralize information with Spaces.

With Evernote **Web Clipper**, you can save web pages, articles, and PDFs. You can tag the articles and organize them in notebooks. Later you can view them by tags or Notebooks, and even you can use their powerful search option to find your articles quickly.

By installing Evernote browser extensions, you can save your articles with 1-2 clicks. And also, using their mobiles and desktop Apps, you can access your articles at any time from anywhere.

#### 5. Google Sheets

Google Sheets is an online spreadsheets application available in Google Drive. It is completely free, and you need to have Google Accounts to use it.

You can save details about your readings, including title, categories, tags, link, remarks, status, ratings, etc... Later you can use these fields to filter and analyze the articles you have read. You can access Google Sheets with any device. However, the mobile view is not that user-friendly.

#### 6. Google Forms

With Google Forms, you can create web forms that you can collect information online. You can design responsive forms that take your device's shape, so that means it's easy to add and edit information. The information you added is saved in Google Sheets on your Drive.

You can create a Google Forms to save the information about articles you have read online. Since Google Forms are responsive, you can use it on any device easily.

Google Forms provides you a quick analysis with neat graphs and charts. And also, you can use the Google Sheet, which stores the form data to analyze and filter your data.

#### 7. Create a Web App with Google Apps Script and Save the List on Google Sheets

Google Forms is a general-purpose form builder. If you do not like the look and need a more customized solution, you can use the Google Apps Script to build your form. You can use the HTML app script service to build the interface and save the data in Google Sheets with Google Apps Scripts.

#### 8. MIX :

The mix.com is a social bookmarking site where you collect and share contents you like. With Mix, you can easily create customized lists of posts you want to organize, bookmark, and recommend to others who share the same passions. The mix.com is not only for track reading; you can also find interesting content under your interest categories.

You can add your reading list to Mix and put them into the relevant collection. You can easily revisit your saved articles through these collections. Mix has both **mobile apps** and **browser extensions**, so you can access and add items to collections easily from anywhere and any device.

On mix.com, you can make collection **private**. If you do not want others to see your collection, you can make them private.

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## Website security

Website security is the measures taken to secure a website from cyberattacks. In this s Web security is also known as “Cybersecurity”. It basically means protecting a website or web application by detecting, preventing and responding to cyber threats. ense, website security is an ongoing process and an essential part of managing a website.

Websites and web applications are just as prone to security breaches as physical homes, stores, and government locations. Unfortunately, cybercrime happens every day, and great web security measures are needed to protect websites and web applications from becoming compromised.

That’s exactly what web security does – it is a system of protection measures and protocols that can protect your website or web application from being hacked or entered by unauthorized personnel. This integral division of Information Security is vital to the protection of websites, web applications, and web services. Anything that is applied over the Internet should have some form of web security to protect it.

Website security is important because nobody wants to have a hacked website. Having a secure website is as vital to someone’s online presence as having a website host. If a website is hacked and blocklisted, for example, it loses up to 98% of its traffic. Not having a secure website can be as bad as not having a website at all or even worse. For example, client **data breach** can result in lawsuits, heavy fines, and ruined reputation.

There are a lot of factors that go into web security and web protection. Any website or application that is secure is surely backed by different types of checkpoints and techniques for keeping it safe.

There are a variety of security standards that must be followed at all times, and these standards are implemented and highlighted by the OWASP. Most experienced web developers from **top cybersecurity companies** will follow the standards of the OWASP as well as keep a close eye on the Web Hacking Incident Database to see when, how, and why different people are hacking different websites and services.

Essential steps in protecting web apps from attacks include applying up-to-date encryption, setting proper authentication, continuously patching discovered vulnerabilities, avoiding data theft by having secure software development practices. The reality is that clever attackers may be competent enough to find flaws even in a fairly robust secured environment, and so a holistic security strategy is advised.

## Available Technology

There are different types of technologies available for maintaining the best security standards. Some popular technical solutions for testing, building, and preventing threats include:

- Black box testing tools
- Fuzzing tools
- White box testing tools
- Web application firewalls (WAF)
- Security or vulnerability scanners
- Password cracking tools

## Likelihood of Threat

Your website or web application's security depends on the level of protection tools that have been equipped and tested on it. There are a few major threats to security which are the most common ways in which a website or web application becomes hacked. Some of the top vulnerabilities for all web-based services include:

- SQL injection
- Password breach
- Cross-site scripting
- Data breach
- Remote file inclusion
- Code injection

Preventing these common threats is the key to making sure that your web-based service is practicing the best methods of security.

## The Best Strategies

There are two big defense strategies that a developer can use to protect their website or web application. The two main methods are as follows:

- **Resource assignment** – By assigning all necessary resources to causes that are dedicated to alerting the developer about new web security issues and threats, the developer can receive a constant and updated alert system that will help them detect and eradicate any threats before security is officially breached.
- **Web scanning** – There are several web scanning solutions already in existence that are available for purchase or download. These solutions, however, are only good for known vulnerability threats – seeking unknown threats can be much more complicated. This method can protect against many breaches, however, and is proven to keep websites safe in the long run.

