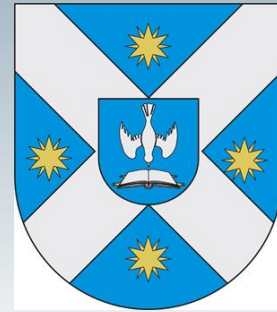




Education and Culture DG

Lifelong Learning Programme



„Let's WIN LIN !”

LEONARDO DA VINCI

LLP-LdV/IVT/2011/RO/188

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ORGANIZATORI



Colegiul Național Iași

Alfatraining Bildungszentrum



PARTICIPANȚI



Grupul țintă al proiectului a fost reprezentat de un grup de 15 elevi ai Colegiului Național Iași, însoțiți de doamna profesor coordonator.

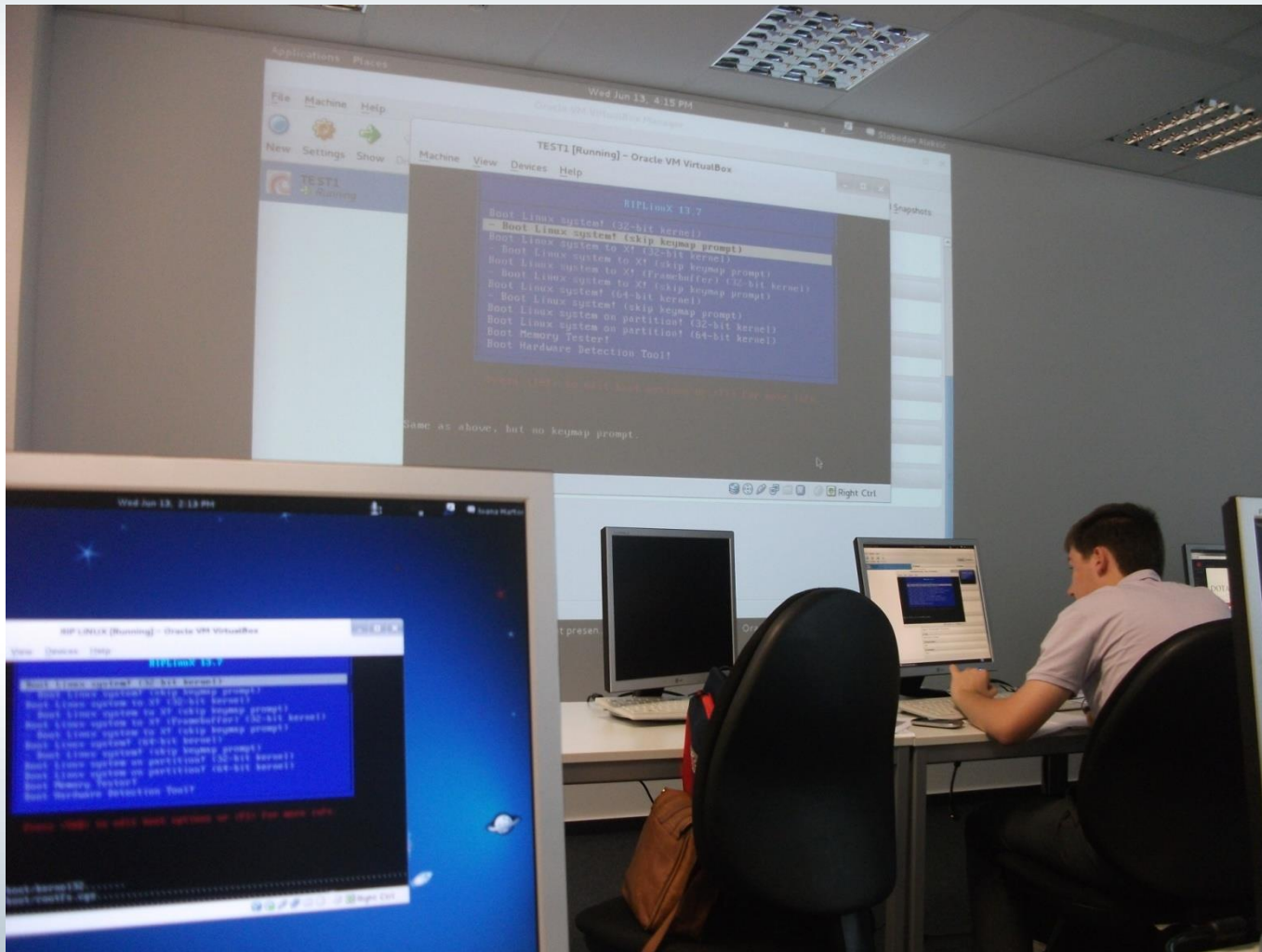
CE AM FACUT NOI TREI SĂPTĂMÂNI?



