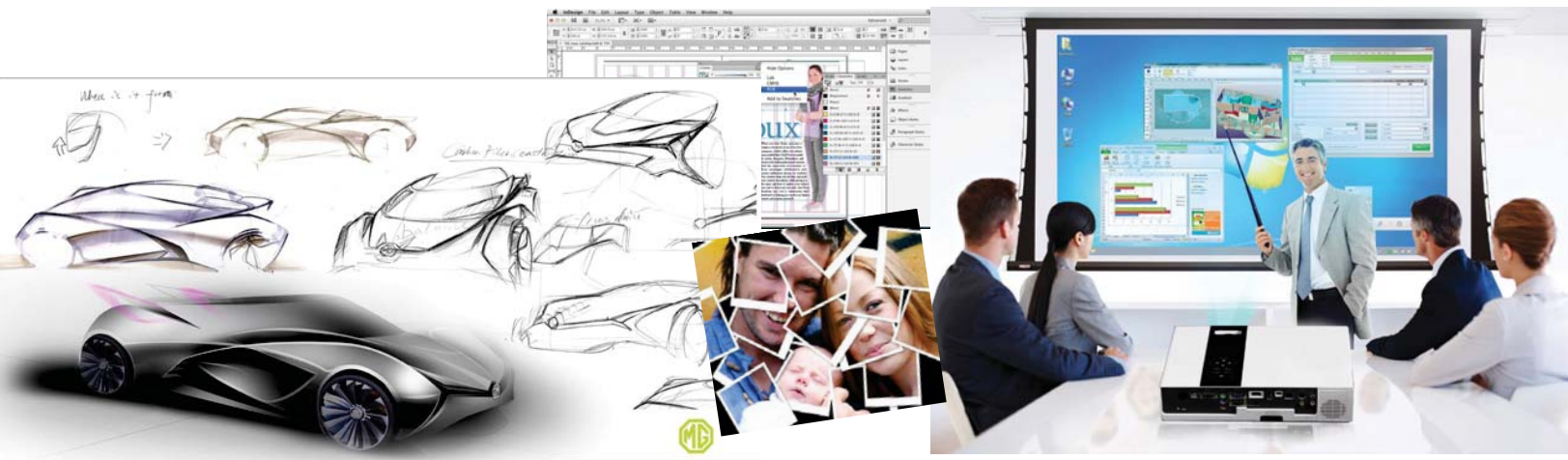


Chapter 4

Word Watch

- word processing
- spreadsheet
- database
- CAD
- multimedia
- shareware
- freeware
- open source
- chat room



Explore Application Software

Learning Objectives

After completing this lesson, you should be able to:

- Discuss the different categories of an application software
- Identify the different forms of an software

The Application Software

Computer is a valuable tool if it has the proper software. Software stimulates users to creatively make letters, memos, reports, and other documents; develop multimedia presentations; design Web pages and diagrams; draw and alter images; record and enhance audio and video clips; prepare and file taxes; play single player or multiplayer games; compose e-mail messages and instant messages; and many more. Users work with application software to accomplish these and many other tasks.

Application software makes users to be more productive and/or assist them with personal tasks. There are a variety of uses of the application software. These are:

- Making the business activities more efficient
- Assisting with graphics and multimedia projects
- Supporting home, personal, and educational tasks
- Facilitating communications

Popular types of application software are being shown below with a table which categorizes their general use. The ones listed on the table below are application software oriented even though there are many types of communications software in existence. Software listed in one category may be used in other categories. For example, desktop publishing programs are categorized as graphics and multimedia software which are also often used for business or personal reasons. Communications software is bundled with other applications or system software often.

CATEGORIES OF APPLICATION SOFTWARE			
Business	Graphics and Multimedia	Home/Educational	Communications
• Word Processing	• Computer-Aided	• Software Suite	• Web Browser
• Spreadsheet	• Desktop Publishing	• Personal Finance	• RSS Aggregator
• Database	• Paint/Image Editing	• Legal	• E-Mail
• Presentation	• Photo Editing	• Tax Preparation	• Instant Messaging
• Note Taking	• Video and Audio Editing	• Desktop Publishing	• Chat Room
• Personal Information	• Multimedia Authoring	• Paint/Image Editing	• Blogging
• Business Software	• Web Page Authoring	• Photo Editing	• Newsgroup/Message Board
• Project Management		• Clip Art/Image Gallery	• FTP
• Accounting		• Video and Audio Editing	• VoIP
• Document Management		• Home Design/Landscaping	• Video Conferencing
• Enterprise Computing		• Travel and Mapping	
		• Reference and Educational	
		• Entertainment	

This book focuses more on most-used and well-known applications and will not be discussing all of the categories.

