

Work case №1

Git and Github

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Git is a free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Git — це безкоштовна розподілена система контролю версій із відкритим вихідним кодом, призначена для швидкої та ефективної обробки будь-яких проектів, від малих до дуже великих.



git

Day-to-day work

`git status`

Displays the status of your working directory. Options include new, staged, and modified files. It will retrieve branch name, current commit identifier, and changes pending commit.

`git add [file]`

Add a file to the **staging** area. Use. in place of the full file path to add all changed files from the **current directory** down into the **directory tree**.

`git diff [file]`

Show changes between **working directory** and **staging area**.

`git diff --staged [file]`

Shows any changes between the **staging area** and the **repository**.

`git checkout -- [file]`

Discard changes in **working directory**. This operation is **unrecoverable**.

`git reset [<path> ...]`

Revert some paths in the index (or the whole index) to their state in **HEAD**.

`git commit`

Create a new commit from changes added to the **staging area**. The **commit** must have a message!

Synchronizing repositories

```
git fetch [remote]
```

Fetch changes from the **remote**, but not update tracking branches.

```
git fetch --prune  
[remote]
```

Delete remote Refs that were removed from the **remote** repository.

```
git pull [remote]
```

Fetch changes from the **remote** and merge current branch with its upstream.

```
git push [--tags]  
[remote]
```

Push local changes to the **remote**. Use **--tags** to push tags.

```
git push -u [remote]  
[branch]
```

Push local branch to **remote** repository. Set its copy as an upstream.

Git branching model

`git branch [-a]`

List all local branches in repository. With `-a`: show all branches (with remote).

`git branch [branch_name]`

Create new branch, referencing the current **HEAD**.

`git rebase [branch_name]`

Apply commits of the current working branch and apply them to the **HEAD** of [branch] to make the history of your branch more linear.

`git checkout [-b]
[branch_name]`

Switch working directory to the specified branch. With `-b`: Git will create the specified branch if it does not exist.

`git merge [branch_name]`

Join specified [branch_name] branch into your current branch (the one you are on currently).

`git branch -d [branch_name]`

Remove selected branch, if it is already merged into any other. `-D` instead of `-d` forces deletion.



GITHUB

Github - GitHub is a web-based platform used for version control and collaboration using Git. It allows developers to work together on projects in an organized manner. With GitHub, users can create repositories, manage branches, and commit changes, facilitating seamless collaboration among team members. It provides a comprehensive interface for code review, issue tracking, and integration with other tools, making it a versatile and essential platform for software development.

Vlad Dovbeshko

The screenshot shows the 'Who has access' section of a GitHub repository. It includes two main sections: 'PUBLIC REPOSITORY' and 'DIRECT ACCESS'. The 'DIRECT ACCESS' section indicates that 2 people have access. Below this, the 'Manage access' interface is shown, featuring a search bar, a 'Select all' checkbox, and a 'Type' dropdown. Two collaborators are listed: 'vladosyk228' and 'Tyoma'. Each collaborator entry includes a checkbox, a 'Remove' button, and a small profile picture.

PUBLIC REPOSITORY

DIRECT ACCESS

This repository is public and visible to anyone.

2 have access to this repository. [2 collaborators](#)

Manage

Add people

Select all

Type ▾

Find a collaborator...

vladosyk228
Collaborator

Tyoma
ZAKHAROV-Artem • Collaborator

Remove

Remove

< Previous Next >

Скріншот редакторів репозиторію на GITHUB

The screenshot shows a GitHub repository page for the repository 'BANANCHIKI'. The 'Code' tab is selected, indicated by a green background. The main content area displays a single commit from 'Nikitanskiy' titled 'Update README.md'. The commit message is 'Update README.md' and it was pushed 'now'. The file 'README' is shown with the content 'HELLO'. The repository statistics on the right show 13 commits, 0 stars, 1 watching, and 0 forks. The 'About' section indicates no description, website, or topics are provided.

BANANCHIKI Public

Unpin Unwatch 1 Fork 0 Star 0

main 2 Branches 0 Tags Go to file Add file Code

Nikitanskiy Update README.md 38c06eb · now 13 Commits

README.md Update README.md now

README

HELLO

About

No description, website, or topics provided.