AM LUCRAT DE LUNI PÂNĂ VINERI...



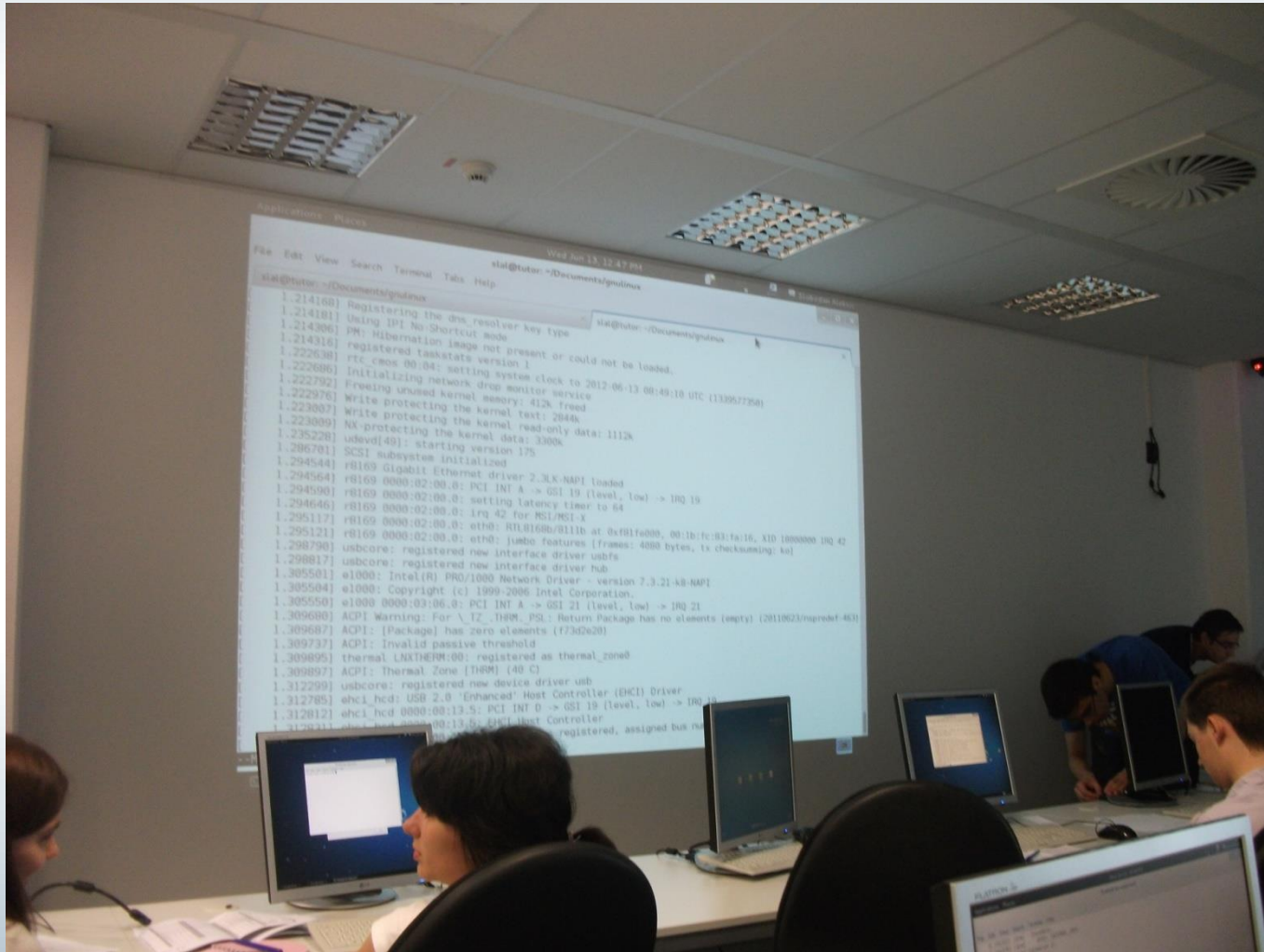
AM INSTALAT DIFERITE VERSIUNI DE LINUX...