Application Software in different Forms

The availability of application software in a variety of forms: packaged, custom, Web application, open source, shareware, freeware, and public domain is present.

- **Packaged software** is usually under Package Management System (PMS) that is mass-produced and copyrighted retail software that meets the needs of a wide variety of users, not just a single user or company. Packaged software is available in retail stores or on the Web. On the right is a sample picture of package software, e.g. Microsoft Office.



- **Custom software** is especially developed for a specific business or industry. Companies sometimes cannot find packaged software that meets its unique standards. In this case, the company may use programmers to customize tailor-made software, which usually costs more than packaged software. Peachtree is an accounting software custom made for accounting works.



- A **Web application** is an application program that runs in a web browser that allows users to access and interact with software from any computer or device that is connected to the Internet. Web applications types include e-mail, word processing, tax preparation, and game programs. Facebook's farmville was once most played online games while checking out friends and families events.



- **Open source software** is computer software with its source code of license provided for use, modification, and redistribution. No restrictions are provided for this software from the copyright holder regarding modification of the software's internal instructions and its redistribution. Open source software usually can be downloaded from the Internet, often at no cost. Open office is one example of this variety.



- **Shareware** is copyrighted software that is distributed on a free trial basis and has expiration. To use a shareware program beyond the given free period, you send payment to the software developer. Shareware developers trust users to send payment if software use extends beyond the stated trial period. In some cases, a scaled-down version of the software is distributed free, and payment entitles the user to the fully functional product. Shown (left) are the top 8 shareware download on Topshareware.com web site.



- **Freeware** is copyrighted software provided at no monetary cost which may have restrictions by an individual or a company that retains all rights to the software. The word, free, in freeware indicates he software has no charge. Firefox is one of the best browsers available for free.

- **Public-domain software** is absolutely no ownership such as copyright, trademark or patent that is donated in a public domain. Anyone can copy or distribute public - domain software to others freely.

Business Software

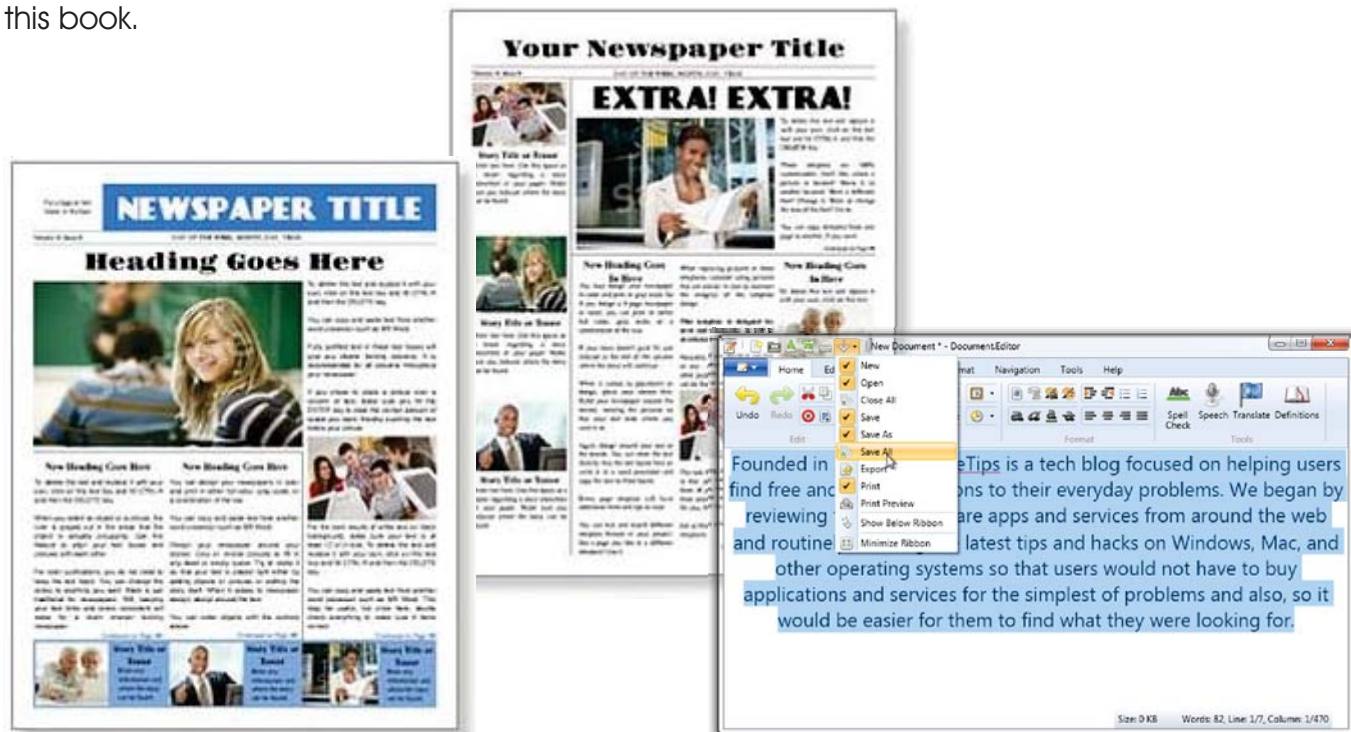
In business sector, computers play a vital role in increasing the productivity of its production and services. Business software is application software that performs various business functions in assisting people to become more effective and efficient while performing their daily business routines. Business software includes programs such as word processing, spreadsheet, database, presentation, note taking, personal information manager, business software for phones, business software suites, project management, accounting, document management, and enterprise computing software.