Readme Activity 0 stars 1 watching 0 forks

Releases

No releases published Create a new release

Packages

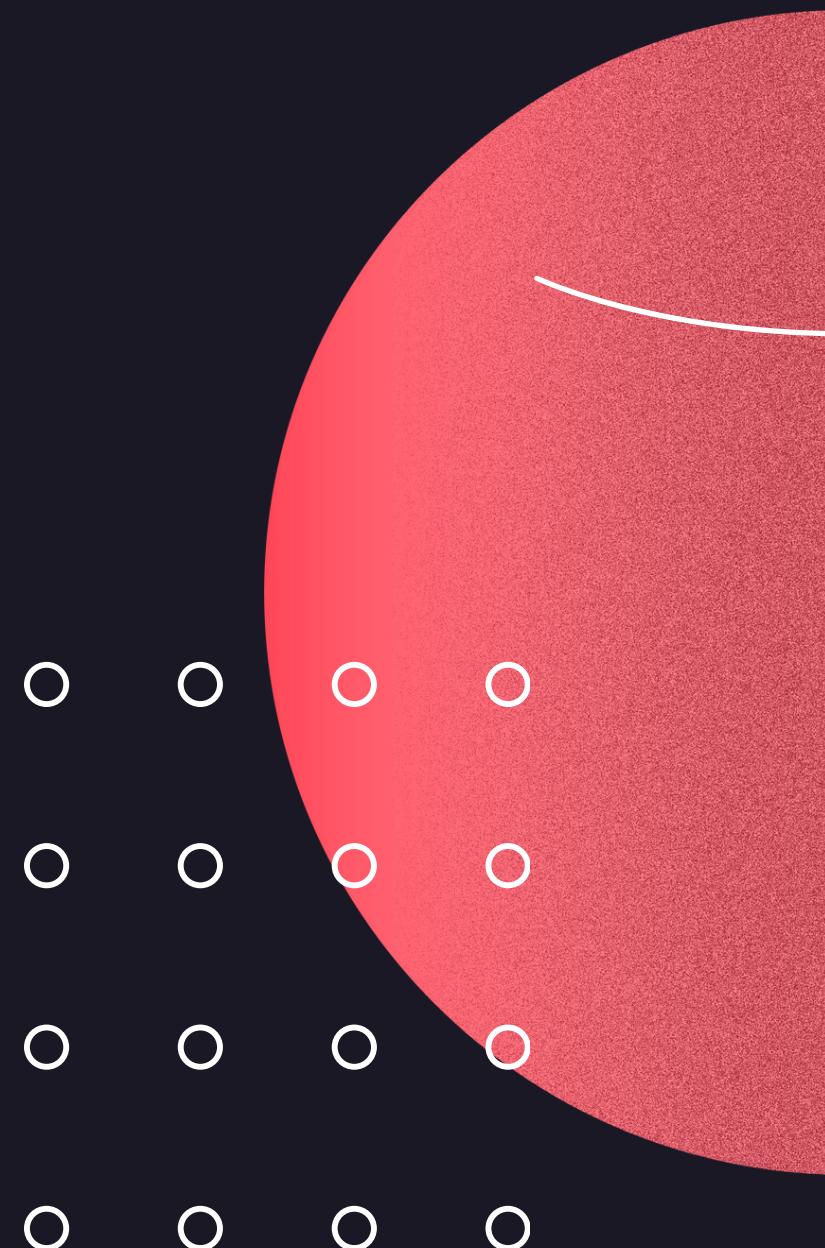
No packages published Publish your first package

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Скріншот вкладки Code в репозиторії

Nikita Yakovenko

Commit Комміт



Комміт - це збережений стан вашого проекту.
Комміт на який вказує HEAD в момент створення
нового комміта стає його батьком. Таким чином
утворюється поняття "історія коммітів".

Nikita Yakovenko

Commit History

The screenshot shows a GitHub repository interface with the following details:

- Repository:** ZAKHAROV-Artem / portfolio
- Branch:** main
- Search Bar:** Type ⌘ to search
- Navigation:** Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, Settings
- Commits:** All users, All time

The commit history is as follows:

- chgs: incorrect age on about me page** (83e94c3) - Committed on Jan 16, 2024 by ZAKHAROV-Artem. Message: "chgs: incorrect age on about me page".
- feat: Analytics and SpeedInsights** (9fa4e1d) - Committed on Jan 5, 2024 by ZAKHAROV-Artem. Message: "feat: Analytics and SpeedInsights".
- fix:email sending** (0b50861) - Committed on Jan 2, 2024 by ZAKHAROV-Artem. Message: "fix:email sending".
- feat: SEO things** (5adabc0) - Committed on Jan 2, 2024 by ZAKHAROV-Artem. Message: "feat: SEO things".
- feat(footer): current sond and social medias** (19133d3) - Committed on Jan 2, 2024 by ZAKHAROV-Artem. Message: "feat(footer): current sond and social medias".
- fix(project popover):undefined error** (b010517) - Committed on Jan 2, 2024 by ZAKHAROV-Artem. Message: "fix(project popover):undefined error".

Плюси GIT та github

Effective version control

Git and GitHub provide the ability to track code changes, view previous versions, and revert to previous project states at any time.