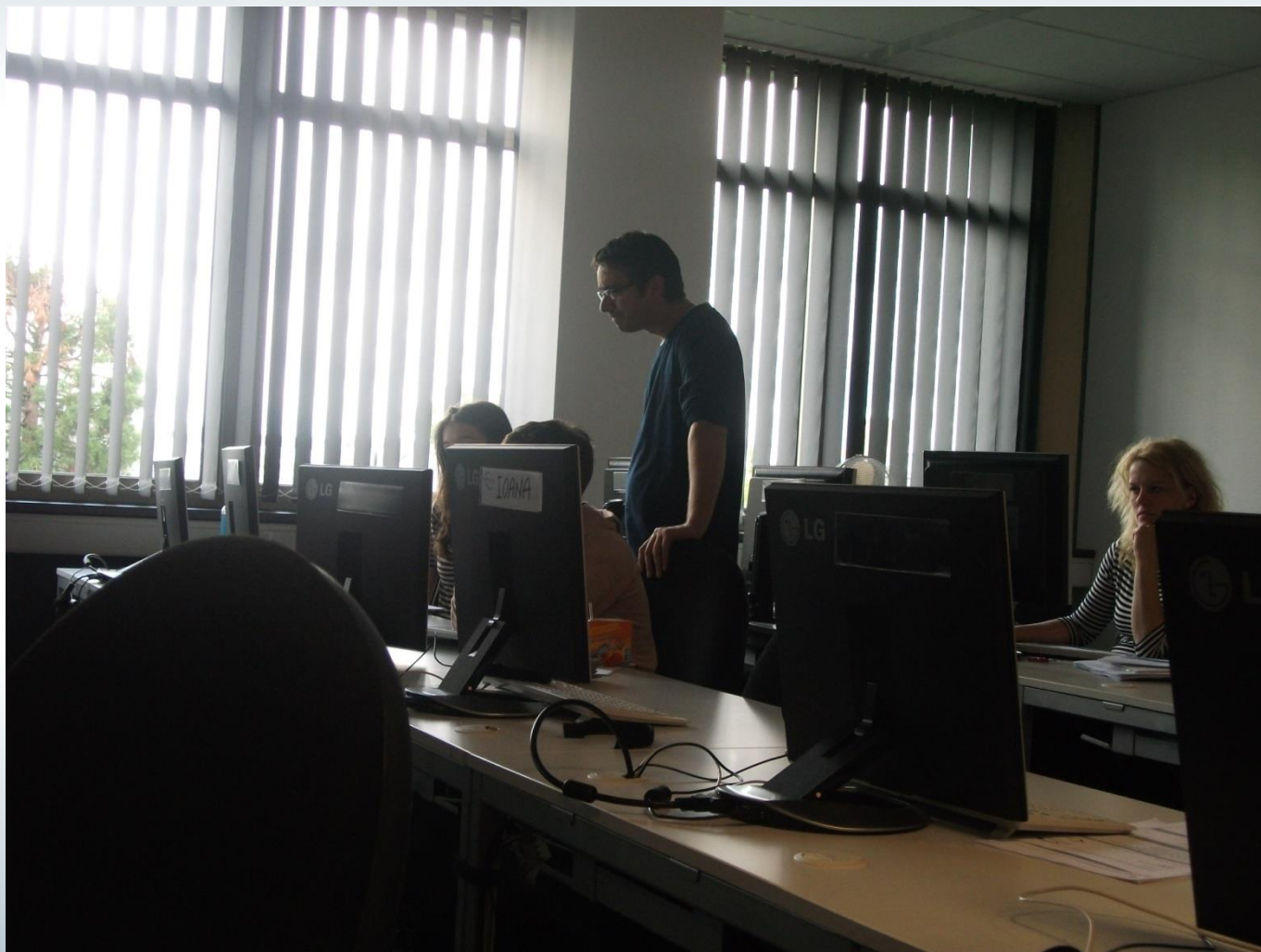
AM FOST VEDETE DE OCAZIE...