The features and functions of business software are being illustrated below. Heavier emphases are given to word processing and spreadsheet software because of their predominant uses.

A. Word Processing Software

Word processing software is one of the more widely used types of application software. Word processing software, sometimes called a word processor, allows users to create and manipulate documents containing mostly text and sometimes graphics. Millions of people use word processing software every day to develop documents such as letters, memos, reports, mailing labels, newsletters, and Web pages.

Users can easily change what they have written and encoded into word processing software, thus, it is considered as a major advantage. For example, you can insert, delete, or rearrange words, sentences, paragraphs, or entire sections. Word processing software also can make your documents to look professional and visually appealing. You can manipulate the shape, size, and color of characters; apply special effects such as three-dimensional shadows; and organize text in newspaper-style columns. When using colors, however, they print as black or gray unless you have a color printer. Below are examples of a newspaper layout using Microsoft Word - a word processing software which will be discussed thoroughly later as part of this book.



B. Spreadsheets

Spreadsheet software is another widely used type of application software. Spreadsheet software is a table of data arranged in columns and rows often used in mathematical computations. These rows and columns collectively are called a worksheet. Because of the invention of spreadsheets, people are no longer taking time too long to compute and solve for large data manually by hand. In an electronic worksheet, you organize data in the same manner, and the computer performs the calculations far better quickly and accurately. People are convenient enough to use spreadsheet for financial and non-financial representation of data because of its user-friendly features.

The following sections describe the features of most spreadsheet programs.

B.1. Spreadsheet Organization.

	A	B	C	D	E	F	G
1	Site Name	Category	Composition	Unique Use	Country	Re Page	Views
2	friendfeed.com	/Online Cor	160000	150000	0.1	2000000	
3	twirl.org	/Computers	47000	43000	0	74000	
4	tweetcan.com	/Online Cor	43000	18000	0	120000	
5	chrisbrogan.com	/Online Cor	39000	29000	0	74000	
6	brightkite.com	/Telecomm	29000	68000	0	910000	
7	twitpic.com	/Home & G	24000	71000	0	340000	TRUE
8	web-strategist.c	/Online Cor	24000	32000	0	86000	
9	sumimize.com	/Arts & Hur	20000	54000	0	570000	

B.2. Calculations

Formula Bar: `=sum(C1:C6)`

	C	D	E	F
1	114			
2	165			
3	178			
4	143			
5	130			
6	165			
7	895			

Using the SUM function to quickly add numbers in EditGrid

B.3. Recalculation.

The formula in cell A3 refers to the value in cell A1 plus the value in cell A2.

Spreadsheets calculates and displays the answer for A1 plus A2.

