

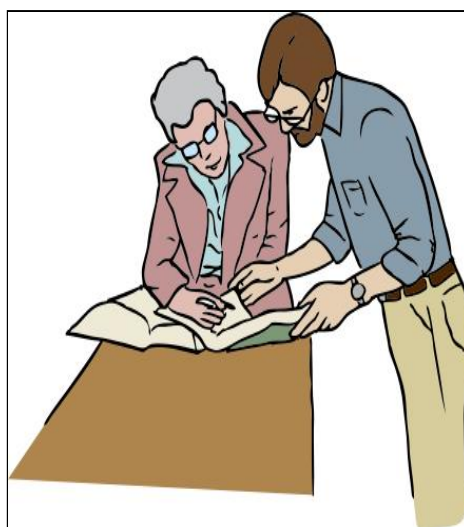
Unit 1. Information and Communication Technologies



Initial situation

Javier had been working as a night security guard for two years in a hospital. His labour situation was stable and his salary was adequate, but he was a bit tired of working the night shift, so he decided to look for another job. He had a lot of spare time during the night, so he registered for a Vocational Training Course which could be done through the Internet using the E-learning methodology. Finally, with a little effort and commitment he got his degree.

Javier went to his friend's house, Ana, who had found her first job short time ago. He wanted to talk to her about his idea of getting another job. He



Source: www.wpclipart.com

also told her that he was going to write his curriculum because he wanted to hand it in several companies. Ana thought it was a good idea but she pointed out that nowadays there are many useful tools which could help him get a job.

Ana told Javier that he only had access to a small number of the job vacancies which are available in the labour market, because, when you use the traditional ways of job searching, the information you get is restricted mainly to advertisements, applying for posts in companies and the information that your friends and acquaintances can give you (what is known as your **social net**).

"If you use the new technologies of information and communication -Ana told him- you will gain access to much more information because your social net will also change completely. On the one hand, it is easier to keep in touch with people who, for any reason, you cannot

frequently see or talk to, as our friend Laura, who moved to Rome last year. On the other hand, your social net will widen a lot to include many people who you really don't know but who can help you achieve your goals, such as getting a job, acquiring specific knowledge about any subject, sharing experiences and hopes, etc.

Ana offered herself to help Javier. She explained him which tools he could use, how they are used and what they are used for.

All these opportunities that Ana showed Javier made him feel very excited so he decided to go deeper into the world of new technologies.

World Wide Web I



The next day Javier comes back to Ana's house to begin their "classes" about the different tools that are available to get a job. Ana points out that his first thing he has to do is to install a client application (or web browser) in his computer, such as: Internet Explorer, Mozilla Firefox, Opera, Konqueror, Safari, etc. Javier installed Internet Explorer in his computer some time ago and he is uses it regularly, therefore he thinks he doesn't need to spend much time with this tool. However, Ana thinks she may clarify and complete some of his knowledge.

Internet is just a wide net of interconnected computers which are able to communicate with each other. It is the tool which allows communication between computers.

One of the main uses of the Internet is the access to the **WWW** (abbreviation of **World Wide Web**), which is a system of interlinked documents (or web pages) which are usually written using a code known as **Hypertext Markup Language (HTML)**. However, it can also be written using other encrypting codes such CSS, ASP, PHP, etc.

Other applications which are available in the Internet are: e-mail, remote access, collaboration, file sharing, internet telephony, etc. Therefore we must always bear in mind that the Internet is not the same as the Web, although many people say "I have connected to the Internet" when they really mean "I'm using the WWW services through the Internet".

The tool used to access the WWW contents is the web browser. When anyone wants to ask for a specific resource from the Internet they have to write in the web browser's address bar the **URI (Uniform Resource Identifier)** of the computer which has got the resource (a **web server** or **website**).

Every machine in the Internet has a unique address which identifies and distinguishes it. It is the **IP address**, which is a group of four numbers separated by dots, for example, you can write in your web browser 209.85.227.103. Sometimes it is very difficult for us to remember those numbers, so each IP is associated to a **domain name**, for example www.google.com is the domain name associated to the IP address just mentioned. You can check this writing both addresses in your web browser.

World Wide Web II



A **website** is a collection of related webpages, images, videos or other digital assets that are addressed with a common domain name or IP address in an Internet Protocol-based network. A website is hosted on at least one web server.

When the client browser and the web server exchange information they have to use a common language (the **protocol**). The protocols used in web exchanges are: **HTTP (HyperText Transfer Protocol)** or **HTTPS (HTTP SSL**, which codes the text that will be transmitted through the net).

Web servers can also work as **mail servers**, **ftp servers**, etc. Therefore when the **web client** (web browser) begins the exchange of information the communication protocol must be explicitly indicated. That is, the web client must point out the service number which is going to be used. It is usually 80 for HTTP, 443 for HTTPs, 20 and 21 for FTP, 25 and 110 for mail, etc.

There are many web pages where the user can find all these service number and their uses, such as:

http://en.wikipedia.org/wiki/List_of_TCP_and_UDP_port_numbers.

When the web server saves information it arranges this information in different folders (as any computer user does with the hard disk), so an URI is formed by: protocol + domain + folder path + the name of the web page or the resource you ask for, for example <http://www.museodelprado.es/coleccion/que-ver/2-horas-en-el-museo>.



To know more ...

- ▣ [How the web works](#)
- ▣ [Understanding web addresses](#)



Self-assessment

Fill in the missing words

_____ is a system of interlinked documents accessed via the internet.

_____ is a safe protocol for web communication.

_____ A identifies the right place of a web resource.

_____ Each IP address has associated a name.

_____ A web browser is a application to work in the web.

E-mail



Ana told Javier that electronic mail (e-mail) is a very useful tool which would allow him to keep in touch with his friends and acquaintances. She also told him that if he used the e-mail he wouldn't have to spend much time moving around companies to hand his curriculum in, because he could do that right from home.