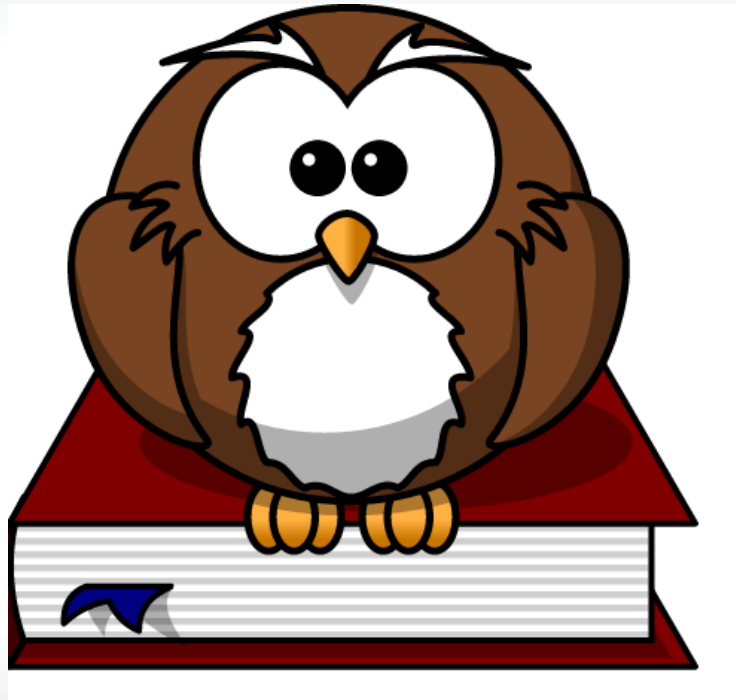
AM INVĂȚAT SĂ UTILIZĂM LINIA DE COMANDĂ. E SIMPLU! DOAR RÂNDUL ACESTA ȘI URMĂTORUL ȘI URMĂTORUL....



DAR NE-AM DESCURCAT CU PUȚIN AJUTOR ...



CUM S-A FINALIZAT STAGIUL?



AM REZUMAT TOT CEEA CE AM ÎNVĂȚAT SUB FORMA UNEI BROȘURI PENTRU UN VIITOR UTILIZATOR LINUX





Let's win LIN!

Summary

Chapter I – History of LINUX	3
Chapter II – Installation of LINUX	7
Chapter III – Basic Commands	11
Chapter IV – Programs	20
Chapter V – Networking	30
Chapter VI - LINUX vs. WINDOWS	39

CUPRINS

CAPITOLUL I – SCURT ISTORIC
AL LINUX

CAPITOLUL II – INSTALAREA
LINUX


CAPITOLUL III – COMENZI DE
BAZĂ

CAPITOLUL IV – PROGRAME

CAPITOLUL V – CONEXIUNI

CAPITOLUL VI – LINUX VS.
WINDOWS

CAPITOLUL I – SCURT ISTORIC



Let's win LIN!

Chapter I – History of LINUX

Whether you know or not what Linux is, or maybe you've even used it before, this will be your guide for discovering it, from what it is and the reason that stood behind its appearance to the possibility of changing and sharing it with your friends. Yes, we did say changing and sharing. Unlike other Operating Systems, Linux can be modified as you wish without breaking the law, but before we talk about this we should answer some basic questions, like...

What is this LINUX OS?

Chances are you've heard about Linux before reading this, but do you really know what it is? Linux isn't exactly an OS, it's just the kernel that makes the GNU/Linux OS functional.

Anyway, consider this GNU/Linux thing we're talking about a simple alternative to Windows. It was developed by hundreds of programmers who collaborated on the Internet. The thing is that behind this whole concept, there is an entire way of thinking based on a truly inspiring revolution for individual freedom.


This process began in the 1980's with the Free Software Movement and GNU project. And now it is most commonly associated with Linux and the Open Source Movement.

What is an OPERATING SYSTEM?