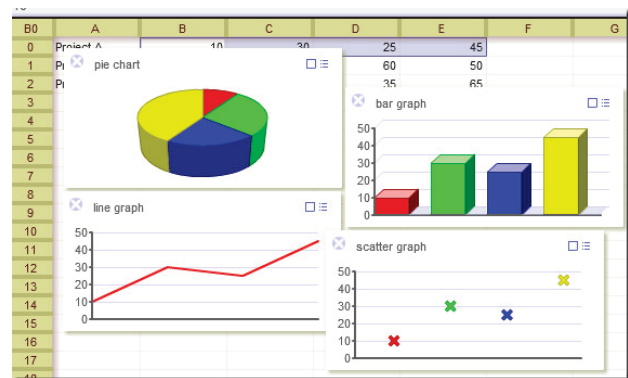
The formula automatically recalculates when the value of a referenced cell is changed.

	A	B
1	3	
2	7	
3	<code>=A1+A2</code>	
4		

	A	B
1	7	
2	3	
3		
4	10	

	A	B
1	8	
2	3	
3		
4	11	

B.4. Charting



Spreadsheet and word processing software have the same basic features to help users create, edit, and format worksheets. In a spreadsheet software, it also incorporates features found in word processing software such as macros, checking spelling, changing fonts and font sizes, adding colors, tracking changes, inserting audio and video clips, providing research capabilities, recognizing handwritten text and drawings, and creating Web pages from existing spreadsheet documents. Microsoft Excel, OpenOffice-Calc, Google apps-sheets are popular and most-used spreadsheets software today.

C. Presentation Software

Presentation software is an application software that allows users to create a sequence of texts and graphics, often audio and video, to accompany a speech for a public presentation.



PowerPoint sample presentation



Prezi sample presentation

The presentations can be viewed as slides, sometimes called a slide show, that are displayed in presentation formats that define complementary colors for backgrounds, text, and graphical accents on the slides. Microsoft Powerpoint and Prezi are the two examples of this type.

D. Database Software

Database software is application software that allows users to create, access, and manage a database. It is also sometimes called as heart of a business information system. Using database software, you can add, change, and delete data in a database; sort and retrieve data from the database; and create forms and reports using the data in the database.

	A	B	C
1	College Enrollment 2007 - 2008		
2			
3	Student ID	Last Name	Initial
4	ST348-245	Walton	L.
5	ST348-246	Wilson	R.
6	ST348-247	Thompson	G.
7	ST348-248	James	L.
8	ST348-249	Peterson	M.
9	ST348-250	Graham	J.
10	ST348-251	Smith	F.
11	ST348-252	Nash	S.
12	ST348-253	Russell	W.
13	ST348-254	Robitaille	L.

Each row of data in a table is a "record"

A database is a collection of data organized in a manner that allows access, retrieval, and use of that data. In a manual database, you might record data on paper and store it in a filing cabinet. With a computerized database, shown on your right, the computer stores the data in an electronic format on a storage medium such as a hard disk.

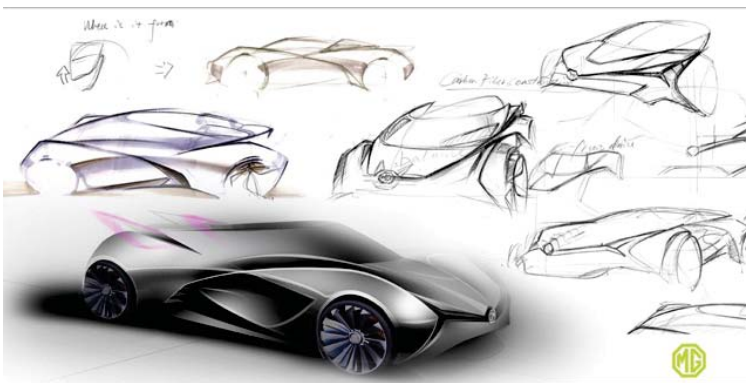
With most personal computer database programs, a database consists of a collection of tables, organized in rows and columns. Each row, called a record, contains data about a given Student ID, Last Name, Initial, and etc. Each column, called a field, contains a specific category of data within a record. Microsoft Access, SQL and MySql are the most-used database software as of writing of this book.

