

# Основы Git и GitHub



# Система контроля версий

Программа позволяющая отслеживать, изменять и сохранять различные версии файлов проекта. Работает по принципу чекпоинтов - контрольных точек, (**коммитов**) в которых сохраняется состояние файлов.

# Система контроля версий

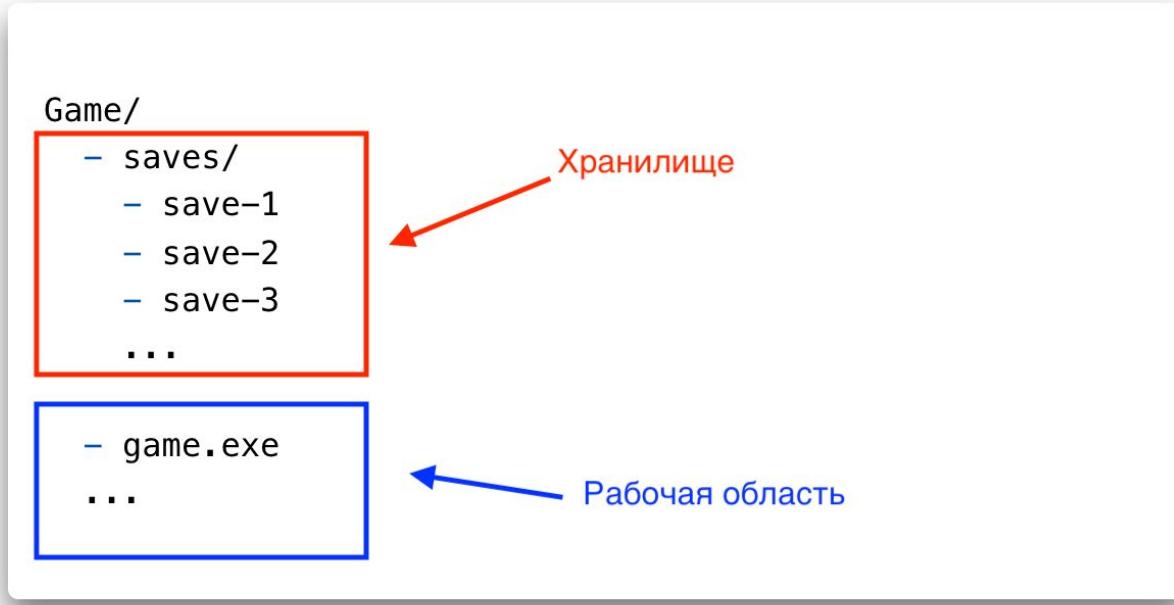
Game/

- saves/
  - save-1
  - save-2
  - save-3
- ...