First we should clear up what an OS is. Basically, it is the main connection between us and the programs we wish to use. Sadiy, an operating system is not human so it does not have free will, it only waits for the programs to ask for certain resources and then to connect them to the outside world. Its purpose is to step in and make it easy for us to write programs.

What exactly does OPEN SOURCE mean?

Open Source refers to the philosophy of free redistribution and permission to change the parts of the product (software). One of consequences of Open Source movement in the technology field is that the users of a certain software or programs are able not only to discuss and collaborate, but also to contribute to it. Sacrificing the intellectual property rights and letting the



4

În spatele oricărei invenții stă o poveste. În cazul sistemului de operare Linux, se află povestea unei comunități revoluționare care a dorit să împartă succesele lor cu toți utilizatorii calculatorului – conceptul de *open source*.

CAPITOLUL II – INSTALAREA LINUX



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Chapter II – Installation of LINUX

Everyone uses at least one operating system. It sounds simple in the beginning because you think you know the basics of using a PC. You know how to use the keyboard and the mouse and you think it's enough before you copy an online installation guide and read the first page (Things aren't that simple as you thought, are they?)

You may laugh when you will see the right picture but that was exactly how I felt when I was for the first time put face to face with Linux content of which I just had heard.

When you thought that every step is followed by the next one by simply clicking "next" button you hit the first error. But you are not the only one who will face these problems. Let me tell you how I've managed to install Debian GNU/Linux. It didn't take an hour or two, it took almost a day but I wasn't discouraged.


I will show you step by step the instructions on how to install Debian GNU/Linux. First of all I was supposed to make sure my PC is configured to boot from CD/DVD. This meant I had to enter the BIOS setup. For some this might have been easy, but for me it wasn't. I had to reboot my system for at least 3 times before I could enter the setup. When I finally got there I had to make sure that the CD is the first booted driver so that the installation from the CD I have inserted will start. If the boot from the DVD is successful then you should see an image of Debian where you will see the following options: Install, Advanced options, Graphical Install and Help. Of course I pressed Install.

First I had to select the language for the installation process and for the menu. I chose English because I was already familiar with the commands. You have the freedom of choosing any other language give in the menu,



Primul obstacol pentru noul utilizator îl reprezintă instalarea sistemului de operare. În broșură este explicat procesul de instalare pas cu pas, pentru a fi nu doar urmat, ci și înțeles de viitorul utilizator.

CAPITOLUL III – COMENZI DE BAZĂ



Let's win LIN!

```
root@teodoracrasmareanu:/home/teodora# touch filename1
root@teodoracrasmareanu:/home/teodora# touch filename2
root@teodoracrasmareanu:/home/teodora# echo text1 > filename1
root@teodoracrasmareanu:/home/teodora# cat filename1
text1
root@teodoracrasmareanu:/home/teodora# echo text12 > filename1
root@teodoracrasmareanu:/home/teodora# cat filename1
text12
root@teodoracrasmareanu:/home/teodora# echo text13 >> filename1
root@teodoracrasmareanu:/home/teodora# cat filename1
text12
text13
root@teodoracrasmareanu:/home/teodora# mv filename1 filename2
root@teodoracrasmareanu:/home/teodora# cat filename2
text12
text13
```

The directories can be copied by using `cp -r /dir1/ /dir2/`. The command `pwd` shows the current directory.

```
root@teodoracrasmareanu:/home/teodora# pwd
/home/teodora
```

In order to change the directory, we have to use the command `cd`. For example, with `cd ~` we can change the directory to home, with `cd ..` we can go one directory up and with `cd /path/directory` we can change

Dupa instalare, utilizatorul poate accesa linia de comanda a sistemului pentru a efectua diferite operații precum : crearea de fișiere, copiere, căutări, etc.

Broșura conține un set de comenzi uzuale, împreună cu explicații suplimentare.

CAPITOLUL IV – PROGRAME



Let's win LIN!

You can adjust the lightness of a picture, as you can see in the example above, change the eye color, the size of a particular feature or you can simply draw anything you want, so if we consider this last matter, GIMP it's fun for kids too, so if you want your child to be quiet just leave him playing in GIMP.


