# Week 2: Command Line Interface

Nowadays most of the people thinks noone use CLI, except the hackers in movies. [http://hackertyper.com/] But the truth is, they underestimate this hidden power...

### Monday

#### The Command Line

Title	Duration
What is CLI?	7:11
Why do we use CLI?	reading 3 mins

#### Basic commands

Title	Duration	
Command line tricks	7:47	
Most important commands	reading 4 mins	

### Self assessment

Write a few sentences to answer the following questions.

- What does the following command do?
  - O pwd prints the current directory/path on Unix. print working directory
  - o Cd On Windows, cd alone prints the current directory, but on Unix cd alone returns the user to his home directory.
  - cp copies a file or folder. Below is an example where we copy index.html and name the new file to about.html. cp index.html about.html
  - O mv moves a particular file to a folder. mv tech.css /sid
  - Is / dir used to display a list of the files and subfolders contained in a folder. Is: Unix, dir: windows.
- How can I get the previous command? With the up-arrow key
- Which key need for auto complete names? TAB
- What is your root folder? C:\Users\Andris>
   The first directory in the filesystem is the root directory. It is the parent of all other directories and files in the filesystem.

# Tuesday

Go deeper in commands and speed up your typing speed and moving

Title	Duration	
Using command line	20:23	
Relative and Absolute path	9:27	
Command help	3:29	
Typing basics	reading 4 mins	
How to increase typing speed	reading 5 mins	
Typing practice	-	

### Self assessment

Write a few sentences to answer the following questions.

- What are the 8 base character? (home row, 8th depends on layout) ASDF|JKLÉ(;)
- What does the man command? is the interface used to view the system's reference manuals.
- What does the cat command? it's used to see what's in a file. cat file1.txt
- What does the touch command? creates a new file. touch file1.txt
- What does the *mkdir* command? makes a new directory. *mkdir dir1*
- What does the rm command? it's used to delete files. rm file1.txt
- What does the *rmdir* command? it's used to delete directories. *rmdie dir2*

## Wednesday

Practice, practice, practice

Title	Duration
Command line practice	-
Typing practice	-

#### Self assessment

```
practice
config
settings.ini
out
a.out
source
hello_world.cpp
```

- Imagine the directory structure above
- You are in the practice folder.
  - Move the a.out file next to hello\_world.cpp!
  - O What command do you need to type in? mv config/out/a.out config/out/source/
- You are in the config folder.
  - Delete the hello\_world.cpp!
  - What command do you need to type in? rm /out/source/hello\_world.cpp

### Optional

If you want to learn how to type blindly or practice more directly

Title	Duration
Type home keys	-
Type top keys	_
Type bottom keys	-
Type punctuation keys	-

## Thursday

Some fun and stuff in command line

Title	Duration
<u>Linux</u>	reading 10 mins
Mac	reading 4 mins
<u>Windows</u>	reading 6 mins
Bonus: We can browse on the web in command line	reading 4 mins

### Self Assessment

We believe being able to assess how well You know something and what is left for You to learn is the foundation of being good in any profession. And this is especially true for software development, where we need to constantly keep up with new technologies and concepts. Also, this is a prerequisite for self driven learning. Here are some questions to help You get a gauge on how well You know this part:

- What is Your current typing speed? In hungarian it's pretty fast, 78 WPM but in english it's much slower, 45 WPM.
  - How does this compare to an average coder's? I think it's worse than an average coder's result.
- Do You feel awkward typing some things? (e.g.: special characters like '\$' or punctuation like ';') Which ones?
   Yes, special characters: ~ <> {};
- If You don't know how to operate a given command, how would You find out? see what it does.
  - o What if You don't have access to the internet? I'd use man and/or I'd ask for help my teammates.
- What is the relative path of a folder where You are standing right now in CLI? relative path specifies a file's or folder's location relatively to current directory

- What is the absolute path of it? absolute path specifies the entire path through directory hierarchy, starting at the root directory
  - If You don't know that by heart, how could You find out? (Can You name 2 different solutions to this?) pwd
- Let's say, You want to gather all the doc files from the three levels of folders beneath where You are into a single folder. How would You do that?
- If You wanted to gather all doc files from beneath the folder You are at not just three levels, but everything how would You do that?