E-mail is, in fact, quite similar to ordinary mail, although there are some differences which make this tool more advantageous:

- You don't need paper, envelopes or stamps.
- E-mails are much faster than ordinary mail. The messages get to the receiver in just a few minutes, no matter where the receiver is.

From the user's point of view, e-mail is a computer facility which allows the user send a message right from his computer to the receiver's computer. Any e-mail consists of two components: a brief subject and the text itself.



Both the sender of the e-mail and the receiver need to have a unique **e-mail address** in the Internet, which takes the following format: name@mailserver, for example john@gmail.com. The software application that sender and receiver use to communicate is the **email client** (for example www.hotmail.com. or www.yahoo.es).

Any e-mail consists of four different parts: from (the sender's address), to (the receiver's address), subject (the topic of the e-mail) and the text (the content of the e-mail).



To know more ...

- Understanding e-mail addresses

E-mail technology

What we have explained up to now regarding e-mails is just the user's perspective of it (that is, what the user actually sees). However, e-mail technology is much more complex.

The sender does not send the e-mail directly to the receiver's computer using the e-mail client application, but to a different computer: a **mail server**, which is part of an **ISP (Internet Service Provider)**. The mail server forwards the original e-mail to another mail server. This process goes on until the e-mail is delivered to the mail server of the receiver's ISP. The receiver's mail server stores all its clients' e-mails and arranges them in different mailboxes.

When users want to read their e-mails, they have to log on to the mail server of their ISP, using their e-mail client, and ask for the e-mails from their mailbox. The e-mails are instantly sent by the mail server to the client's e-mail and shown in the users' screen.



Source: www.learnthenet.com

Demonstrations



➤ In this web page you can see how e-mail works



To know more ...

- How private is your e-mail?
- Protect yourself. Top ten privacy tips

Important aspects

Some important aspects to bear in mind:

- The e-mail sending mechanism works properly even if the receiver is not on-line when the e-mail is sent because the messages are automatically stored in the receiver's mailbox.
- When an e-mail cannot be delivered to the receiver's mailbox, the mail server must send a bounce message back the sender, indicating the problem.

- Privacy of the e-mails is guaranteed because the receiver can only access their mailbox using a log-in name and a password.
- Most e-mail applications allow: attaching files, sending an e-mail to more than one receiver (multiple recipients), replying e-mails, creating a mailing list, arranging contacts and e-mails in different folders, etc



Fuente: www.learnthenet.com



Self-assessment

Regarding format, which one of the following e-mail addresses is wrong?

xxx@yyy.zzz
 @Dav.hotmail.com
 Gary_yahoo@gmail.com
 Rob.Phoenix@mimail.gov



Self-assessment

Is this statement true or false?

A mail client sends the e-mails directly to the receiver's mail server.

Verdadero Falso

E-mail types I



When a mail client connects to a mail server, both computers must be speaking the same language, called a protocol. In this case, there are four protocols that can be used: SMTP, POP3, IMAP and HTTP.

While all four protocols perform mail functions, there are important differences in how they function on the server.

As far as e-mail users are concerned, they do not need to know how e-mail protocols work, just like mobile phone users do not need to know how the mobile phone works to make a phone call. However, any mobile phone user should know the services and the main features that the phone offers in order to make the most of it, such as call waiting, answering machine, call forwarding, short message sending, camera, Internet access, etc.



The most widely used is **POP3** (Post Office Protocol version 3). It is almost always used in conjunction with **SMTP** (Simple Mail Transfer Protocol). POP3 is used to retrieve mail from the mail server (incoming), whereas SMTP is used to send mail through the server (outgoing).

When users log on to the mail server and retrieve the incoming e-mails (using the POP3 protocol), they are stored in the users' personal computer and deleted from the mail server, unless otherwise indicated. In that way, the user will be able to read his or her e-mails although they are off-line. When the e-mails are retrieved (and therefore deleted) from the mail server they cannot be read from a different computer, that is, you cannot read an e-mail in the office if it was retrieved at home.

IMAP (Internet Message Access Protocol) is a newer protocol that is not used as widely as POP3. It is always used in conjunction with SMTP (outgoing).

It allows the user the complete management of the mailbox (including all the different folders) using different computers either in an alternate or simultaneous way. Any kind of modification in the e-mails (reading, classification, etc.) will be shown to the rest of the users with access to that mailbox.

Using this protocol is the best option for users who want to retrieve their messages from different computers. Another advantage is the fact that different users can access simultaneously the same mailbox. Therefore, it is easy to detect any kind of changes or modifications carried out by a different user.

HTTP (HyperText Transfer Protocol) is actually the protocol used by web mail servers (web-based email servers) both for sending and for receiving e-mails. This is an email service intended to be primarily accessed via a web browser. Users do not need to configure or install any special software in their computers because they just have to access a web page, such as www.yahoo.es. Since users access through the web, they can check their e-mail wherever they are.

E-mail types II

E-mail users usually have specific applications for sending and receiving mail already installed in their computers, or they check their mail through a web browser, regardless communication

protocols and their features. In fact, most of the current e-mail applications support several of these protocols in order to guarantee communication between different mail servers.



Anyway, from the users' point of view, communication through e-mails can take two different formats:

- A desktop email client, such as Microsoft Outlook, Mozilla Thunderbird, Apple Inc.'s Mail, etc.
- A webmail accessed via a web browser, por ejemplo Gmail, Yahoo!Mail, Hotmail, AOL, etc.



Self-assessment

Which protocol is used to send e-mails to an e-mail account created in a web-based email server?

POP3
SMTP
IMAP
HTTP



Self-assessment

Is this statement true or false?

An e-mail account which is not web-based uses the protocols smtp and pop to receive e-mails.

Verdadero Falso

Desktop email clients I



Javier has decided to set up an e-mail client in his computer. There are plenty of e-mail clients available in the market, but he has opted for using Outlook. Ana told him that Outlook is part of the Microsoft Office suite. She also explained him that, although Outlook is mainly an e-mail application, it also includes other useful tools, such as calendar, task manager, contact manager or note taking.