Another great feature of this program is that you can export a picture in almost any format you want, including BMP, JPEG, PNG, GIF, and just like this, GIMP becomes a very easy way to change the format of a picture, adjusting it to your needs.

I could go on and on about this program because there's so much to say, but there's no point. I give you the chance to try GIMP and discover yourself the advantages brought by it.



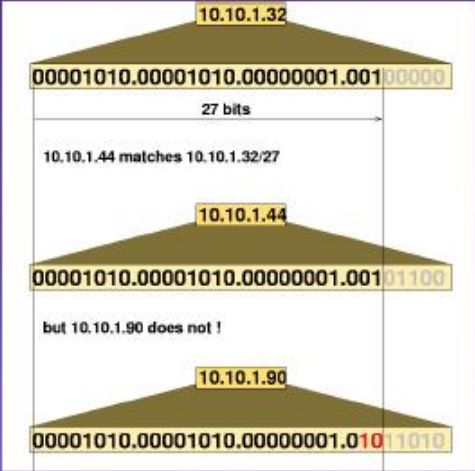
În următorul capitol sunt abordate cele mai utilizate programe, specifice sistemelor de operare Linux, precum: editor de text, editor de imagine, editor de prezentări, programe pentru calcul tabelar, etc.

CAPITOLUL V - CONEXIUNI

 **CIDR**

Let's win LIN!

Classless Inter-Domain Routing is a method for allocating IP addresses to different machines in the same network. All IPv4 addresses are structured like a.b.c.d/n. The a,b,c,d represent the standard decimals of the IP itself. However, n, represents how many binary digits have to form the so-called prefix. For example, in the picture we see 10.10.1.32/27, meaning 27 digits have to coincide in order to belong to the same network.




SSH

Secure Shell (SSH) is a network protocol for data communication between two networked computers, a server and a client, that it connects via a secure channel.

The best-known application of the protocol is accessing Unix-like operating systems. It was designed as a replacement for other insecure protocols, which send information, notably passwords, in plain text, making them easy to steal. The encryption used by SSH is intended to provide confidentiality and integrity of data over an unsecured network, such as the Internet.

SSH uses public-key cryptography to authenticate the remote computer. Anyone can produce a matching pair of different keys (public and private). The public key is placed



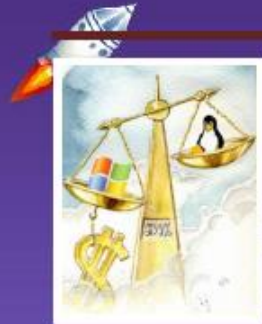
SSH!

DON'T GIVE AWAY YOUR PASSWORD TO ANYONE WHO MIGHT BE LISTENING!
Always use SSH (Secure Shell) when connecting to Computer Science Department hosts, instead of telnet or rsh. For more information:
<http://www.cs.umd.edu/faq/ssh.html>

Specifică oricărui calculator este posibilitatea de a se conecta la Internet, dar și la alte calculatoare. Capitolul V abordează modul de realizare a acestor conexiuni și problemele care ar putea apărea.

CAPITOLUL VI – LINUX VS. WINDOWS

Let's win LIN!