Graphics and Multimedia Software

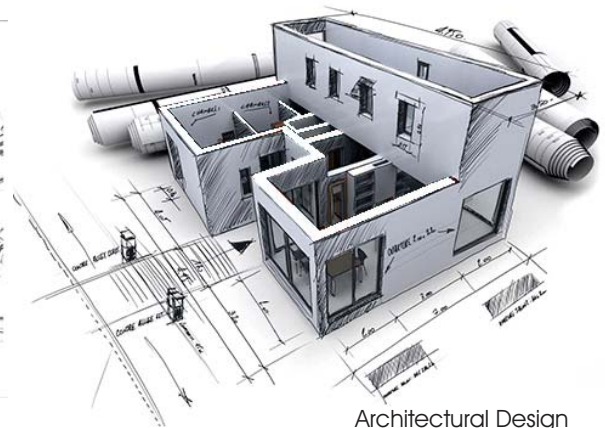
In addition to business software, there are many individuals who are working on their own field of specialization. Power users such as engineers, architects, desktop publishers, and layout and graphic artists often use sophisticated software that allows them to work with graphics and multimedia. This software includes computer aided design, desktop publishing, paint/image editing, photo editing, video and audio editing, multimedia authoring, and Web page authoring.

A. Computer Aided Design (CAD)

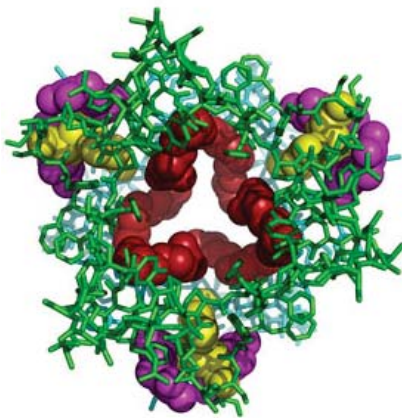
Computer-aided design (CAD) software is a sophisticated type of application software that enables a professional user in creating engineering, architectural, and scientific designs. For example, engineers create design plans for vehicles and security systems. Architects design building structures and floor plans. Scientists design drawings of molecular structures.



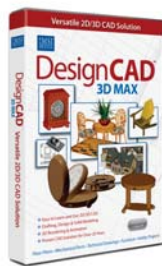
Automobile Sketch Design using CAD software



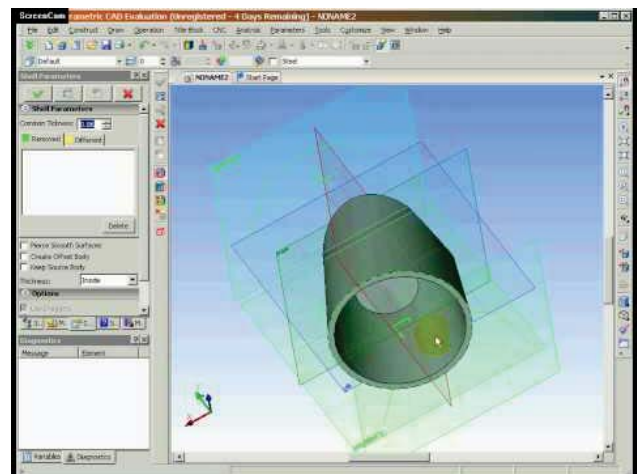
Architectural Design



3D Molecular model



3D Max CAD Software



CAD is mainly used for detailed engineering of 3D models and or 2D drawings of physical components. The software eliminates the laborious manual drafting that design processes can require. Some CAD software can even generate material lists for building designs.

B. Desktop Publishing Software (DTP)

Desktop publishing (DTP) is the creation of documents using page layout skills that enables professional designers to create sophisticated documents that contain text, graphics, and many colors. Professional DTP software is ideal for the production of high-quality color documents such as textbooks, corporate newsletters, marketing literature, product catalogs, and annual reports.

Professional designers use DTP software because it is supported by a page layout even though many word processing programs have some of the capabilities of DTP software. Page layout is the part of graphic design that deals in the arrangement of visual elements of a page. DTP software includes color libraries to assist in color selections for text and graphics. Designers and graphic artists can print finished publications on a color printer, take them to a professional printer, or post them on the Web in a format that can be viewed by those without DTP software. Microsoft InDesign, Illustrator and CorelDraw are top of the line applications for this category. These types of applications are shown in the right pictures as samples of magazine layout.