Javier has already installed Outlook, so the following step is to configure it. As Ana told him, he must set up an **email account**.



Usually, when someone contracts or hires an Internet connection, the ISP will provide them with an associated free mailbox as well. If you do not know which your e-mail address is, you should ask your ISP. If your ISP does not provide you with an e-mail account, you can create an associated web-based one. In this case, you will need to create it first (as will be explained later on).

You will also need to know which kind of e-mail server it uses (POP3, HTTP o IMAP), and your account name and password.

To create an e-mail account you have to follow the following steps: first, click on the “Tools” menu; second, click on “Accounts”; then, click on “Add new account”. However, depending on the Outlook version you have installed the whole process may vary (including the order of the steps to follow). After that you will have to provide Outlook with some data: your name (or the name you want to appear in your e-mails), the name of the e-mail servers you use to send and receive e-mails, and your account name and password.

Once you have finished you will be able to send and receive e-mails, reply and forward messages, attach files to an e-mail message, add contacts and arrange your mailing list, etc.

While Outlook is working, it will ask your e-mail server periodically for new incoming mail. In fact, it will show a pop-up window anytime you receive an e-mail, even if the program is minimized.

Desktop email clients II

As many e-mail clients do, the Outlook interface divides the screen in several areas, depending on the tool you are using. The left side of the screen contains the navigation pane with all the links and access buttons to the different Outlook tools such as calendar, contacts, tasks, mail, notes, etc. When you click any of them you will see its content in full-screen-size.

Demonstrations



this website you will find a video where you will see how Outlook tools work ...interactively.

Outlook - Productivity Tools - YouTube

You should pay special attention to some important issues:

- It explains how to create reminder pops up for a meeting
- It explains how to open the different email folders: inbox, outbox, unread mail, subfolders, etc.
- It explains how to arrange the e-mails from your inbox by date: today, yesterday, last week, etc.
- If you clicking on “arranged by”, you can change the date order to: conversation, from etc.
- E-mails can have attached files (you will see a clip next to the sender’s name).

Take note of this:

- Below, with this title: “Demo text version” you will find the transcription and explanation of the demo.
- If you move the cursor on the left side of the screen you will find more demos, transcriptions and online trainings.



To know more ...

- ▣ [What is the Navigation Pane? \(microsoft.com\)](#)
- ▣ [How to compose and send an email in Outlook - YouTube](#)
- ▣ [Add Attachment in Email in Outlook - YouTube](#)
- ▣ [How To Reply Email With Attachment In outlook \(the best ever\) - YouTube](#)
- ▣ [How to configure Microsoft Office outlook 2007 - YouTube](#)

Webmail I



Javier remembers what Ana has told him about the different kinds of e-mail. He has already installed Outlook and his ISP has provided him with a mailbox. Apart from that, he is going to sign up in Gmail to have also a web-based account. Gmail is one of the most widely used e-mail client and it also offers a safe encrypted connection because it uses the SSL protocol. He will only use this second account for job searching. Since this account is web-based he will have the opportunity to check his e-mail anywhere and using any computer or device (like a mobile phone) connected to the Internet.

Creating this second account has not been a difficult task. He just visited the Gmail website and clicked on "Create an account". Then he filled in all the information he was asked for by Gmail.

Demonstrations



- [How to Create a Gmail Email Account From Scratch - YouTube](#)

Recommendations:

- View the video in high resolution (HiRes) and full screen.
- Read the notes under the video (section "Show notes").

You will find more tutorials about Gmail in this website.



Think about ...

When you create an account in Gmail, you must fill in your **login name**, for example javier57, and **password**. Gmail will ask you if you want your password to be remembered in your computer. If you agree, the next time you log into Gmail you will have to write only your login name. That makes it easier, doesn't it?

Webmail II

Most web-based e-mail clients offer similar functions, although external appearance and layout may vary from one to another.

The Gmail main screen displays contents in two different areas: there is a navigation pane on the left side. In this pane the user will find all the possible tools at their disposal. The right side will show a different display depending on the tool the user has selected on the left side.

When you log into Gmail, the folder box will show the user all the incoming mail. The e-mails which have already been read will be shady and marked with a specific label. The user can read both new e-mails and previously read e-mails by double clicking on them. When the e-mails have been read, the user can reply, forward, delete or mark as spam any of them using the buttons on the tools bar. If you click on "more actions" you can mark them as unread, mark them with a star (that is, important) or move it to one of the special folders in the labels zone: personal, job, etc.

You can also carry out these actions even if you do not open any e-mail. You only have to click on the e-mail checkboxes (several checkboxes can be selected at once) and select the action you want to carry out from the "more actions" menu.

You can change folder to have a look at other e-mails: starred (only the e-mails marked with a star will appear), sent mail, spam (undesired e-mails), trash (deleted e-mails), drafts (copies of the e-mails you have written but which have not been sent) and every folder you have created in the labels zone.

The tool "compose mail" is used to write your e-mails. You will have to include the address of the receiver, the subject and the message. You can apply different formats to the message and even attach files.

Demonstrations



► [7 Gmail Settings Every User Should Know! \(Tutorial\) - YouTube](#)

There is another folder called "Contacts". My Contacts is a place to import, store and view all of the contact information that is important to you. You can also create your own groups of contacts to easily email many people at once. However, this is not the only way to send an e-mail to many people at once. In the space for the receiver's address you can write as many addresses as you want, writing a comma between them. E-mail users usually create groups of contacts if they are going e-mail those people frequently.

Webmail III



Now Javier has got a problem. His two email accounts work perfectly alright, but he thinks it is a bit annoying having to use two different applications (the mail client

Outlook and the webmail via web browser) to check his e-mail.



Ejercicio resuelto

Ana told him that he could have several e-mail accounts in Outlook, so he is going to set up a new account in Outlook associated to the one he has in Gmail. He clicks on "Tools" in the menu bar and selects e-mail accounts. His new account uses the POP3 protocol. He just fills in the information he is asked for: his e-mail address in Gmail (javier57@gmail.com), the domain names of the mail Server of Gmail (pop.gmail.com and smtp.gmail.com) and the login name and password for his Gmail account. He has to indicate also if he wants his password to be remembered or not.

