04. Verziókövetés, Git

Elmélet

Version control, Git



- Track changes in a set of files
- Coordinating work among developers
- Who made what changes and when
- Revert back at any time
- Local and remote repos
- Take snapshots of files by making a commit

Install

sudo apt install git

Basic commands

```
git init  # Initialize local git repo
git add <file> # Add file/files to staging area
git status  # Check status of working tree and staging area
git commit -m "What I've done"  # Commit changes in index
git push  # Push to remote repository
git pull  # Pull latest changes from remote repo
git branch <new_branch_name>
git checkout <brack the branch into the current branch
git config --global user.name "Istvan Szabo"
git config --global user.email "istvan.szabo@gmail.com"
```

```
!!! tip
   **Personal token megjegyzése:** `git config --global credential.helper store`

!!! tip
   **Windows és Linux óra probléma megoldása:** `timedatectl set-local-rtc 1 --adjust-system-clock`
```

GitHub



```
git remote
git clone <link> # Copy repo into a new directory

# Add remote to repository:
git remote add origin <link>
git push -u origin master
```



Some alternatives to GitHub

GitLab, BitBucket, Launchpad, Phabricator

Markdown

- Markup language, easy to read
- Text file \rightarrow Formatted document
- Widespread usag, e.g., blogs, forums, documentations, readme files, GitHub
- Markdown Cheatsheet

Gyakorlat

0: GitHub repo létrehozása

- 1. Inicializáljunk egy lokális git repo-t a ros-course package-ben.
- 2. Regisztráljunk GitHub-ra, majd hozzunk létre egy private repo-t a ros_course package számára. Állítsuk be a local repo-ban a remote-ot, majd push-oljuk a package tartalmát.