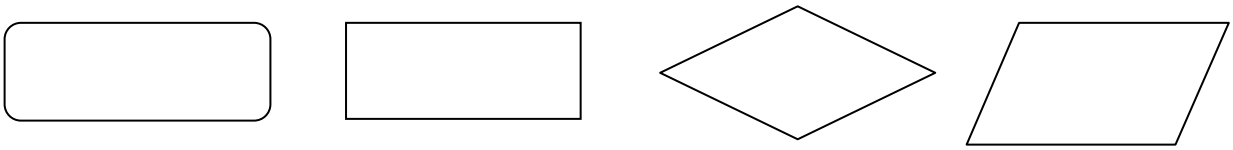
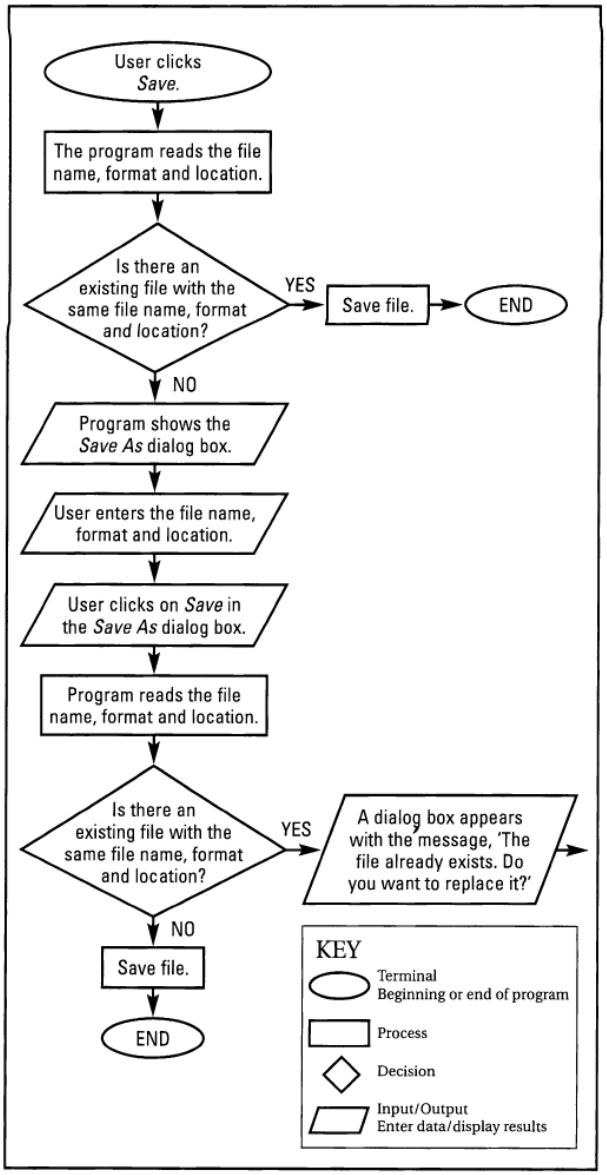
UNIDADE 14

Computer programming/Reviewing Websites

O que é um fluxograma?
Qual seu objetivo?
Como ele costuma ser usado na programação?
Qual o significado dos símbolos abaixo em um fluxograma?



Exercício 1: Interprete o fluxograma abaixo e responda as perguntas ao lado.



1 Which computer commands does it show? _____ and _____
2 How many decisions does the computer make? ____
3 After the user clicks Save, how many times does the user input data? ____

Exercício 2: Leia o texto sobre programação abaixo e escreva o número do parágrafo em que aparecem as informações abaixo:

a a description of machine language ☐
b the greatest problem for computer programmers ☐
c the names of three high-level computer languages ☐
d a description of an algorithm ☐
e different uses of computers in our lives ☐

1 The diagram on the right shows part of a simple algorithmic flow chart for the Save command in a computer program. An algorithm is a set of logical rules that we use to solve a problem. Computer programmers often use algorithms to plan their programs, but the only language a computer understands without translation is machine language. This uses the binary system of 1 and 0, which matches the electrical positions 'on' and 'off'. We can also show these numbers in English by *Yes/No* or *True/False*.

2 Machine language is a low-level language and is very difficult to write. Over the years, computer scientists have developed many high-level languages, such as BASIC, C++ and Java. These languages use a computer code that is similar to English, which makes them easier to learn. A computer program is just a set of coded instructions. A computer translates the code into machine language to complete a specific task. A computer receives input, processes data and produces results, or output, according to the program code.