When he clicks on "Check Connection" an Error Message appears. The message says that the mail server has been found but there is no answer from it and he needs to check that the port and the SSL security information are correct. So Javier has to open the configuration and the advanced options windows.

Then Javier remembers that Gmail configuration has a security SSL connection, so he needs the ports number for POP3 SSL and for SMTP SSL. He looks the information up in a web page which contains a list of ports, such as:

http://en.wikipedia.org/wiki/List_of_TCP_and_UDP_port_numbers.

He finds out that its port numbers are 995 for POP3 SSL and 587 for SMTP SSL. He takes note of these numbers and marks them in the SSL boxes, clicks on "Outgoing server" and marks the box to require authentication.

Javier tries again to connect and now it works alright. Now he can check the received-amil in all his account using only Outlook, and his Gmail e-mails using any computer anywhere



To know more ...

- Hotmail Email Login: Hotmail for Beginners 2019 | Using Hotmail.com - YouTube
- Yahoo Basic Mail | Yahoo Mail Basic - YouTube

We recommend to use high resolution viewing "HiRes" and read the "Show notes"

Blog and Forum



Ana is reading a very interesting article on the web.
According to this article:

“... Human Resource Managers usually use personal **blogs** and Facebook profiles in their search for future employees.

Both blogs and Facebook profiles may receive unexpected visits of these experts. Their main aim is to get more information about the **applicants** who have sent them their curriculum vitae. Professional experience is usually oversimplified in curricula vitae; therefore Human Resource Managers cannot have a thorough profile of the applicant. That thorough profile is precisely what the Managers are looking for.

That is the reason why job-seekers use personal blogs more and more to put their ideas forward, explain their professional experience and skills, talk about their projects for the future, and so on. Their ultimate aim is to attract the reader's attention: not only the attention of their friends and mates, but also from the Human Resources Managers of the companies which have job vacancies but who do not want to initiate a recruitment process.

This tool should not be underestimated. It is nowadays in fashion. Managers can find a great variety of contents in blogs, from videos to PowerPoint or audios which allow the job seeker or “**blogger**” show their professional skills and their personal or business initiative which make them suitable for the post. ...”

Ana immediately phones Javier to tell him about what she has just read and to encourage him to make use of these new technologies which will help him find a job.

Blog and Forum I

A blog (a contraction of the term “**weblog**”) is a type of website, usually maintained by an individual with regular entries, (from one or several authors), commonly displayed in reverse-chronological order, of commentary, descriptions of events, graphics, videos and links to other blogs, web pages or others resources. As an example, in the website <http://www.englishclub.com> which is devoted to teachers and learners of English, several blogs have been built up and can be found in the section <http://esblogs.englishclub.com>.

Many blogs provide commentary or news on a particular subject; while others function as more personal online diaries:

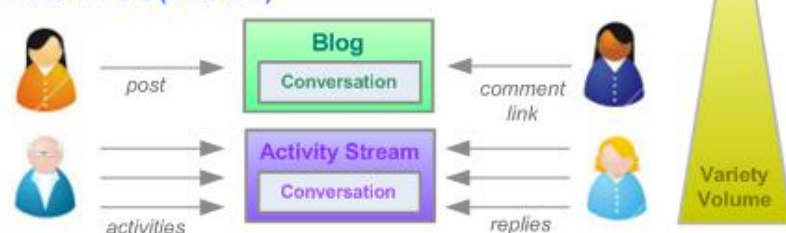
- Personal blog (the most common blog) is an ongoing diary or commentary by an individual. Usually take pride in their blog **posts**, even if their blog is never read by anyone but them, but some personal blogs quickly garner an extensive following.
- Microblogs, such as Twitter, are a type of personal blog which allows users to send brief text or micromedia

Evolution of Online Conversation Models Driving Increase in Variety and Volume

Personal Publishing (Web 1.0)



Social Media (Web 2.0)



CC BY Source: Dion Hinchcliffe, <http://web2.socialcomputingmagazine.com>

such as photos or audio

clips and publish them to share thoughts and feelings instantaneously with friends and family and is much faster than e-mailing or writing. It is extremely detailed blogging as it seeks to capture a moment in time.

- Corporate blogs can be private, as in most cases, or they can be for business purposes, used internally to enhance the communication and culture in a corporation or externally for marketing, branding or public relations purposes.



To think about ...

It is common for blogs to feature advertisements either to financially benefit the blogger or to promote the blogger's favorite causes. Moreover, the popularity of blogs has also given rise to "fake blogs" in which a company will create a fictional blog as a marketing tool to promote a product.

Blog and Forum II

There are two ways of creating and updating a blog: either installing a specific application in your web server or in a hired one, or by using ready-made blog tool such as Blogger. The first method is expensive and requires deep knowledge of computer systems. On the contrary, the second method is easier and therefore the most widely used for personal blogs.

If the future user decides to use a ready-made blog tool, they will be assigned a web address (in the case of Blogger, the last part of the assigned address will be "blogspot.com"). The user will be also provided with an interface which can be used to add or edit contents. However, the functionality of a free hosted blog is limited to what the service provider can offer. The first method, on the contrary, gives the blogger total freedom.

Apart from the contents that authors include in their blogs, bloggers have the possibility of leaving comments in an interactive format (after signing up) about the different topics which are being discussed (or **discussion threads**). They can also add hyperlinks to other web resources (usually to blogs recommended by the authors). All these features and possibilities, including retransmission capabilities to other media, increases the popularity of a weblog.

All these features and possibilities, including retransmission capabilities to other media, increase the popularity of a weblog.

It is advisable to point here that blogs are not **forums** (although some websites combine both applications). Forums are only discussion sites. When a topic for a debate (thread) is set, any member of the forum can put forward their opinion through posts, or even comment on the opinion of another member of the group. A tree-like structure is thus created. Apart from that, language is usually more colloquial and abbreviations are often used. An example of forum is <http://www.keepmusicalive.com>



Tink about ...

