

WEB DEV SEMINAR

DAY 01 - UNIX ENVIRONMENTS



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This day is tested by the autograder!

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Intranet and Manifesto

Using the intranet, register for all of the week's activities.

Now, take a moment to read the document given alongside this one: "the manifesto", to understand **our values**.

Discovering your environment

First, take some time to discover your working environment (keywords, commands,...) Then learn how to lock your workstation, it might prove very useful.



Create a directory named delivery in your home directory's root.
Within that directory, create another one named task01, which will contain:

- ✓ an empty file named test01 with the default permissions,
- ✓ a file named test02 containing "If you don't struggle, you don't improve.". Everyone must have the rights to read and execute this file, but only you can write in it,
- \checkmark a symbolic link (symlink) named test03, which is a reference to test02.



Read the **In** man carefully!





Create a file delivery/task02/z, which displays the character 'Z' followed by a line feed (#cr) when the binary cat is used to read it:





Write in delivery/task03/midLS, a command that lists the current repository's files and directories (without hidden files, ellipses, or files starting with a dot) sorted alphabetically.

Files and directories should be separated by commas and directories must end with a slash.



Add execution permission to everyone



Access your repositories - git and github

From this point onwards, all your projects will have to be turned-in in a Github repositories.

Github repositores are simply **git repositories** hosted on github.com.

So first, create an account on github.com using your Epitech email address.



If you already have a GitHub account, you can simply add your Epitech's email address to the list of emails linked to your account.

On GitHub, all your Epitech's projects will be grouped in an organization. If you check your emails, you should already have been invited to the Epitech organizations for your promotion. Accept this invitation using the link in the mail.



If you've not received an invitation email, contact your local pedagogical team about it.

Okay, now you're in the organization. And for this first time, you're even now part of a team of this organizations which give you access to the repository to delivery today's work.



From now on, for every project, you will be given access to a group on the GitHub organization and thus have access to the project's dedicated repository.

Now generate an ssh key named id_rsa and add it to yout GitHub account. This key will allow you to authenticate with github (and thus accessing your repositories) via your terminal.

One last thing: be sure to authorize the previously added ssh key for use with single sign-on on GitHub.com.



For more information, see the document "How to turn-in" on the intranet (here).



Do a delivery - Clone a repository and push your work

Now, it is time to check if the previous part really works. To do so, we are going to clone the repository for todays tasks.

The repository is available for git at the following address:

git@github.com:EpitechMscPromospromotionyear/T-WEB-500-\$city-5-1-webpoold01-\$leader.git

Where \$PROMOTIONYEAR stands for your current promotion year (2025 for the 2022/2023 academic year), \$CITY is a three letter code indicating your city and \$LEADER is the name of the project group leader (for the pool, you're alone: you are the leader).



You can check on the organization page of GitHub to see the list of all the repositories you have access to.

From a repository webpage, you can click on the "Code" button to have access to the repository link (to clone it using SSH).

If it worked, you should have a result similar to:

Terminal

T-WEB-500> git clone git@github.com:EpitechMscProPromo2025/T-WEB-500-STG-5-1-webpoold01-jointo 'T-WEB-500-STG-5-1-webpoold01-jonathan1.nau'...

warning: You appear to have cloned an empty repository.

Checking connectivity... done

Now, You have to move all task directories (previously created) into the repository of the day. Then, you have to inform "git" of your wish to **add** these files.

After that, you have to **commit** a new local revision which contains all these modifications. Finally, you have to **push** this revision to the remote server.

From now on, commit and push at the end of each task.



Make sure that the file permissions have not been altered during the copy/move.



Have you read the document on the intranet already?



Write a file named mr_clean - stored at the root of the repository of the day - a command to find and delete every file from the current directory and all subdirectories which end by " or which start **and** end by #.

Give execution rights to the owner of the file.



Only one command is allowed (no ";", neither "&&" or anything...)



Read carefully the manual of find





Write a shell script (using bash as shell) named push_that.sh at the root of your repository. The script must add all of the current folder's files and push them to the repository.

The script must take a commit message as parameter and should be able to handle simple problems and still push your files.



having trouble figuring out how to retrive parameters? man bash.



Where you're writing a script, dont't forget the **shebang**! Don't forget to give execution right to shell scripts as well!



Don't use this script if you share a repository with other people.



Reproduce the folders structure displayed below.

```
Terminal
  WEB-500> tree -FQ task06 | head -n 32
"task06"/
 -- "1910s"/
    |-- "1911" -> "../Solvay Conferences on Physics/The theory of radiation and quanta"/ '-- "1913" -> "../Solvay Conferences on Physics/The structure of matter"/
   "1920s"/
    |-- "1921" -> "../Solvay Conferences on Physics/Atoms and electrons"/
    |-- "1924" -> "../Solvay Conferences on Physics/Electric conductivity of metals and
   related problems"/
    '-- "1927" -> "../Solvay Conferences on Physics/Electrons and photons"/
  - "1930s"/
    |-- "1930" -> "../Solvay Conferences on Physics/Magnetism"/
    |-- "1931" -> "../Solvay Conferences on Chemistry/Constitution and Configuration of
   Organic Molecules"/
    \mid -- "1934" -> "../Solvay Conferences on Chemistry/Oxygen, and its chemical and
   biological reactions"/
    '-- "1937" -> "../Solvay Conferences on Chemistry/Vitamins and Hormones"/
 -- "1940s"/
    '-- "1947" -> "../Solvay Conferences on Chemistry/Isotopes"/
 -- "1950s"/
-- "Professors"/
    |-- "Frederic Swarts"
    |-- "Hendrik Lorentz"
    |-- "Paul Karrer"
    |-- "Paul Langevin"
    '-- "William Jackson Pope"
    "Solvay Conferences on Chemistry"/
    |-- "Constitution and Configuration of Organic Molecules"/
        '-- "chair" -> "../../Professors/William Jackson Pope"
    |-- "Isotopes"/
        |-- "chair" -> "../../Professors/Paul Karrer"
        '-- "participants"/
    |-- "Oxygen, and its chemical and biological reactions"/
        '-- "chair" -> "../../Professors/William Jackson Pope"
    '-- "Vitamins and Hormones"/
        '-- "chair" -> "../../Professors/Frederic Swarts"
```



```
Terminal
           tree -FQ task06 | tail -n 24
'-- "Solvay Conferences on Physics"/
    |-- "Atoms and electrons"/
        '-- "chair" -> "../../Professors/Hendrik Lorentz"
    -- "Electric conductivity of metals and related problems"/
        '-- "chair" -> "../../Professors/Hendrik Lorentz"
     -- "Electrons and photons"/
        |-- "chair" -> "../../Professors/Hendrik Lorentz"
        '-- "participants"/
            |-- "A. Einstein"
            |-- "E. Schrodinger"
            |-- "H.A. Lorentz"
            |-- "M. Planck"
            |-- "M. Sklodowska-Curie"
            |-- "N. Bohr"
            |-- "W. Heisenberg"
            '-- "W.L. Bragg"
    |-- "Magnetism"/
        '-- "chair" -> "../../Professors/Paul Langevin"
      "The structure of matter"/
        '-- "chair" -> "../../Professors/Hendrik Lorentz"
    '-- "The theory of radiation and quanta"/
        '-- "chair" -> "../../Professors/Hendrik Lorentz"
30 directories, 23 files
```



Git handles empty directories differently.





Create a compressed (with Gzip) tarball of the content of the previous task's directory.

Delivery: task07/task06.tgz



man tar