3 We use computers in many parts of our lives, and not just in schools or for the Internet. There are computers in all kinds of electrical devices, from mobile phones to washing machines. We can find them in banks, supermarkets and cars. When programmers write programs, they have to plan carefully for every possible kind of error a computer user can input into the computer. It is planning for the random behaviour of humans that makes programming so much fun.

Exercício 3: Marque “sim” ou “não” para as afirmações abaixo:

1 Programmers use algorithms when writing programs. yes/no
2 Programmers write programs using the numbers 1 and 0. yes/no
3 Machine language is a high-level language. yes/no
4 We only find computer programs in computers. yes/no

Exercício 4: Complete as lacunas com as palavras fornecidas no box:

according to ■ behaves ■ devices ■ errors ■ input ■ output

1 _____ the bank machine, I have no money in my bank account.
2 Video and digital cameras are other _____ that use computers.
3 _____ is any result a computer displays on a screen or prints from a printer.
4 A computer receives _____ from users when they click on a command.
5 I made too many _____ in my test so I got a bad grade.
6 Not everyone _____ logically when things go wrong with a computer.

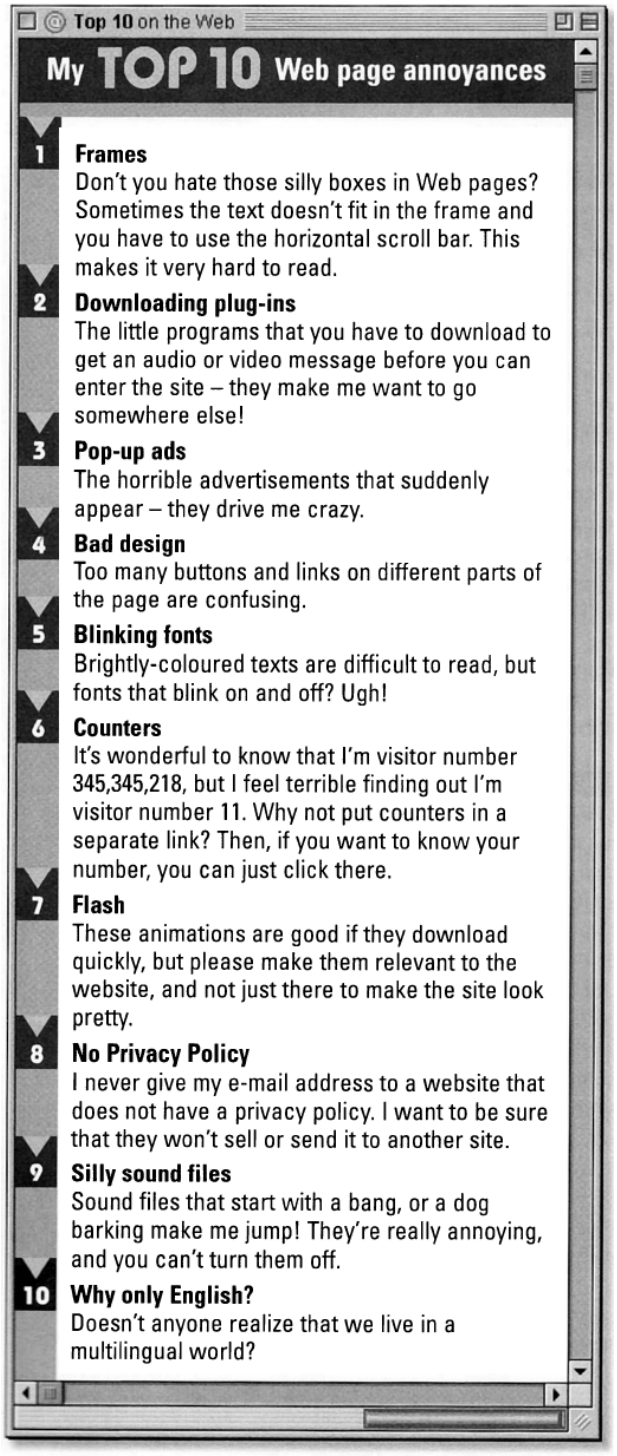
Exercício 4: Escolha a palavra correta para cada opção:

1 Most people can easily learn a _____ language and become programmers.
a low-level **b** high-level **c** binary
2 You can use a mouse or keyboard to _____ data into the computer.
a output **b** input **c** process
3 Some children _____ very badly when they can't have something they want.
a process **b** solve **c** behave
4 You can draw _____ for many simple procedures.
a an algorithm **b** a code **c** data
5 Computers _____ programming language into machine language.
a use **b** develop **c** translate
6 A computer can _____ large amounts of data at very high speeds.
a process **b** result **c** complete

Exercício 5: Faça uma lista abaixo com as cinco coisas que mais aborrecem você em sites de internet:

- _____
- _____
- _____
- _____
- _____

Exercício 6: Agora, veja uma lista de problemas em sites listadas em um site pessoal. Eles coincidem com a sua lista pessoal? Você concorda ou discorda com a lista? Como "rankearia" os problemas listados?