When discussion threads are set in a blog or forum, the responsible of that blog or forum must pay special and constant attention to the contents the bloggers post, because irresponsible bloggers may include defamations or explicit sexual messages. This usually happens when access to the blog is anonymous, that is, when signing up is not compulsory to post comments.

Blog and Forum III

When you create a free Blogger account you should follow the following steps: first, you need to give it a name; then, you should customize the theme; finally, you can write your first blog post and share your stories with the world or only the people you choose.

Blogger gives you tools to easily change the template of your blog, the colours, and even the font. Each page element can be adjusted to match the personality of your blog and make it stand out.

Gadgets are extra features that you can add to your Blogger blog. A gadget can be a photo-stream from Flickr, polls that your readers can participate in and even something as simple as a welcome message that your visitors will see every time they visit your site. Gadgets can be easily added and removed from your blog with just a couple of mouse clicks and they help you add even more of your own personality to share with your readers



To know more ...

- ▣ You can create your own blog (for example, with blogger) in www.blogger.com
- ▣ How to create a blog and post in only a few minutes with blogger:
 - ▣ Blogger - Tutorial for Beginners in 12 MINUTES! [2021 Updated] - YouTube
 - ▣ https://youtu.be/QX0WCGHuu_U (español)
- ▣ Everything you need to create, edit and publish your posts:
 - ▣ How to Write a Blog Post From Start to Finish | Neil Patel - YouTube



Self-assessment

A “blog” (abbreviation of the term “weblog”) is a type of website, usually maintained by an individual with regular entries (called “posts”), from one or several authors, commonly displayed in chronological order.



Self-assessment

Communication mechanisms are the exactly same for blogs and forums?

Verdadero Falso



Self-assessment

What is the meaning of the word “post”?

- The contents published by the author or the members of a blog or forum.
- The contents published by the blog’s author.
- The contents published by the responsible or member of a forum.
- The contents published by the author or the member of a blog.

Syndication I



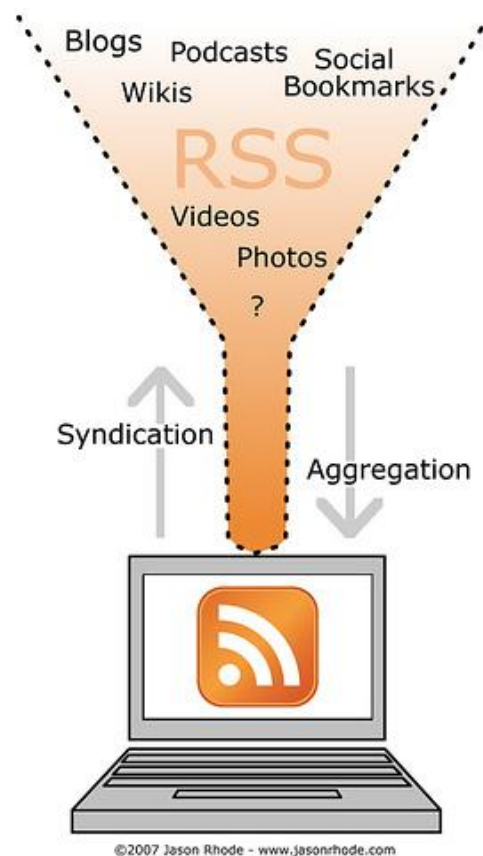
Javier is becoming really skillful in his handling of the web. However, he wastes too much time looking for news and information in webs, blogs and forums.

Ana tells him that overuse of Internet can lead to addiction and advises him to reduce the time he spends in front of the computer.

She also tells Javier that there is a technology which can help him save time. Instead of looking for information in every single site related to his interests, he could gather all that information in a single site and look it up whenever he wants. It is a great advantage, isn't it?

The technology Ana is talking about is known as Content **Syndication**.

In journalistic jargon, **RSS (Really Simple Syndication)** is the means publish or upload information in several media simultaneously. For example, Dilbert cartoon stories



Source: <http://www.flickr.com/photos/jrhode/375671790/in/pool-rss>

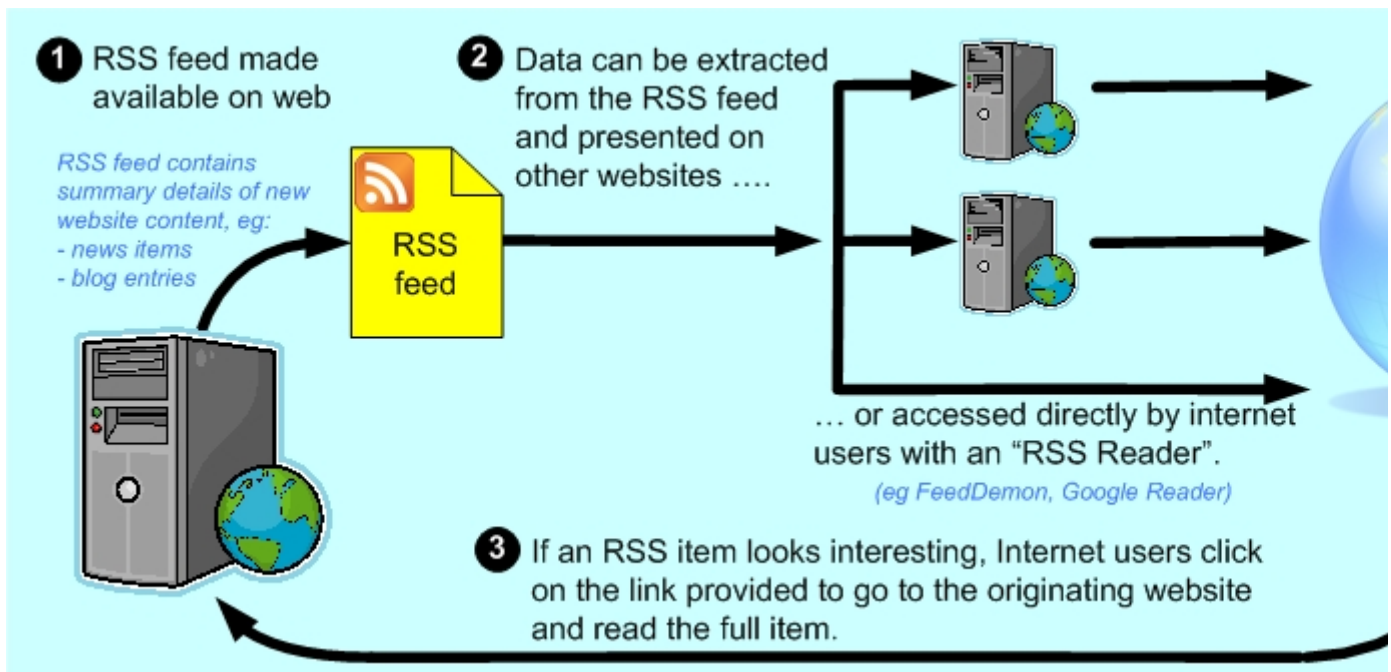
(<http://www.dilbert.com/comics/dilbert/index.html>) are published in several online newspapers at the same time.

