C++

Session #2

#2

- Tools
  - Linux
  - Git
  - G++
- Environment setup

Linux

The testing environment is running under ubuntu server 17.10 x86_64.

This is a very small computer with limited resources and since you are a quite a lot, I don’t have time to take care about security issues. For this reason I will ask you to be careful with what you are sending on it.

Make sure you are running the similar version!

Linux

If anyone tries to make me run some malicious code, he/she will be granted with a total **failure** of this module (Your final score will be capped to 50/100 whatever you do or how much you complain).

Linux

- Command line
- Shell script
- SSH
- Make

Linux

FEW companies are NOT using linux to run their applications. If you have never used it, I highly encourage you to start as soon as possible.

Linux

- Virtual Machine (VM)
  - Your computer needs at least 2GB Ram if you run the desktop
  - You can clone the system
- Dua Boot
  - Faster
  - Try to not break the system

Linux

- Terminal
  - CD -> change directory
  - LS -> list directory
  - PWD -> current path
  - SSH -> secure shell
  - NANO/VIM/GEANY -> text editors

Linux

Are there any good IDE on Linux?

Linux

Yes, a lot

Linux

Should I use it?

Linux

No.

Git

Your exercices won’t be checked manually simply because it takes too much time. Everytime an assignment is given, you will have to submit it to my server.

The default score for a late or unsubmitted assignment is **0/100**.

Git

How to use it:

- GIT CLONE -> copy a repository
- GIT COMMIT -> commit changes
- GIT PULL -> retrieve changes from a remote location
- GIT PUSH -> send changes to a remote location

Git

If your system doesn’t have it, simply run the command

$> sudo apt-get install git

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Git

Since you have to push your work to a remote location on a git repository, you will have to do it on:

https://home.tuxlinuxien.com:9999/

(accept the security warning)

Git

Before creating a project you will have to create an account wish will be your **student id** as **username**.

Any username that doesn't match will be DELETE including your projects.

G++

The GNU Compiler Collection is a compiler system produced by the GNU Project supporting various programming languages. GCC is a key component of the GNU toolchain and the standard compiler for most Unix-like operating systems.

G++

If you can’t run this command on your system, then run the command:

$> sudo apt-get install g++

G++

G++ will parse your source code to generate a binary file. You can do this operation like this:

```
$> g++ filename.cpp -o outputfile
```

Then

```
$> ./outputfile
```

G++

Explaining how g++ works is a totally different topic that we can’t fully cover, if you want to get more details, look for it on Internet or run:

$> man g++

There are nearly 22K lines of documentation.