



Version Control: git

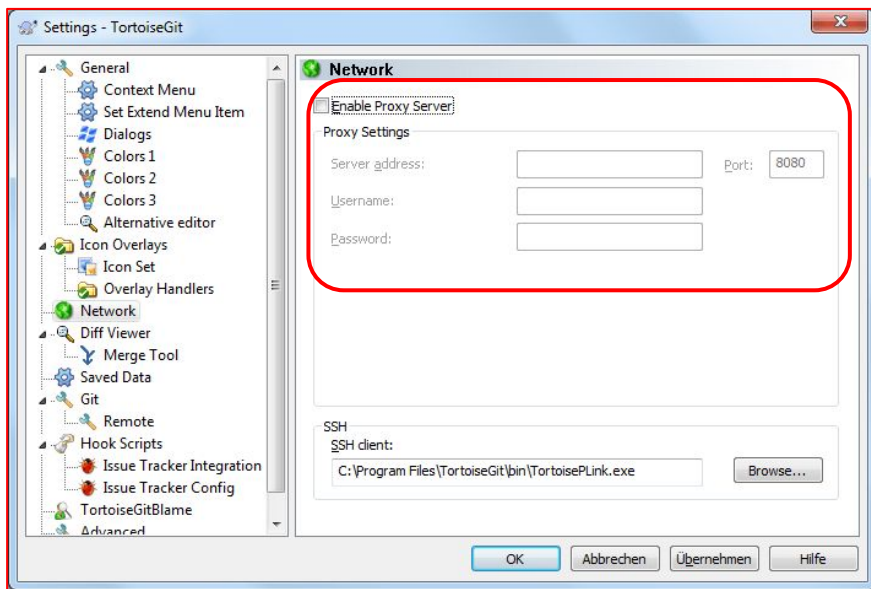
Outline

Today:

- git knowledge test (12 questions, 10 minutes)
- cool features of github.com
- working with remote: clone, push and pull

proxy setup: TortoiseGit -> Settings->Network

If you tried and FAILED to clone a remote repository on github.com, you need to setup proxy



- Check “Enable Proxy Server button”
- Server address: proxydid.cardano.pv.it
- Port: 8080
- Username: your school username
- Password: your school password

Why github is so popular?

1. Hosts many open source projects:

Currently trending repos (can filter by language)

<https://github.com/trending>

Javascript frameworks: AngularJS is here

<https://github.com/showcases/front-end-javascript-frameworks>

Just a page for cool repos (including Swift by Apple)

<https://github.com/showcases>

Why github is so popular?

2. You can browse your project files. Git also provides syntax highlighting for more than 200 programming languages.

Why github is so popular?

3. It's very easy to continuously work on the larger projects using:

- issues - **problems** with your code
- labels - tells **type** of the problem
- milestones - sets **deadlines** for the problems

Why github is so popular?

4. You can create and join organizations:

- teamwork
- regulate permissions
- have different member roles:
owner, billing manager, team maintainer, and so on

Great for start ups!

Creating a new empty repository

The screenshot shows the GitHub homepage for user **dmukusheva**. The top navigation bar includes the GitHub logo, a search bar, and links for Pull requests, Issues, and Gist. The main feed displays recent activity, including pushes to master, file creations, and issue closures. A notification banner at the top right announces a new look for repositories. The right sidebar, titled 'Repositories you contribute to', lists several repositories. Below this, the 'Your repositories' section shows a list of repositories, with the '+ New repository' button highlighted by a red box.

Search GitHub

Pull requests Issues Gist

dmukusheva

4 days ago
kathrynsiegel pushed to master at kathrynsiegel/hknportal
8b1f97a fix officer register method

5 days ago
Sitsa pushed to master at dmukusheva/GTL5CI
46b383f Created file "Sviatoslav.txt" following instructions in exercise num...