1

Wide integration possibilities

The Git versioning system, on which GitHub is based, allows you to track every change in the code, which makes working with projects more secure and controlled.

3

Collaboration and teamwork

GitHub allows developers to collaborate on projects, join forces, and solve problems with remote access to repositories.

2

Track changes

GitHub provides convenient tools for integration with other services, which helps automate routine tasks and expands functionality.

4

**Tyoma**

ZAKHAROV-Artem

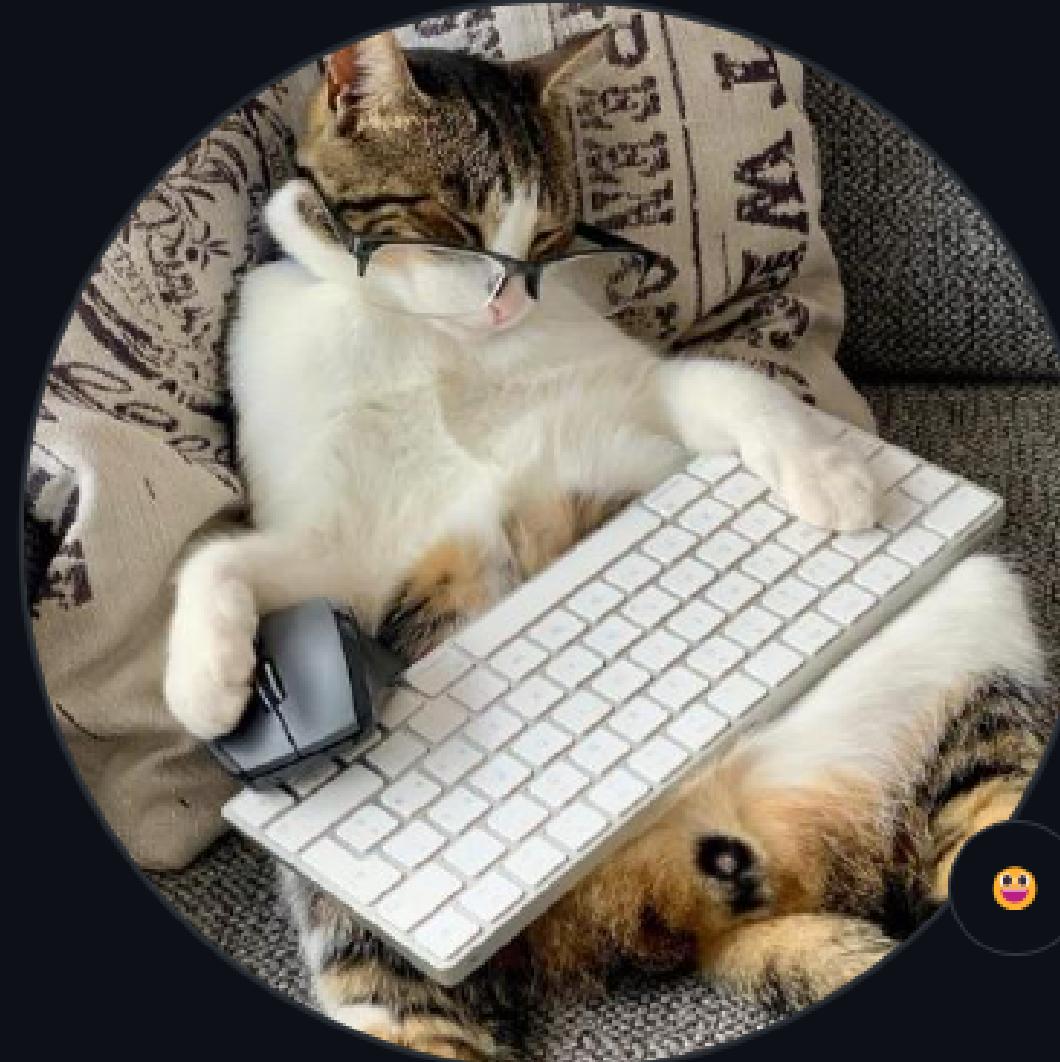
I'm just writing code

[Edit profile](#)

1 follower · 0 following

[Upwork](#)[Cracow](#)

10:09 (UTC +01:00)

<https://zakharov-artem.vercel.app/>[in/artem-zakharov-6b94b6251](#)[zakharov_artem_](#)**Nikita YAKOVENKO**

Nikiitanskiy

[Follow](#)

3 followers · 4 following

**Vlad Dovbeshko**

vladosyk228

[Edit profile](#)

3 followers · 3 following

ВИСНОВОК



Розробники

90 млн

More than 90 million developers around the world use GitHub to develop projects.

Користувачі

80%

About this percentage of users are satisfied with work on GitHub.



Репозиторії

200 млн+

GitHub hosts more than 200 million different software and project repositories.