## Web Security also protects the visitors from the below-mentioned points –

- **Stolen Data:** Cyber-criminals frequently hacks visitor's data that is stored on a website like email addresses, payment information, and a few other details.
- **Phishing schemes:** This is not just related to email, but through phishing, hackers design a layout that looks exactly like the website to trick the user by compelling them to give their sensitive details.
- **Session hijacking:** Certain cyber attackers can take over a user's session and compel them to take undesired actions on a site.
- **Malicious redirects.** Sometimes the attacks can redirect visitors from the site they visited to a malicious website.
- **SEO Spam.** Unusual links, pages, and comments can be displayed on a site by the hackers to distract your visitors and drive traffic to malicious websites.

Thus, web security is easy to install and it also helps the business people to make their website safe and secure. A web application firewall prevents automated attacks that usually target small or lesser-known websites. These attacks are born out by malicious bots or malware that automatically scan for vulnerabilities they can misuse, or cause DDoS attacks that slow down or crash your website.

Thus, Web security is extremely important, especially for websites or web applications that deal with confidential, private, or protected information. Security methods are evolving to match the different types of vulnerabilities that come into existence.

## Privacy and Site Blocking

Google's Chrome is, by most measures, the most popular browser in use. That being said, it also has a perception problem as far as security is concerned, causing privacy-concerned

users to shake the Chrome habit. If you don't have any intention of moving away from Chrome anytime soon, here are some tips to help you maximize your privacy.

Chrome has tools for blocking first-party cookies (which are used to store your preferences for a particular site) as well as third-party tracking cookies (which follow your online activity across sites). Some of these tools need to be enabled manually, and we've included instructions on how to do that, along with steps on how to delete cookies already stored by your browser. We also address how Google plans to prevent fingerprinting — a form of tracking that uses data about your system configuration to identify you.

There are also plenty of extensions available in the Chrome Web Store if you'd like to protect your privacy beyond Chrome's built-in tools.

## **DEAL WITH TRACKERS**

Version 79 of Chrome, which came out last December, concentrated mostly on enhancing password security. In Chrome 80, which began rolling out on February 4th, Google is gradually implementing a new system for sorting and blocking cookies. It will allow all first-party cookies, but third-party cookies will have to include a specific same-site setting that ensures they are being accessed from secure connections. (You can update to the Chrome 80 manually by going to Help -> About Google Chrome. However, be aware that this feature may take a while to be fully implemented.)

Google also says that Chrome will phase out third-party cookies in two years in favor of an alternative system to cookies using new technologies Google is developing.

## **ADJUST YOUR TRACKING SETTINGS**

Meanwhile, you can still manually block cookies in Chrome:

- Go to "Settings" (by clicking the three dots in the upper-right corner next to the URL bar). Scroll down and click on "Advanced" at the bottom of the screen or in the menu bar on the left.
- Find the "Privacy and security" section, and then click on "Site settings" -> "Cookies and site data."
- To block only third-party cookies, toggle "Block third-party cookies" on. To block all cookies, toggle the "Allow sites to save and read cookie data" to off.

Once you've blocked third-party cookies in your settings, a cookie icon will pop up on the right side of your address bar when Chrome is blocking cookies. You can click on that icon to see what cookies are allowed and blocked by each site and choose to block or allow individual cookies. Here's how:

- Click on the icon, and a small window will open
- You can, at this point, allow cookies from this site or continue to block cookies. Click on "Done" to save your settings.
- To view which cookies are being blocked, click "Show cookies and other site data" at the bottom of that window. You can toggle between seeing the "Allowed" and "Blocked" cookies.
- Click on the site name; you'll see either "Block" or "Allow" at the bottom of the window, allowing you to block or permit cookies from that site. If you click on the arrows next to the site names, you can see the individual cookies and can block or allow them as well.
- When you click on an individual cookie's name, you'll also see its domain, when it was created, and when it expires.

## **CLEAN UP YOUR COOKIES**

Chrome does allow you to automatically clear out your cookies and other data when you exit the browser.

- Go to the "Cookies and site data" page as described above
- Toggle on "Clear cookies and site data when you quit Chrome"

Want to see a list of all the cookies currently stored by your browser?

- In the “Cookies and site data” page, click on “See all cookies and site data.” You can delete cookies by site by clicking on the trash icon next to each site name, or you can delete them all by clicking “Remove all.”
- If you click on the site name, you’ll be able to see the individual cookies left by that site. Click on the arrow for more information about the cookie, and click on the “X” to delete it.