Top 10 on the Web

My TOP 10 Web page annoyances

1. **Frames**
Don't you hate those silly boxes in Web pages? Sometimes the text doesn't fit in the frame and you have to use the horizontal scroll bar. This makes it very hard to read.
2. **Downloading plug-ins**
The little programs that you have to download to get an audio or video message before you can enter the site – they make me want to go somewhere else!
3. **Pop-up ads**
The horrible advertisements that suddenly appear – they drive me crazy.
4. **Bad design**
Too many buttons and links on different parts of the page are confusing.
5. **Blinking fonts**
Brightly-coloured texts are difficult to read, but fonts that blink on and off? Ugh!
6. **Counters**
It's wonderful to know that I'm visitor number 345,345,218, but I feel terrible finding out I'm visitor number 11. Why not put counters in a separate link? Then, if you want to know your number, you can just click there.
7. **Flash**
These animations are good if they download quickly, but please make them relevant to the website, and not just there to make the site look pretty.
8. **No Privacy Policy**
I never give my e-mail address to a website that does not have a privacy policy. I want to be sure that they won't sell or send it to another site.
9. **Silly sound files**
Sound files that start with a bang, or a dog barking make me jump! They're really annoying, and you can't turn them off.
10. **Why only English?**
Doesn't anyone realize that we live in a multilingual world?

Exercício 7: Escreva ao lado das frases abaixo o número do problema listado no texto a que elas se refém.

a Websites should have rules about giving e-mail addresses to other sites. ☐
b Web pages should have options for different languages. ☐
c Animations should be about the same subject as the Web page. ☐
d Web pages should not need special programs to run. ☐
e The text should not blink on and off. ☐
f Dividing a Web page into a lot of small frames is bad design. ☐

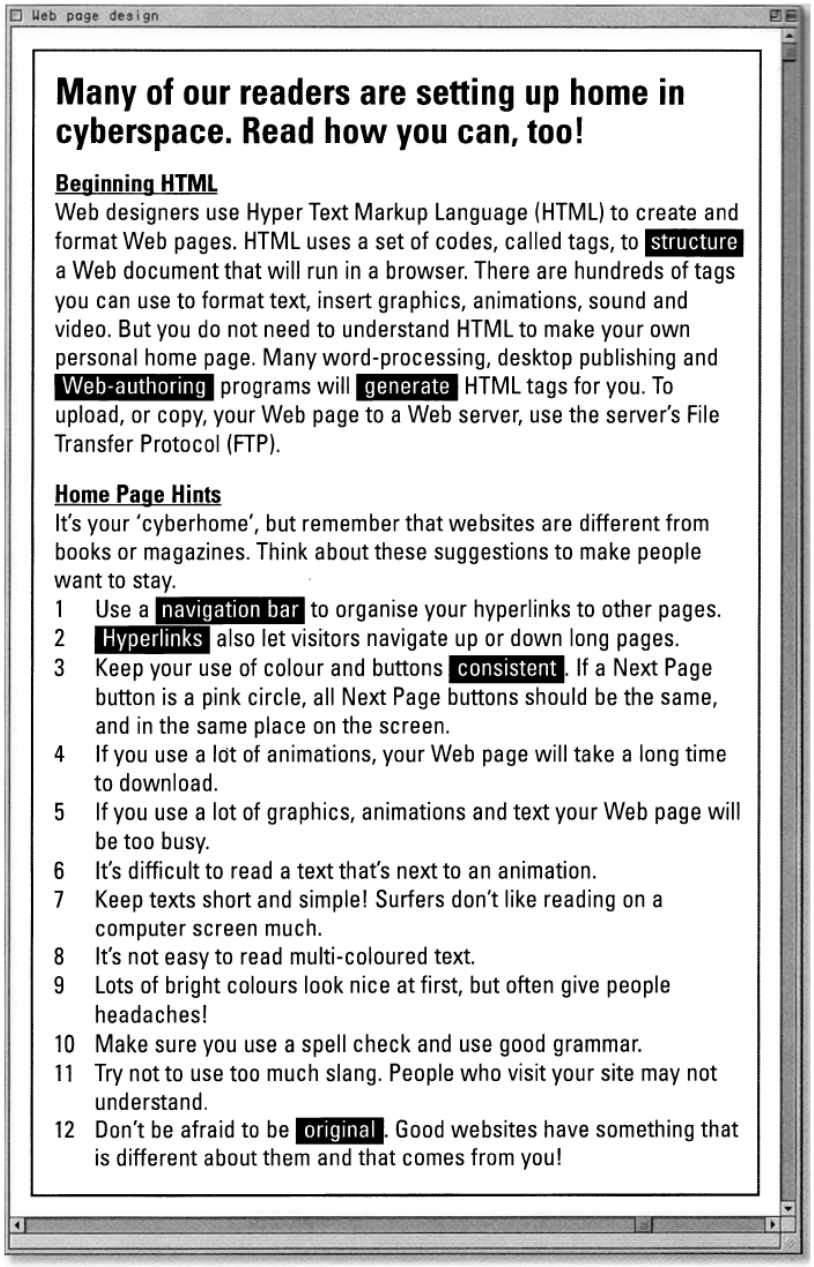
Exercício 8: Localiza antônimos no texto:

