13. tétel **Git** and **GitHub**

I would like to introduce mysaelf. My name is ……. I am a Manager of a software developing company. Your teacher asked me to present you the Git version control system and the GitHub.

**Git** is a **version control system** for **tracking changes** in computer files and **coordinating work** on files. It is primarily used for **source code management** (forráskód kezelés) in software development, but it can be used to keep track of changes (változások nyomonkövetése) in any set of files. All programs are stored in binary files, it can be converted to text files, and text files are stored in a form (usually ASCII) that is human-readable. As a distributed (osztott) revision control system **it is aimed at speed** (a sebességre épül), **data integrity, and support for distributed, non-linear workflows** (támogatja az osztott nem egyenes irányú munkafolyamatokat).

If you make an **open source project** and it has been finished, you can share it with other developers. In this case, you have to **choose a project hosting system.** (tárhely szolgáltató**)** There are many of them but the well-known is the **GitHub.** **The GitHub is a so-called HTML interface to the Git. The GitHub is a web-based Git version control repository hosting service.** It offers **all of the distributed version control** and **source code management** **functionality of Git**. The Git can store different versions of the project, it can keep track of changes and **share the project with other developers.**

**(Könnyebb összefoglalás:)**

Every project has a project administrator. If you want to work on a project, you do not need to download it because the Git clones the project in your local repository from the central repository. In this case, you have to use the ‘commit’ command. In this local repository the developer does what he wants with the project.

The Git:

- can keep track of changes when our directory has changed,

-can reset any previous state of the directory

-can synchronize with a similar directory on another computer.

Let’s see how the GitHub works. If you use Windows operational system, you have to download a GitHub client. This is a small program. With some clicks, this client program creates a local repository in a folder on your computer. After, you can work in this folder and when you finish the project and you want to upload it, you have to send a pull-request to the project administrator. This is a system message in which the developer describes the changes of the project. If the administrator agrees the changes, he will pull the project in his repository.

If you want to use the GitHub, you have to register on the GitHub website. After you upload your project, you can create a nice webpage for it on the admin’s page. This page content is stored in ‘git extension’, therefore any registered users can use it.