If you want to clear a range of your data from the browser:

- Go to “Settings” -> “Privacy and Security” -> “Clear browsing data”
- A window will open up with two viewing options: “Basic” and “Advanced.” The former allows you to clear out your cookies, browsing history and caches; the latter gives you the chance to delete all of those items along with other types of data, such as your download history, passwords, and autofill form data.
- At the top of the box, select an option from the drop-down menu next to “Time range.” You can clear anything from the last hour’s worth to all of the data that’s been collected.
- In either view, make sure the categories of data you want to delete are selected, and then click “Clear data”

## FINGERPRINTING AND AD-BLOCKING

Google has proposed a number of fingerprinting protections, which it says it plans to implement later this year. Among the proposed steps is a strategy, which involves restricting the number of requests that can be made for user information so as not to allow for the collection of enough data to identify individual users.

Chrome, by default, does filter out some ads using the rules set by the Coalition for Better Ads and EasyList, but you can always download ad-blocking extensions to increase your protection.

## Site Blocking

On the Internet, a **block** or **ban** is a technical measure intended to restrict access to information or resources. Blocking and its inverse, unblocking, may be implemented by the owners of computers using software. Blocking may also refer to denying access to a web server based on the IP address of the client machine.<sup>[3]</sup> In certain websites, including social networks such as Facebook or editable databases like wikis, users can apply blocks (based in either IP number or account) on other users deemed undesirable to prevent them from performing certain actions. Blocks of this kind may occur for several reasons and produce different effects: in social networks, users can block other users without restriction, typically by preventing them from sending messages or viewing the blocker's information or profile. Privileged users can apply blocks that affect the access of the undesirable users to the entire website.

You are protected from connecting to websites known to be malicious—websites that attempt to steal your personal information or infect your device with malware—when you are on most U-M networks on the Ann Arbor campus, including the MWireless WiFi network and wired ethernet connections in most U-M buildings associated with the Ann Arbor campus.

This protection does not extend to Michigan Medicine networks, U-M networks using a unit-provided DNS service, and U-M networks in units that request DNS redirection not be implemented (typically networks used for specialized research).

**Domain Name Service (DNS) redirection or filtering** is an additional tool to protect you from malicious websites. DNS redirection works with your web browser to:

- Check websites you try to visit against a denylist of known malware and phishing sites.

- Block access to sites on the list.

There are several reasons why you might want to block certain websites on your computer. Some websites could be spreading viruses, contain explicit content or even be trying to steal your personal data. While you may well be more than capable of avoiding these websites, but that doesn't stand true for every one who uses your device. In such cases, it might be best to block certain websites.

There are different ways to go about blocking websites. You can choose to block websites only on specific browsers, the entire operating system, or indeed your network router. Here's how to block websites.

### **On your computer**

If you want to control access to websites on just one machine, then you can set up block at the operating system level. This method for blocking websites is not too hard to configure and will work across browsers.

### **How to Block Any Website On Windows Computers**

One of the backbones of the Internet is the DNS system that translates easy to remember (and type) names such as [www.google.com](http://www.google.com) into equivalent IP addresses (8.8.8.8). While you use DNS servers to get to websites, your computer also has something called a HOSTS file which can have this information stored locally. This can be used to disable access to unwanted websites. We checked this method with both Windows 7 and Windows 8.

1. Make sure you have administrator access on your computer. Sign in to your PC using an administrator account and go to `C:\Windows\System32\drivers\etc\`
2. Double-click the file named "hosts" and select Notepad from the list of programs to open the file. Click OK. The last two lines of your hosts file should read "`# 127.0.0.1 localhost`" and "`# ::1 localhost`".
  - 2a. In case you can't edit the file, you'll need to right-click the file labelled hosts and select Properties. Click the Security tab, select the administrator account and click Edit.
  - 2b. In the pop-up, select the account again and check Full control. Click Apply > Yes. Now click OK in all pop-ups.
3. At the end of the file, you can add the addresses of websites to block. To do this, just add a line at the end of the file, with 127.0.0.1 and then the name of the site you want to block - this will redirect the site's name to your local computer.
4. To block Google, for example, add "`127.0.0.1 www.google.com`" to the end of the file without the quote marks. You can block as many sites as you want this way, but remember you can only add one per line.
5. Repeat this step until you've added all websites you want to block.
6. Now close the hosts file and click Save. Reboot your computer for the changes to take effect and you'll find that all those websites are now blocked.

### **How to Block Any Website On Browser Level**

Blocking a website on any browser is the easiest way to get the job done.

On Firefox, you can install an addon called BlockSite to block website.

1. Install the addon, press ctrl+shift+a, and click Extensions on the left. Now click Options under BlockSite. In the pop-up, click Add and type the name of the website you want blocked. Repeat the process for all websites you don't want to access. Click OK.
2. Now these websites will be blocked on Firefox. You can also set a password in BlockSite to prevent others from editing the list of blocked websites. This can be done via the options menu described in the previous step.  
BlockSite is also available on Google Chrome.

**Internet Explorer lets you block websites easily. Here's how.**

- Open the browser and go to Tools (alt+x) > Internet Options. Now click the security tab and then click the red Restricted sites icon. Click the Sites button below the icon.
- Now in the pop-up, manually type the websites you want to block one-by-one. Click Add after typing the name of each site. When done, click Close and click OK in all other windows. Now these websites will be blocked in Internet Explorer.