1 clear _____
2 very bad _____
3 unrelated _____
4 ugly _____
5 uncertain _____
6 monolingual _____

Exercício 9: Complete as lacunas com palavras do box:

confusing ■ else ■ fits ■ relevant ■ scroll bar

1 This is a well-designed Web page. Everything _____ well on the screen.
2 Web surfers will go somewhere _____ if the page doesn't appear quickly.
3 That animation is good because it is pretty and it is _____ to the Web page.
4 That website is very _____ because I couldn't find the Back button.
5 It's annoying when you have to use the horizontal _____ to see all of the text.



Web page design

Many of our readers are setting up home in cyberspace. Read how you can, too!

Beginning HTML

Web designers use Hyper Text Markup Language (HTML) to create and format Web pages. HTML uses a set of codes, called tags, to structure a Web document that will run in a browser. There are hundreds of tags you can use to format text, insert graphics, animations, sound and video. But you do not need to understand HTML to make your own personal home page. Many word-processing, desktop publishing and Web-authoring programs will generate HTML tags for you. To upload, or copy, your Web page to a Web server, use the server's File Transfer Protocol (FTP).

Home Page Hints

It's your 'cyberhome', but remember that websites are different from books or magazines. Think about these suggestions to make people want to stay.

1 Use a navigation bar to organise your hyperlinks to other pages.
2 Hyperlinks also let visitors navigate up or down long pages.
3 Keep your use of colour and buttons consistent. If a Next Page button is a pink circle, all Next Page buttons should be the same, and in the same place on the screen.
4 If you use a lot of animations, your Web page will take a long time to download.
5 If you use a lot of graphics, animations and text your Web page will be too busy.
6 It's difficult to read a text that's next to an animation.
7 Keep texts short and simple! Surfers don't like reading on a computer screen much.
8 It's not easy to read multi-coloured text.
9 Lots of bright colours look nice at first, but often give people headaches!
10 Make sure you use a spell check and use good grammar.
11 Try not to use too much slang. People who visit your site may not understand.
12 Don't be afraid to be original. Good websites have something that is different about them and that comes from you!

Exercício 10: No texto ao lado, leia o parágrafo "Beginning with HTML" e faça a correspondência das letras com os números apresentados a seguir:

1 HTML tags tell the browser where
2 A Web-authoring program
3 FTP is a set of transfer rules
4 Web page designers use
5 See your Web page on the Internet
6 Tags are

a that are used to upload Web pages to a server.
b the text, graphics and animations go.
c by uploading it to a Web server
d HTML tags to create Web pages.
e a set of codes in HTML.
f writes HTML tags for you.

Exercício 11: Quais das frases abaixo utiliza vocabulário informal?

1 Get real, people. Frames are a big no-no. ☐
2 Designing a Web page needs careful planning. ☐
3 I think sound files are cool. ☐
4 Multi-coloured blinking fonts look terrible. ☐
5 That Web page is mega ugly. ☐
6 The text has too many grammatical errors. ☐

Exercício 12: Agora, leia a parte "Home Page Hints" e preencha as duas colunas abaixo com os números das dicas:

Do ...	Don't ...
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Exercício 13: Veja as páginas pessoais abaixo. Quais seriam suas observações, críticas e sugestões?