Regarding the web, RSS is a technology used for providing users with frequently updated content from a content provider, such as blog entries, news headlines, audio, and video. Therefore, syndicating a web or subscribing to it will enable users know the new updates in that web, since users will constantly be sent summaries or headlines of updated contents (also called feeds) to their RSS reader.

RSS was the first syndication format. The term RSS was indeed used to refer to both the feed format and the content provider. However, nowadays there is also another **feed** format known as Atom.

The RSS reader software can display feeds in different ways. For example, they can indicate the user which headlines have already been read, delete spam etc. It works just like any e-mail inbox. In fact, users do not need to install RSS or Atom in their computers because feeds can be automatically sent to the users' e-mail account, to Google Reader, etc. The advantage of this second way of subscribing feeds is that we can check new feeds everywhere.

Syndication II



Source: http://ez.no/developer/articles/how_to_import_and_export_rss_feeds



To know more ...

- [Staying Up To Date Using Google Reader and RSS Feeds \(orthogate.org\)](http://orthogate.org)

Other social network tools

Internet offers web users a great variety of resources to broaden and strengthen their social net:

- IRC (Internet Relay Chat, or just Chat) is a form of real-time Internet text messaging (chat) or synchronous conferencing. It is mainly designed for group communication in discussion forums, called channels, but also allows one-to-one communication via private message as well as chat and data transfers via Direct Client-to-Client.
- Messenger (MSN, Yahoo, ICQ, etc) is an instant messaging client, which allows the users share folders, pc-to-pc and pc-to-phone calls, short message sending to mobile phones, games and applications, etc.
- Facebook, Flickr, MySpace, etc. are social networking websites which allow users share all kind of information: opinions, photos videos, etc. Each network is usually set up with a specific aim (a region, a concrete type of contents or a group of people).

There is a complete list of social networking websites in this link:
http://en.wikipedia.org/wiki/List_of_social_networking_websites



source: <http://geekandpoke.typepad.com/geekandpoke/2007/11/the-last-judgem.html>

Demonstrations



- This web will give you some ideas about different ways to broaden your social net.
- The monologue is transcribed in this web

Search engines

Search sites, like Google, Altavista, Yahoo, etc, provide anyone on the web with links to web pages with the apparently magical ability to search large areas of the Internet in seconds.

Search engines do not have time to search the whole web every time you make a query, so they first build up a large **database** with automatic computer programs called **spider-robots** that continuously browse the web, twenty-four hours a day, to find new sites and old sites that have been updated. The robots read the text on each page and add it to the search engine's database. Then, they store the information in a tight structure which will later allow fast searches.

These sites enable you to search the Internet, for information you're interested in, such as "home AND garden AND tomatoes" or "exercise AND arthritis" or any others.



source: <http://www.flickr.com/photos/sepblog/3921521570/>

Demonstrations



- You can have a look at the following web to see how search engines look for and store information.



To know more ...

Different engines combine criteria such as those listed below in various scoring algorithms to determine which sites to return first in response to each query:

- ▣ Number of other sites that link to the site.
- ▣ The search words are in the Meta tag.
- ▣ The search words are in the URL.
- ▣ The search words are in the Title.
- ▣ The search words are near the top of the page.
- ▣ The search words are in the Keyword tag.
- ▣ There are repeated occurrences of the search words.
- ▣ Etc.

Advanced searching I

The goal of an Internet web search engine is to winnow down a handful of the most relevant results from billions of possibilities and reject the rest of results as quickly as possible.

By default the search engine tries to locate pages which have exact matches for all of the words entered in your search query. If that fails, it then tries to locate pages which contain any words in your search query. If that happens a short message is displayed at the top of the search results indicating this has been done.

Several techniques can be used to narrow down the number of results you get. These techniques will also make your query more specific and, therefore, the search engine will reject any results which do not adapt to the searching criteria you have used. These techniques will make you an expert searcher.



source: <http://blog.weblinx.biz/tag/meta-tags/>

To narrow down the number of results you can use some of these ideas:

- When you want to query a specific phrase you have to place it between double quotes.
- You can also use relational operators like AND, OR, – (not), ~ (similar) to show the relationship between the elements you have introduced in your query.
Examples:
(flower or bush) --> 12,100,000 results.
(flower or bush) -florist --> excludes from the search the word “florist” (7,440,000 results).
(flower or bush) +florist --> forces to include the word “florist” (469,000 results).
"mountain bike" ~inexpensive --> “inexpensive” = “cheap” = “affordable” = “low cost”
- Another technique is using meta words operators to show special relationships, like: info, inurl, filetype, cache, allintext, etc.
Examples:
info:www.jccm.es festival site:jccm.es filetype:pdf --> The search engine will show only pdf files in jccm.es website related to “festival”.
- Ranges (...) and wildcards (*) can be used for searches as well.
Examples:
queen band --> 64,300,000 results.
queen band 1970..1975 --> only in this range (9,620,000 results).
"Francis Coppola" --> 198,000 results.
"Francis * Coppola" --> 18,000,000 results.