C. Photo Editing Software

Professional photo editing software is a type of image editing software that allows photographers, videographers, engineers, scientists, and other high-volume digital photo users to manipulate visual images of digital photos. Professional photo editing software allows users to save images in a wide variety of file formats.

Features of this software can make users retouch photos, crop images, remove red-eye, change image shapes, color-correct images, straighten images, remove or rearrange objects in a photo, and apply filters. Adobe Photoshop - a photo editing app can make the pictures on the right be realized.



D. Video Editing Software

Video editing software allows professionals to modify a segment of a video, called a clip. For example, users can reduce the length of a video clip, reorder a series of clips, or add special effects such as words that move horizontally across the screen.

Video editing software typically includes audio editing capabilities. Audio editing software lets users modify audio clips, produce studio-quality soundtracks, and add audio to video clips. Audio editing software usually includes filters, which are designed to enhance audio quality. For example, a filter might remove a distracting background noise from the audio clip. Most television shows and movies are created or enhanced using video and audio editing software. A popular software for this category is the product from Adobe - Premiere Elements.



E. Multimedia Authoring Software

Multimedia authoring software allows users to combine text, graphics, audio, video, and animation in an interactive application. With this software, users control the placement of text and images and the duration of sounds, video, and animation. Once created, multimedia presentations often take the form of interactive computer-based presentations or Web-based presentations designed to facilitate learning, demonstrate product functionality, and elicit direct-user participation.

Training centers, educational institutions, and online magazine publishers all use multimedia authoring software to develop interactive applications. Top 3 most used software of this category are Adobe Captivate, TechSmith Camtasia and Articulate Engage,



F. Web Page Authoring Software

Web page authoring software helps users of all skill levels create Web pages that include graphical images, video, audio, animation, and other special effects with interactive content. In addition, many Web page authoring programs allow users to organize, manage, and maintain Web sites.

Application software, such as Word and Excel, often includes Web page authoring features. This allows home and small business users to create basic Web pages using application software they already own. For more sophisticated Web pages, users work with Web page authoring software. Many Web page developers also use multimedia authoring software along with, or instead of, Web page authoring software for Web page development. Two popular Web Page Authoring Software are Adobe Dreamweaver & Microsoft Expression Web



Educational/Home Software

A. Finance Software

Finance software is a simplified accounting program that helps home users and home office users balance their checkbooks, pay bills, track personal income and expenses, track investments, and evaluate financial plans. Examples of this type are QuickBooks & Sage

B. Travel Software

Travel and mapping software enables users to view maps, determine route directions, and locate points of interest. Using travel and mapping software, which is available both as packaged software and as Web applications, you can display maps by searching for an address, postal code, telephone number, or point of interest (such as airports, lodging, and historical sites).

F. Reference (Educational) Software

Reference software provides valuable and thorough information for all individuals. Popular reference software includes encyclopedias, dictionaries, and health/medical guides.

C. Home Design Software

Potential homeowners can use home design/landscaping software to assist them with the design, remodeling, or improvement of a home, deck, or landscape. This software includes hundreds of predrawn plans that you can customize to meet your needs.

D. Entertainment Software

Entertainment software for personal computers includes interactive games, videos, and other programs designed to support a hobby or provide amusement and enjoyment. For example, you might use entertainment software to play games individually or with others online, make a family tree, or fly an aircraft.

Communications Software

A. Web Browser. Users access and view Web pages on the Internet using web browsers and it is available for download on the Web for free or for a fee. Browsers like Mozilla Firefox & Internet Explorer are top as of writing of this book.

B. E-Mail. Messages and files sent via a network such as the Internet and included with paid Internet service. Widely used are Yahoo mail & Gmail from Google.

C. Video Conferencing. Meeting between geographically separated people who use a network such as the Internet to transmit video/audio and requires specific software. Skype, Viber, WeChat, Tox and Slack are most-used worldwide.

D. Blogging. Time-stamped articles, or posts, in a diary or journal format, usually listed in reverse chronological order and needs a blog software to create. Known software platforms are WordPress, Google Site, Tumblr, IMCreator, Blogger and Silver Stripe.

E. VoIP (Voice over Internet Protocol). Users speak to other users over the Internet and require Internet connection and a software. Commonly used are Skype, Google Voice + Google Hangouts, Jitsi and Ekiga.

F. Chat Room. A real-time, online typed conversation which requires chat client software and available for download on the Web for free.