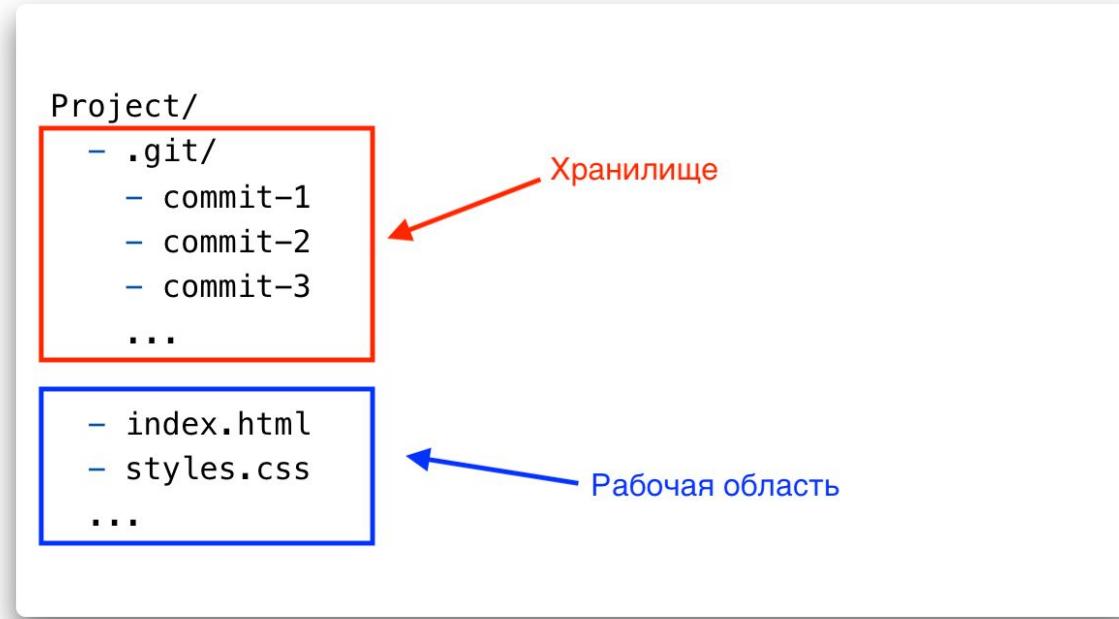
- game.exe

...

# Система контроля версий



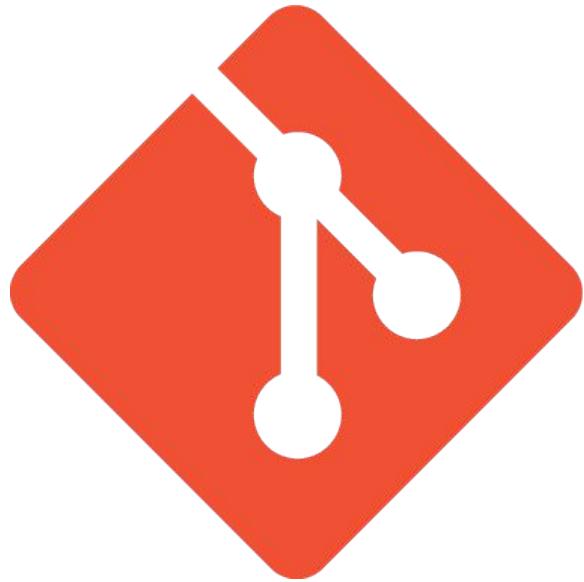
# Репозиторий - папка с проектом



# Коммит - фиксация изменений

- Если в рабочей области есть изменения, их можно сохранить сделав коммит.
- При коммите, в хранилище (истории коммитов) создаётся новый чекпоинт.
- Коммит сохраняет полное состояние рабочей области (файлов и папок) проекта.
- К коммиту всегда добавляют комментарий, чтобы не догадываться что изменили.
- Каждый коммит имеет уникальный идентификатор (номер версии).
- Репозиторий хранит все коммиты (версии проекта).
- Можно вернуться к любому коммиту и посмотреть как выглядели файлы проекта.