For example, if you write: "romantic painting" AND (corot OR delacroix OR gericault) AND inurl:britannica.com, the search engine will search in the britannica.com URL contents of any of the three romantic painters.

Advanced searching II

Most search engines have a link to another web page where the user can carry out an advanced or expert search. This web page helps the user specify their query and establish their preferences by filling up a form with different fields like: language, date, file type, etc. You can see an example in http://www.google.com/advanced_search?hl=en



To know more ...

- The basic rules you need to follow to specify your query. These rules apply to most search engines.

- Everything you need to know about query input (especially in Google)
- A detailed description of the meta words operators used in the different search services.



Self-assessment

Which of the following operators is not useful when you use a search engine?

- (exclude)
- ~ (equivalent)
- + (include)
- # (concatenate, link together)



Self-assessment

Is this query correctly expressed to search a chessmaster Capablanca variation for the nimzo-indian defence in the website rebel.nl?
capablanca+variation nimzo+defence site:rebel.nl

Verdadero Falso

Advanced searching III

Some tools in the web allow us to carry out specialized searches:

- Directory sites place each web site in their database in one or more predefined subject categories following review by a human being. A web site is included in a directory site's database only after some human reviewer has judged it to be useful, informative, etc. For example:
<http://www.galaxy.com> or <https://developers.google.com/admin-sdk/directory>
- We can also use search engines which do not search the whole web but only blogs, like:
<http://blogsearch.google.com/?hl=en&tab=wb>



Self-assessment

When you make a query in a search engine, the search engine searches all the web pages related to the query you have introduced:

- While the query is being introduced.
- The search had previously been done in case someone made that query

afterwards.

The search is done in a database which had been previously filled in with the results of many other searches.

If it is an simple query it is carried out instantly; if it is composed, the search is based on previous searches.

Which of the following items is not a searching meta word for search engines?

Inurl
Site
Info
Blog

Job searching



Javier is young and enterprising and he is determined to get a new job, so Ana tells him that another possibility is looking for a job abroad, in the United Kingdom or in any other country. Javier smiles. He thinks that travelling abroad would be ill-judged and ridiculous if he does not have a job interview beforehand. Ana tells him that he does not need to travel abroad because he can carry out his search via web.

The **job search web sites** publish a great deal of job vacancies everyday and they are constantly adding new ones, like the adds published in newspapers. These web sites contain more information than newspapers. Job seekers can use different search criteria to find the job vacancy which best suits them and, therefore, avoid reading the rest. Job search web sites usually include the following search criteria: keywords (one or several specific words), job sector, location (country, region or city), job type, salary range, company, etc. Apart from that, you have the possibility to subscribe to these sites. The advantage of subscription is that you will receive job vacancies regularly and you can monitor the ones you have selected.



To know more ...

- ▣ To find information on jobs and learning opportunities and to facilitate the free movement of workers within the 30 countries of the European Economic Area (EURES).

Some links to job search engines:

- ▣ <http://jobsearch.monster.com>
- ▣ <http://www.jobsite.co.uk/>
- ▣ <http://www.net-search.uk.net/lifestyle/Jobs/>
- ▣ Further information in the web page de European Commission of Employment, Social Affairs and Equal Opportunities.

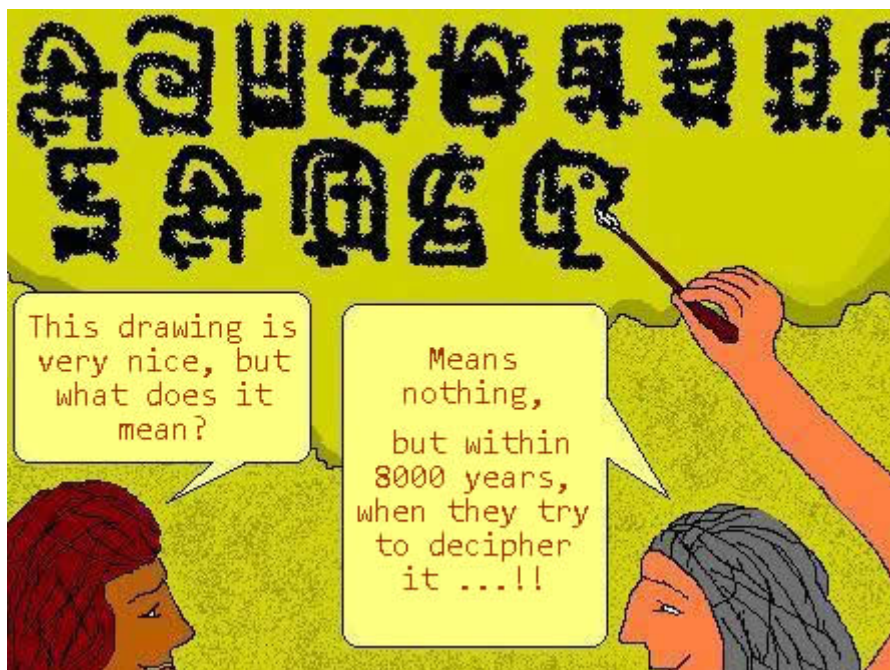
- Some advices to be safe when job-seeking
- Find a job - GOV.UK (www.gov.uk)
- Job Search Safety Tips (cpp.edu)

Language tools



Javier has finally decided to look for a job abroad. Ana knows he is not very good at English, so he may need a little help. She tells Javier that there are many resources to learn and practice languages on the Internet, such as online translators, dictionaries, glossaries, reference texts and grammar summaries, exercises, pronunciation activities, etc.