ProbablyMat starred dmukusheva/GTL5AI 6 days ago

12 days ago
kathrynsiegel closed issue kathrynsiegel/hknportal#31
Move "Add Eligibles" and "Batch add eligibles" into new page

LyndaT deleted branch revert-35-master at kathrynsiegel/hknportal 12 days ago

LyndaT created branch revert-35-master at kathrynsiegel/hknportal 12 days ago

A new look for repositories
The new design improves navigation and simplifies page layout, all while improving the code and performance under the hood.
View 52 new broadcasts

Repositories you contribute to

Zulzaga/6.830_final_project	0 ★
MIT-DB-Class/homework-solns...	0 ★
armanrahman22/mmdxJS	1 ★
jfgm/kiwi	1 ★
saadiyahrPrivate/LDLWebApp	0 ★

Your repositories 25

+ New repository

Find a repository...

All Public Private Sources Forks

test

- Go to github.com
- Sign In
- On the right panel, select "New Repository"

Creating a new empty repository

Create a new repository

A repository contains all the files for your project, including the revision history.

Owner

Repository name



dmukusheva ▾

/

Great repository names are short and memorable. Need inspiration? How about **redesigned-train**.

Description (optional)



Public

Anyone can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

☐ Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: **None** ▾

Add a license: **None** ▾



Create repository

- Choose a repo name
- Put a good description
- Choose "Public"
(you have to pay for "Private")
- Choose
Initialize ... with a README
- Create repository!

Creating a new empty repository

You can **clone** your own repository and start working on your project!

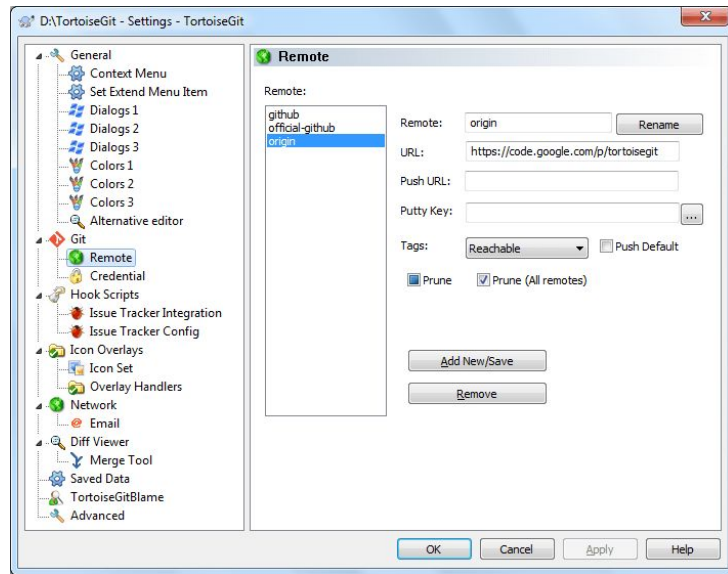
But what if you have a local repo with existing project and want to upload it on github?

Uploading an existing repository to github

- On github.com create a new repository as was described in previous slides.
- Copy its url:
`https://github.com/username/reponame.git`
- DO NOT CLONE IT YET!

Uploading an existing repository to github

- In your local repository, choose:
TortoiseGit -> Settings
- Select Git->Remote
- As URL, insert a URL of your github.com repo address
- Click on "Add/Save"
- Apply->Ok
- Now you can push it!



Exercise 4 (from last week)

- Create a new folder, name it “remote_repo”
- Use “Git Clone” option and specify the URL:
<https://github.com/dmukusheva/GTL5BI.git>
- In your copy of the repo, create a new file, name is with **your** name: e.g., *dana.txt*. Write something inside.
- Add, commit and push your changes.
- Once everybody is finished, pull the changes.

Exercise 5

- Create a local repo on your computer.
- Add and commit a new file.
- On github.com, create a new repository.
- Upload your local repository to a github repository by setting a remote in your local repo settings.
- If you have time, try creating new issues, labels for them and milestones.