# Git - система контроля версий



git

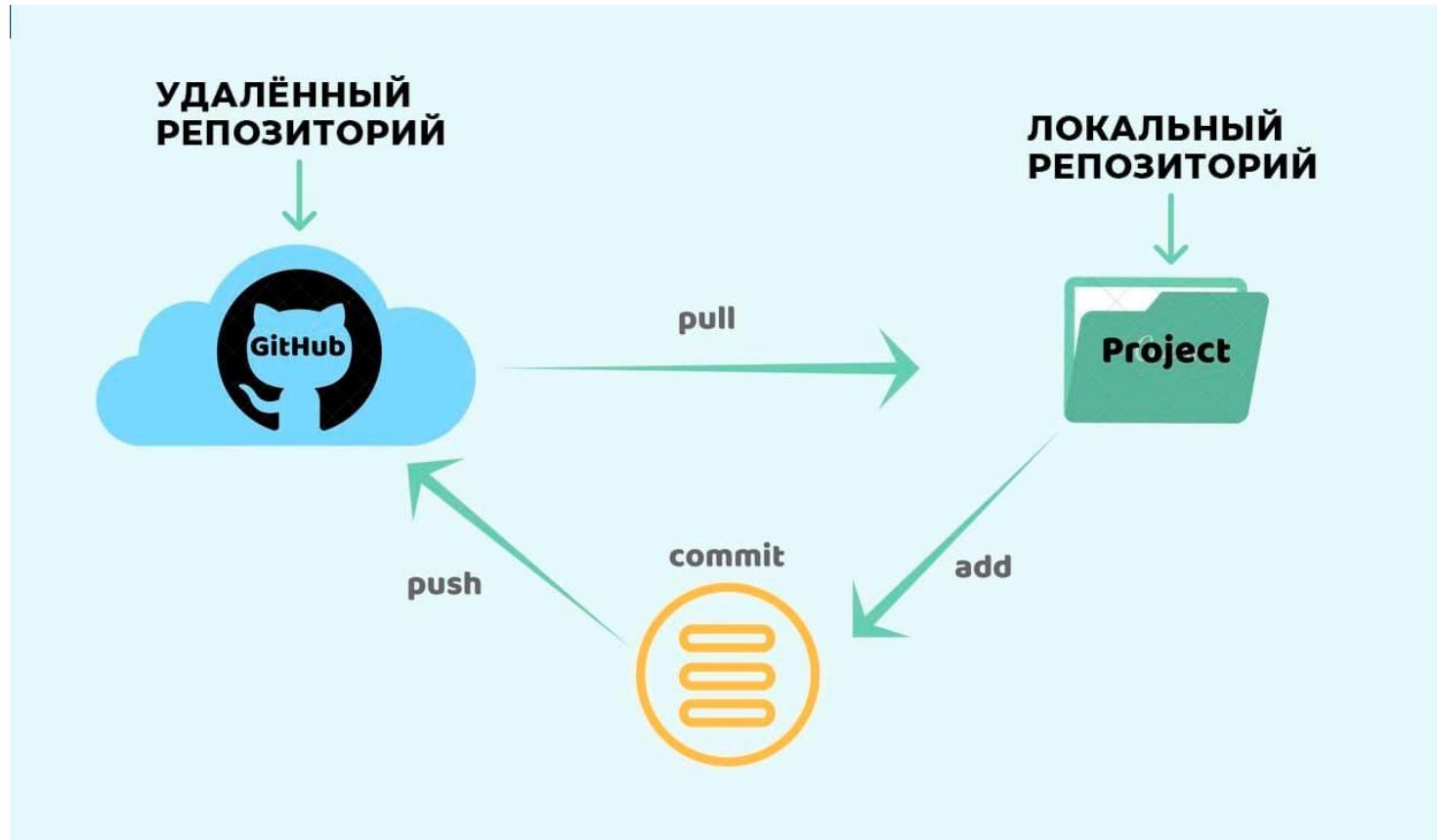
<https://git-scm.com>

# Git - установка

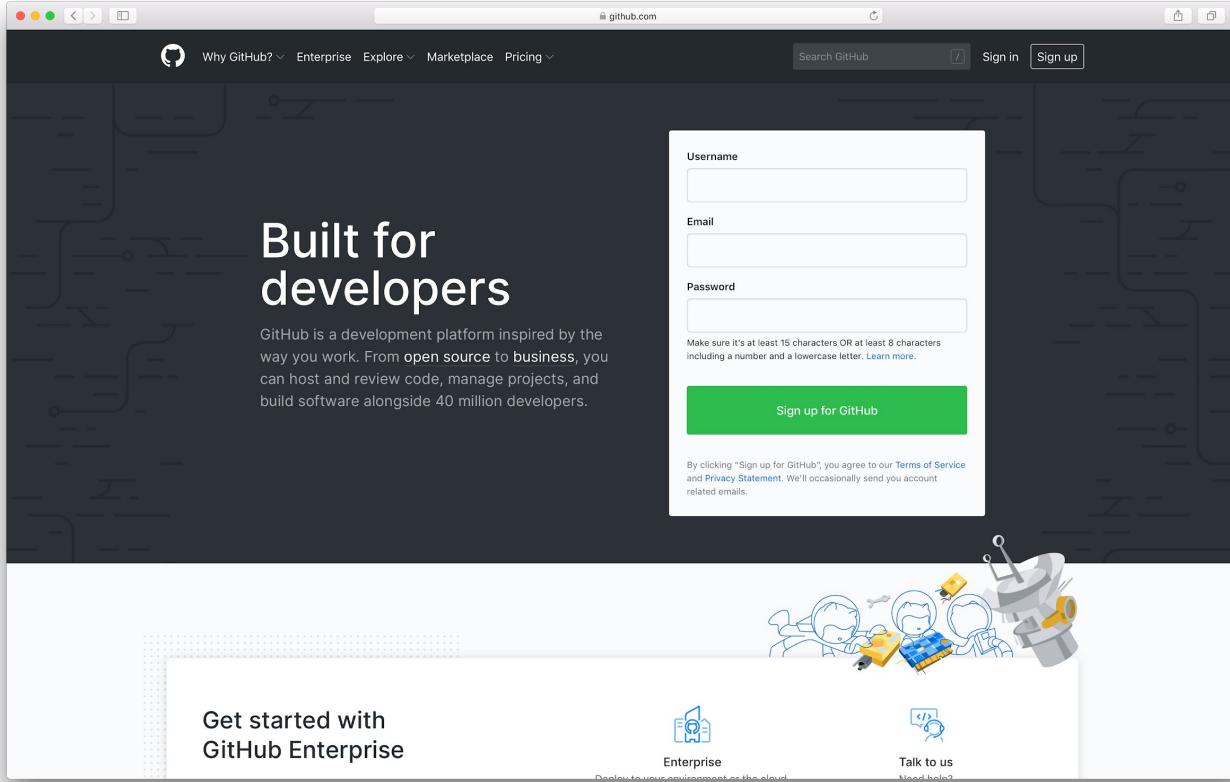
The screenshot shows a web browser window displaying the official Git website at [git-scm.com](https://git-scm.com). The page is titled "Downloads". On the left, there's a sidebar with links for "About", "Documentation", "Downloads" (which is currently selected), and "Community". Below that is a snippet from the "Pro Git book". The main content area features a large image of a Mac monitor displaying the latest source release "2.26.0" with a prominent red arrow pointing to the "Download 2.23.0 for Mac" button. To the left of the monitor, there are links for "Mac OS X", "Windows", and "Linux/Unix". Below the monitor, sections for "GUI Clients" (with a link to "View GUI Clients") and "Logos" (with a link to "View Logos") are shown. At the bottom, there's a section titled "Git via Git" with instructions for cloning the repository and a link to the web interface.

