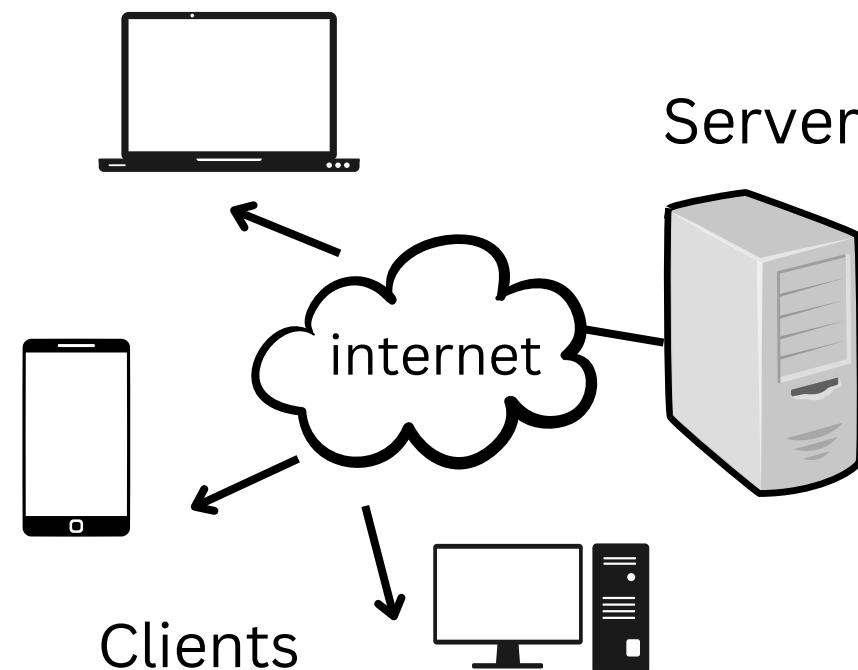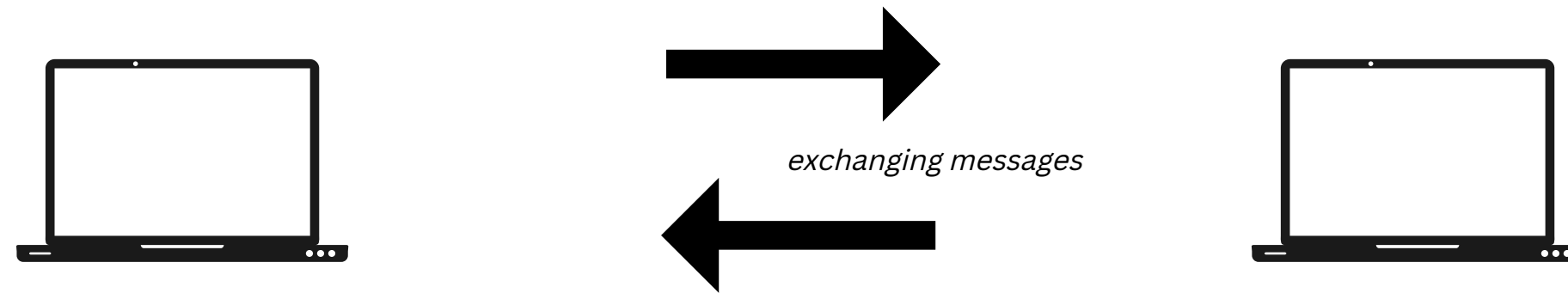# Theoretical part of Website Development

Training: Closing the Gaps

Digtial Learning - Women are Informed

How the internet works?

The <u>The</u> **internet** consists of nodes and edges. Each node is a computer of each node edge of a transmission medium usually cable or optical fibre. Each node has a unique IP address. Each node to communicate with the other person must know his address.

exchanging messages

Nodes exchange messages with each other, and each node (web client) must have the appropriate software to read the messages it receives. There are nodes called web servers, whose job is to always be available and respond with messages to the respective requests. An online communication is usually client - server, i.e. a client node asks and a client-server node responds

Server

internet

Clients

What is a web server?

Web Servers are the hardware and software, which provide various services "serving" requests from other computers, known as clients. Sure there is a possibility that the computer itself is running such server programs 24 hours a day. In this case the whole computer is considered a server since this is its basic function.

Web Servers and their components

Servers are usually computers that differ in their composition from common computers because they have more advanced capabilities. The way communication between a client and the server is done by a local network or even and from the Internet. Usually web hosting is done on a specialized server to host websites

What is a web client?