Advantages of using Linux

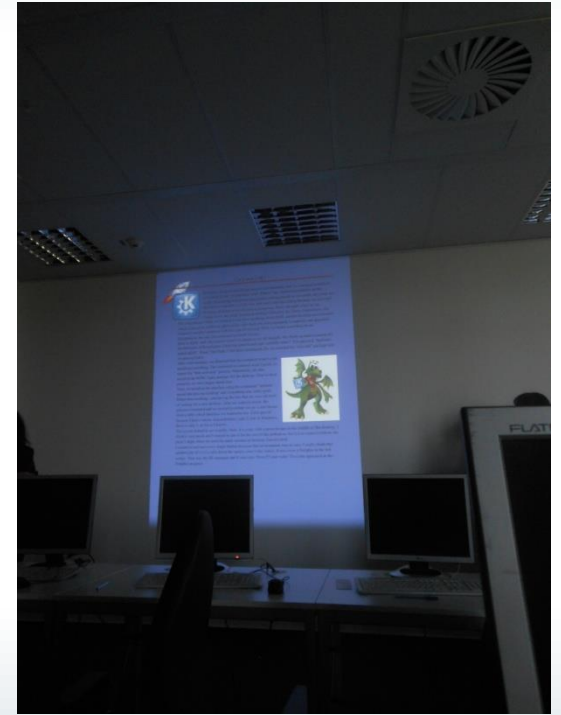
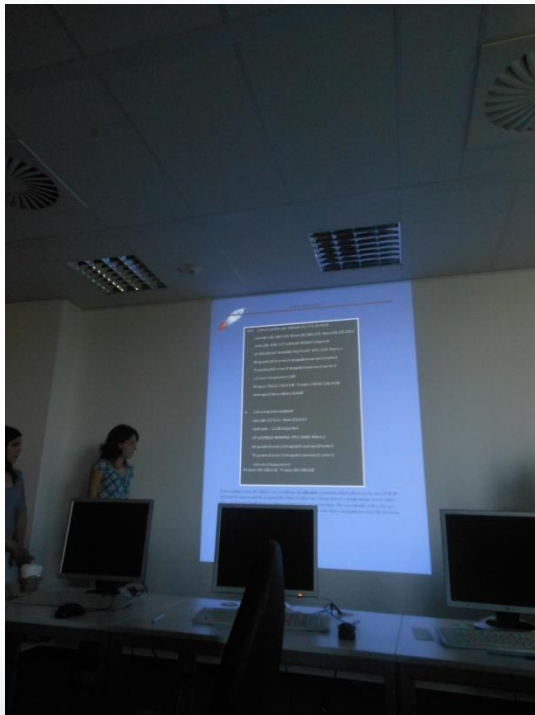
Although Linux it's not as popular with as many people as Windows, what makes users choose a completely new operating system? The answer is simple: it offers a certain series of advantages that cannot and will never be offered by Windows.

Below, you have a table of both advantages and disadvantages of using Linux instead of Windows.

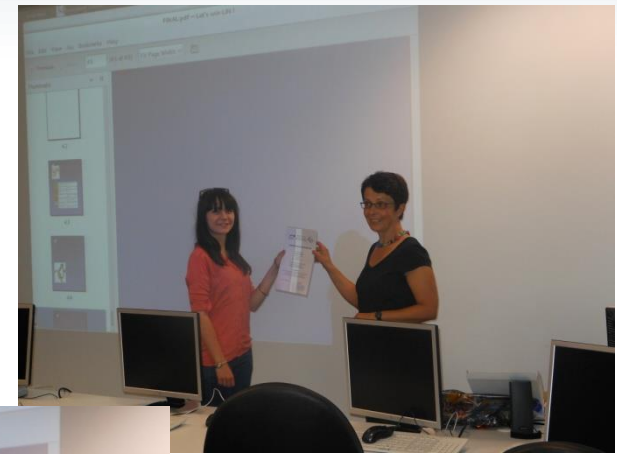
Topic	Linux	Windows
Open Source	Linux operating systems allow users to read and modify the source code.	Users are not allowed to enter the source code.
Price	Most versions of Linux are and will remain free.	Microsoft Windows' license costs around 100\$.
Ease	In order to efficiently use Linux, the user must know the basic commands.	For a new user, Windows is still the easiest choice.
Security	Linux is and has always been a very secure system.	Most viruses, malware and other dangerous programs are designed for Windows OS.
Hardware	Most companies don't include Linux support for their devices.	Because it is the most popular, all the companies make their devices compatible with Windows.
Support	Support is given by a large community of users, but sometimes it can be very slow.	Windows has its own help but it can also provide paid but fast support.
Flexibility	The user can configure the system to his own needs.	In Windows you are stuck with what they think it's good for you.

Capitolul final abordează o problemă delicată: de ce Linux, când există Windows? Comparația se realizează din mai multe puncte de vedere, precum ușurința utilizării, preț, securitate, suport. Concluzia? Argumentele forte precum gratuitatea, posibilitatea de a modifica însuși sistemul de operare în funcție de preferințe și securitatea maximă au decis : LINUX WINS!

BROȘURA A FOST PREZENTATĂ TUTORELUI GERMAN...



IAR MUNCA NOASTRĂ A FOST RASPLĂTITĂ !



„A FOST UN TIMP FRUMOS CU
VOI 😊 !”