<https://git-scm.com/downloads>

# Git + GitHub



# GitHub - регистрация



<https://github.com>

# GitHub - профиль

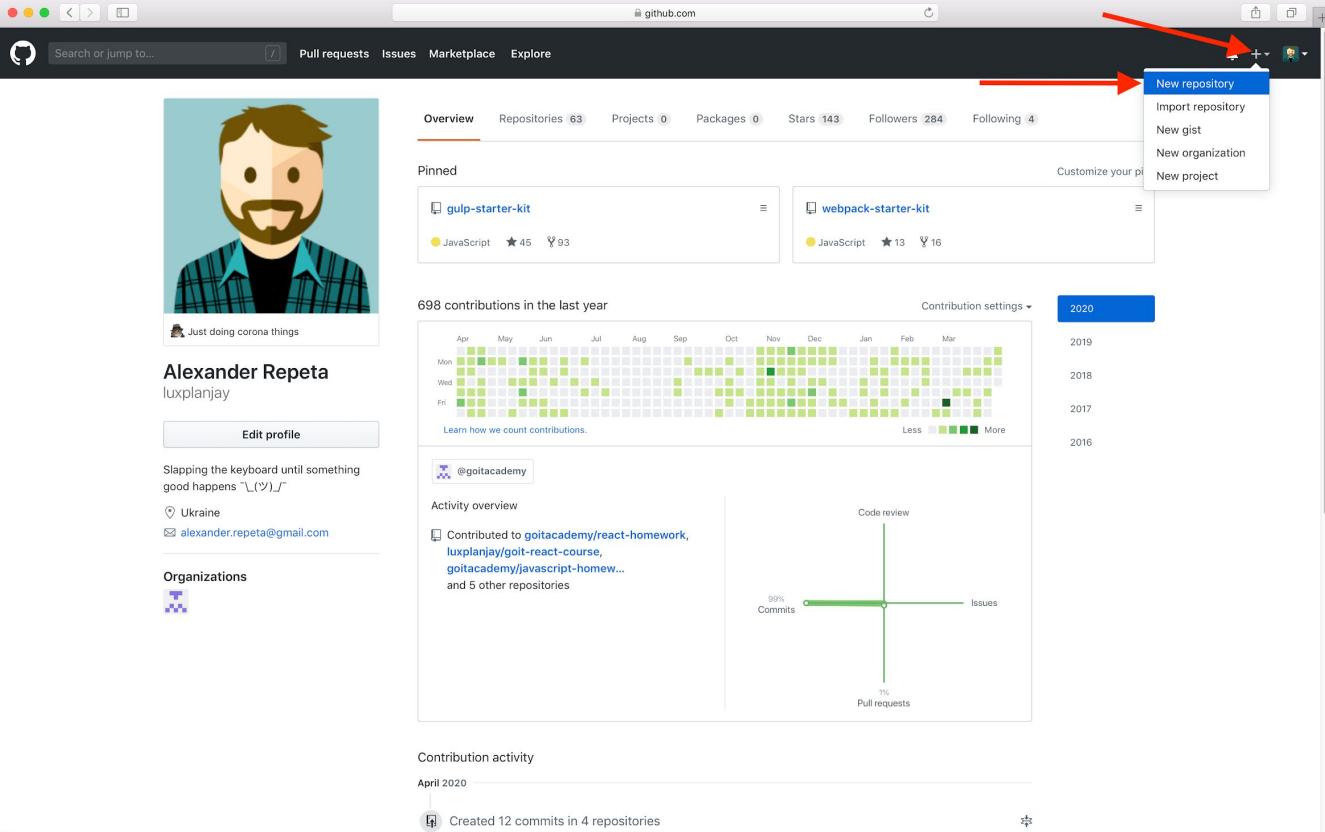
The screenshot shows a GitHub profile page for a user named Alexander Repeta. The profile features a cartoon illustration of a man with a beard and a plaid shirt, with the caption "Just doing corona things". Below the profile picture, the user's name is displayed as **Alexander Repeta** and their GitHub handle as luxplanjay. There is a "Edit profile" button.

On the left sidebar, there are sections for "Edit profile", "Slapping the keyboard until something good happens \u263a\ufe0f", "Ukraine", and "alexander.repeta@gmail.com". There is also a "Organizations" section showing a small icon.

The main content area includes:

- Pinned:** Two repositories are pinned: "gulp-starter-kit" (JavaScript, 45 stars, 93 commits) and "webpack-starter-kit" (JavaScript, 13 stars, 16 commits).
- Contributions:** A heatmap showing contributions over the last year, with a legend indicating contribution levels from "Less" to "More". A dropdown menu allows switching between years: 2020 (selected), 2019, 2018, 2017, and 2016.
- Activity overview:** Shows contributions to repositories like @goitacademy/react-homework, luxplanjay/golt-react-course, and goitacademy/javascript-homew... and 5 other repositories.
- Code review:** A chart showing the distribution of code review activity across commits, issues, and pull requests.
- Contribution activity:** A timeline for April 2020 showing a single commit: "Created 12 commits in 4 repositories".