Computers connected to the internet and using a web browser are called web clients.
All browser software (Internet Explorer, Google Chrome, Mozilla Firefox, Opera. . .

Introduction to the **Website**

What is DNS?

The Internet uses a distributed naming system called **Domain Naming System (DNS)**. The DNS system allows us to refer to computers and other devices (for example routers), with names (the domain names) rather than the IP address (Internet Protocol address) which is difficult to remember and uncomfortable to use.

For example, it is easier to remember www. ip. gr than www. ip. gr 123. X. XX. XX.

DNS is responsible for converting the mnemonic names (domain names) to the relevant IP. For example, IN. GR has registered the domain in. gr to uniquely name the its existence on the Internet.

How to choose your
Domain Name?

- Find a small and clear Domain Name relevant to your business

Your website visitors should easily remember it and write it down easily. Try to register the smallest possible name associated with the activity of your business. A good rule of thumb is to manage to keep it up to 7 characters without the suffix

- Find a name that is easy to spell.

Find a name that doesn't raise doubts about how it's spelled even if someone hear it. A domain that every time you mention it you are asked how to spell it, it is not the proper name for you.

- Use keywords

A good idea to use a keyword is to find something in the field that will activity of your business.

- Branding through Domain Name

Choose the Domain Name according to the name or title of your business. Optimally, the Domain Name and the name should be exactly the same

- Avoid using numbers and hyphens

Avoid names that contain even one a dash or a number. If you use a number or hyphen and someone only listens, without seeing the Domain Your name will not know whether it is spelled with words or regular numbers. In general, the use of numbers or hyphens in the Domain Name is a combination that confuses your visitor. Don't use it if you don't have to.

How do we check if a domain is available?

There are many websites to check if a domain is available so that you can register such as papaki. com, easy. gr, domain. com and so on. Example, we will go to the easy. gr page and in the "Write the domain" box we will put the domain we are looking for.

Come up with name ideas!
Search for name availability!
Customize your domain name!

If you want to target international markets, it's a good idea to get a **.com**

If you want to target a specific country, ideally you should use its own country main TLD, such as **.de** for Germany, **.co .uk** for the UK, etc.

In case there is no .com , prefer **.org** (for organization. . .), **.net** (network), .biz (business), **.eu** (European Union), **.edu** (educational), **.gov** government agencies, etc.

In USA they say: 'If you start a company with the name X, and the x. com is not available, then you have to change your company's name.

What is web hosting?

Web hosting is an online service that allows you to host your website and to individuals and companies to have a website permanently posted on the Internet, without having to bear the cost of such equipment or the need to serving a large number of external connections and bandwidth.

This is undertaken by web hosting companies (web hosts) that offer space on their server and part of their network connection. The term Web Hosting refers to the process by which the owner of a website rents space on computers to place their files and or electronic files. These files, which make up its website, are offered through a secure network of uninterrupted supply to visitors.

Types of websites and applications:

Static website:

A static website is an internet website that in order to edit the its content, you should have knowledge of web programming. On the static website we are not provided with any control panel and that changes, additions, deletions, etc. we want to make to the content, we need to we do in the code of the page. It is less flexible than the dynamic website but is usually cheaper and serves to display content that we are not going to update often

Dynamic website:

A dynamic website is that web page on the internet, which has a control panel behind it and can be edited without any knowledge of the web programming. Similarly, a dynamic website is considered to be the one that its content is updated or revised automatically, without our intervention. The system does it all automatically. All I have to do is write and format my article in a text editor that the control panel offers to me.

Web Hosting Control Panels (Web Hosting Control Panels)

A web hosting control panel is an interface based on the web and is provided by a web hosting service that allows users to users to manage their servers and hosted services.

Let's look at some basic CPanel functions:

-Web-server management (mime-types, frontpage extensions, redirection, folders password)

-Softaculous Module that allows you to automatically install Open Source dynamic sites and applications such as joomla, wordpress, phpbb, applications newsletter etc.

-Manage e-mails (user creation, mail aliases, mail forwards, auto responders, filters, spam detector)

-File management (transfer, deletion, file/folder editing)

-DNS management (domains, sub-domains, parked domains, re-directs)

-FTP management

-MySQL management (database creation, user creation and editing with the phpMyAdmin)

-Statistics of the site.

-Backup management

-Installed CGI and PHP scripts.

-E-commerce applications.

-Manage SSL (add/remove certifications)