Some of these reference materials can be downloaded. Once you have installed them, you can study off-line. However, other materials have to be used on-line.



source: http://commons.wikimedia.org/wiki/File:Antes_da_arqueologia._Cartoon_de_Paulo_Cesar.JPG

Translators I

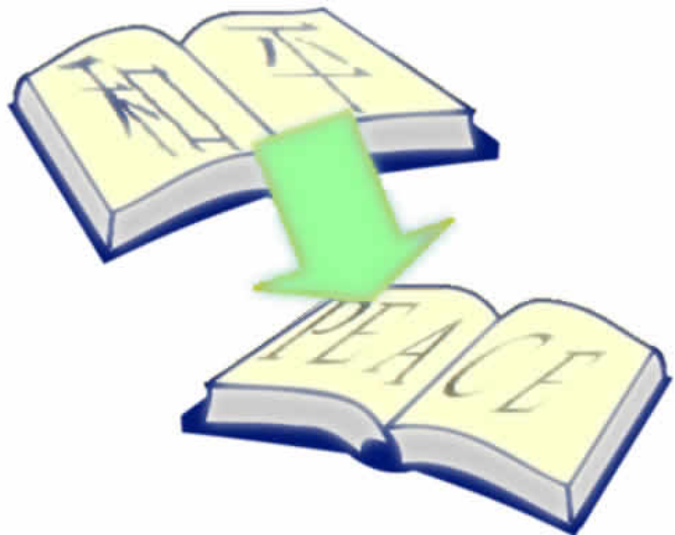


Translators are usually highly-talented professionals or “artists” who devote a great amount of time to create their own artistic works. A common misconception is that there exists a simple word-for-word correspondence between any two languages, and that translation is a straightforward mechanical process. However, translators have to take into

account context, grammar, conventions, and idioms. Human languages are made up of Morphology (the description of the structure of words), Syntax (clause and sentence structure) and Semantics (the meaning of words and texts). Even the simplest text can be riddled with ambiguities. Apart from that, translators have to pay special attention to stylistic conventions and pragmatics.

The **Machine Translation Engines** interpret the meaning of a text and produce an equivalent text in a different language, for example from English to Spanish or vice versa. These engines can even translate to non-written languages, like sign language.
<http://www.youtube.com/watch?v=RarMKnjqzZU>

When you use a Translation Engine, you have to follow just three steps: firstly, write, copy or even upload the text you want to be translated; then, select the language you want to translate from; and finally select the target language.



Automatic translation can be quite useful to get a general idea of the original content of a text. Sometimes, the result is quite good and can be used exactly as the engine has produced it. However, current systems are unable to produce human quality outputs, mainly when the original text contains idioms or colloquial expressions. Therefore, the target text or output produced by an automatic translator usually needs to be revised and corrected.

source: <http://commons.wikimedia.org/wiki/File:Translation2.png>

The user should bear in mind that the more different the source language and the target language are, the more inaccurate the output will be. However, if the source and target language are similar or have the same origin (like Romance languages: Spanish, Catalan or Portuguese) the output will be much better. Better results can be achieved if the translator engine is configured to translate texts from a concrete domain (law, health, etc).

Translators II



Ejemplo

If you translate a text from English to Spanish or vice versa, you can grasp the main idea, but you may also find some language rarities regarding Syntax or Semantics.

Have a look at the following translation:

Today is the 51st birthday of Michael Jackson. Google has created a logo on their main Google page to celebrate the birthday of the King of Pop.

- By http://www.appliedlanguage.com/free_translation.shtml
 El hoy es el 51.º cumpleaños de Michael Jackson. Google ha creado una insignia en su paginación principal de Google para celebrar el cumpleaños del rey del estallido.

- By http://translate.google.es/translate_t?hl=es&sl=en&tl=es
Hoy es el 51 cumpleaños de Michael Jackson. Google ha creado un logotipo en su página principal de Google para celebrar el cumpleaños del rey del pop.



To know more ...

Here you have some online automatic translators:

- <http://babelfish.yahoo.com>
- http://translate.google.com/translate_t
- The following site contains several links to translation engines.
<http://www.lai.com/lai/temain.html>
- Compendium of Translation Software (directory of commercial machine translation systems and computer-aided translation support tools compiled by John Hutchins)
<http://www.hutchinsweb.me.uk/Compendium.htm>



Self-assessment

The more specialized is a Translation Machine in a domain, the worse the output will be for a non-specialized text.

Verdadero Falso

Dictionaries

A dictionary is a collection of words in a specific language, often listed alphabetically, with definitions, etymologies, phonetics, pronunciations, and other information, or a collection of words and expressions in one language with their equivalents in another, also known as a lexicon.

Using online dictionaries is very easy: just write the word you want to look up and the web will give you the translation. If the dictionary is multilingual, we have to select first the source and the target languages and then write the word to get a translation.



Many dictionaries accessible via the Internet have a special section called "Collaborative Dictionary". A collaborative dictionary is a forum or microblog where anyone can add an entry (including term and translation). These entries are usually revised and corrected by experts, at least in reliable dictionaries. This new way of building up dictionaries makes them more lively, although they may include some mistakes if they are not properly supervised.

source: <http://commons.wikimedia.org/wiki/File:Dico.png>

<http://www.wordreference.com/>

In some dictionaries, you can select the domain in which you want to search a term, like in the InterActive Terminology for Europe (IATE)

<http://iate.europa.eu/iatediff>

There are also specialized or technical dictionaries, which focus on the lexicon of a particular subject field.

For example: <http://www.fishbase.org/search.php?lang=English>

Froese, R. and D. Pauly. Editors. 2009. FishBase. World Wide Web electronic publication. www.fishbase.org, version (04/2009).

Another variant is the glossary. Glossaries are usually specialized list of terms from a specific domain: medicine, science, law, etc. There is an example of a glossary in the following website (English to Spanish translation glossaries for several domains).

<http://www.proz.com/glossary-translations/english-to-spanish-glossaries>



Self-assessment

Which of the following statements is true regarding collaborative dictionaries?

They are usually domain specific.

Anyone can add an entry without supervision.

They make more lively and richer dictionaries.

They work like the Messenger application.