# GitHub - создание репозитория



The screenshot shows a GitHub user profile for Alexander Repeta (luxplanjay). The top right corner of the interface has a context menu open, with the 'New repository' option highlighted by a red arrow. The menu also includes options like 'Import repository', 'New gist', 'New organization', and 'New project'. The main profile area displays pinned repositories ('gulp-starter-kit' and 'webpack-starter-kit'), a heatmap of contributions over the last year, and activity statistics.

Alexander Repeta  
luxplanjay

Just doing corona things

Edit profile

Slapping the keyboard until something good happens `＼(＾ゞ＼`

Ukraine  
alexander.repetta@gmail.com

Organizations

Created 12 commits in 4 repositories

Contribution activity  
April 2020

99% Commits  
1% Pull requests  
Issues  
Code review

New repository

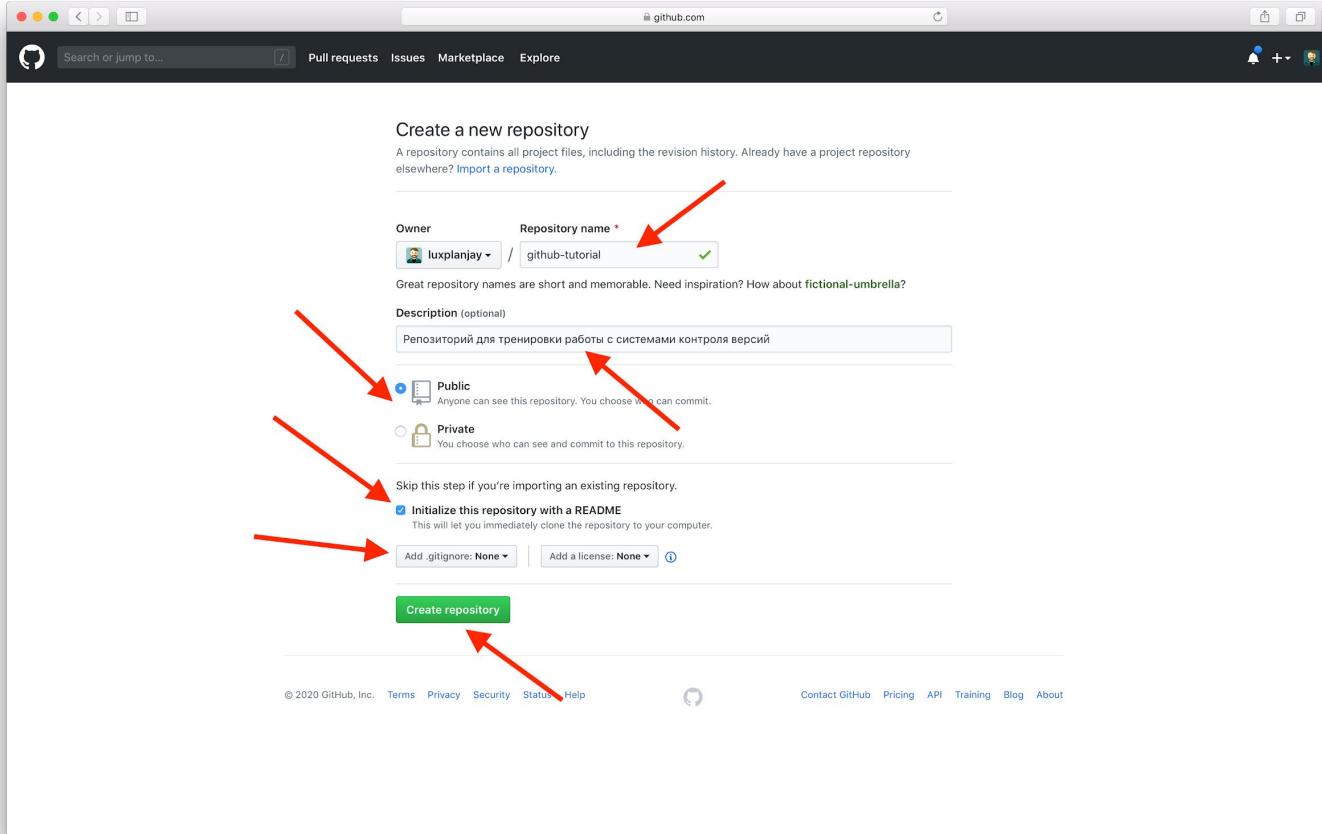
Import repository

New gist

New organization

New project

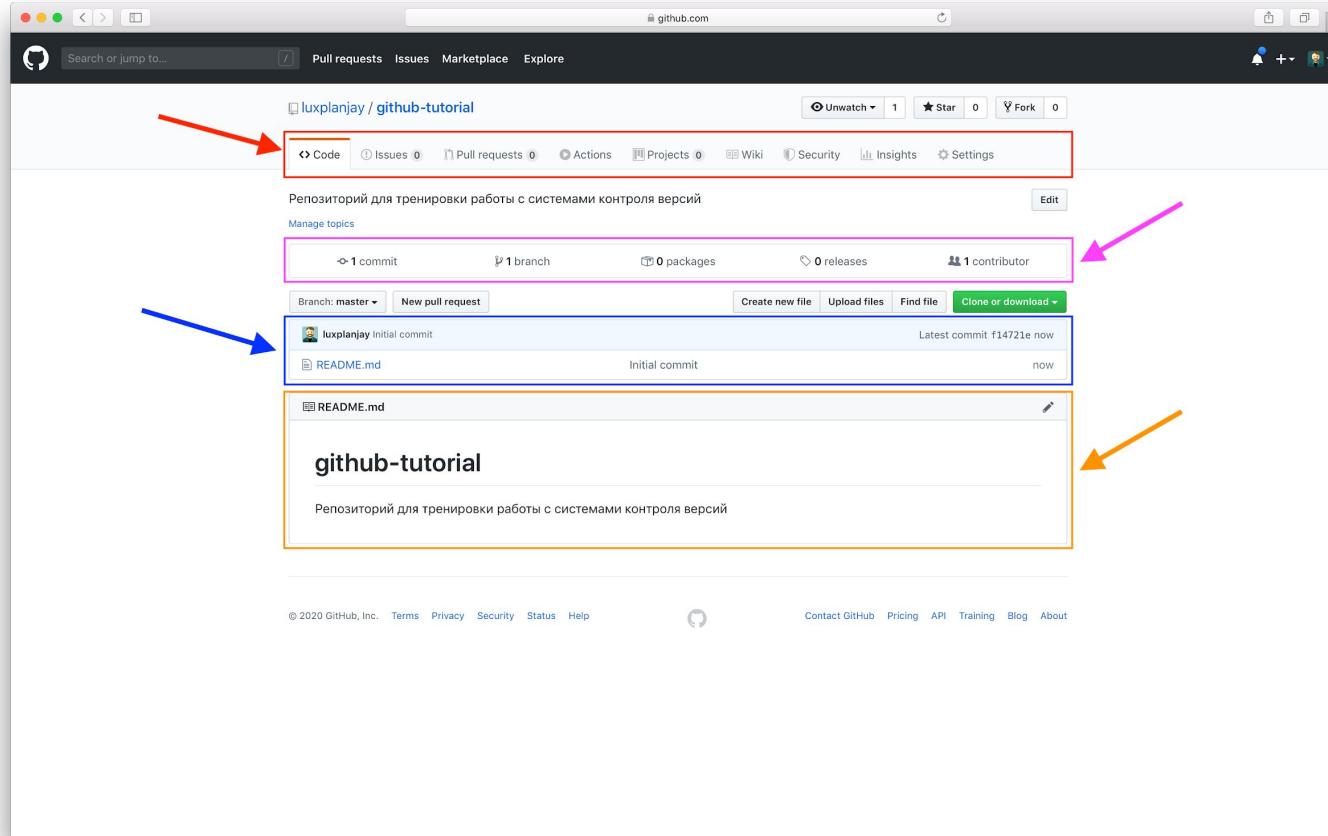
# GitHub - создание репозитория



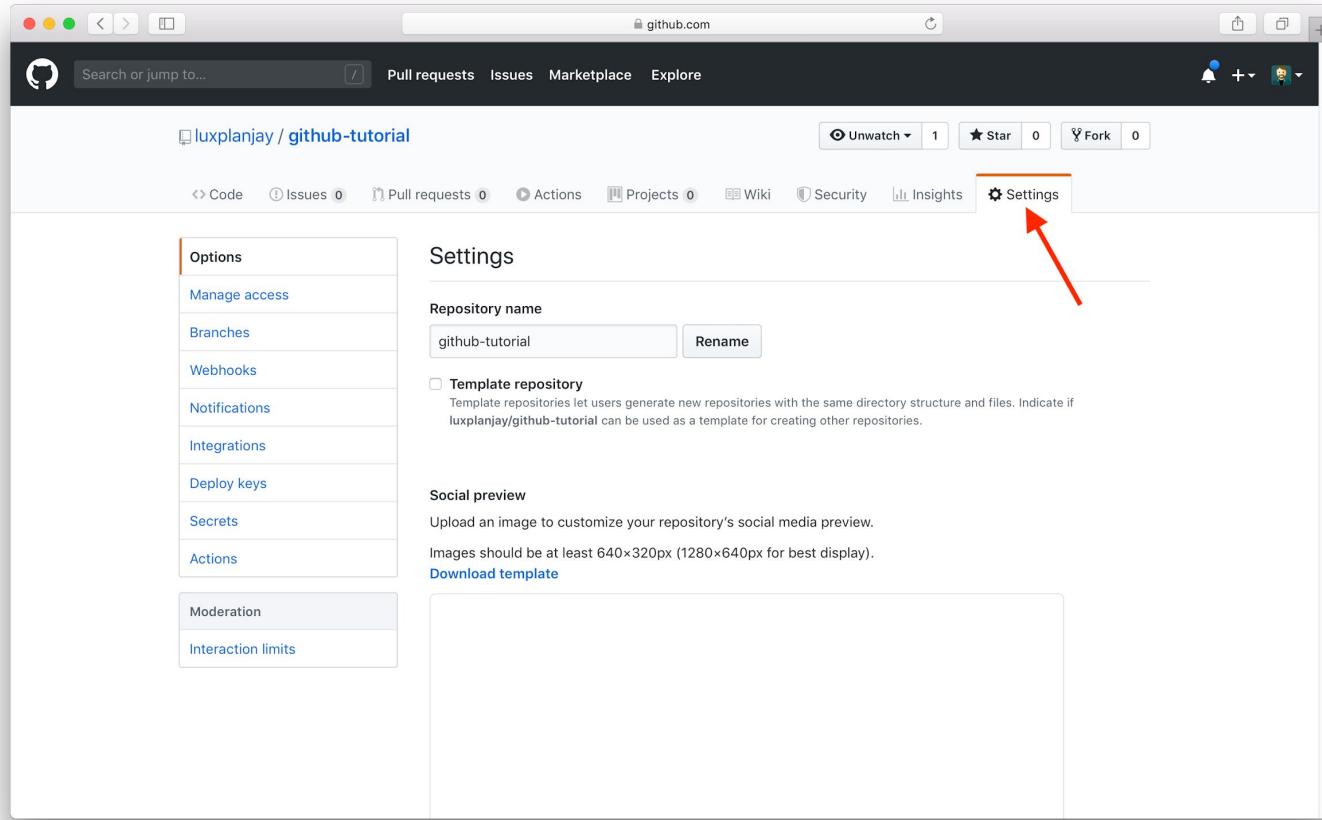
# Файл .gitignore

```
# Папки и файлы которые Git должен игнорировать
.vscode
.idea
.DS_Store
node_modules
.env
build/
*.psd
```

# GitHub - интерфейс репозитория



# GitHub - настройки репозитория



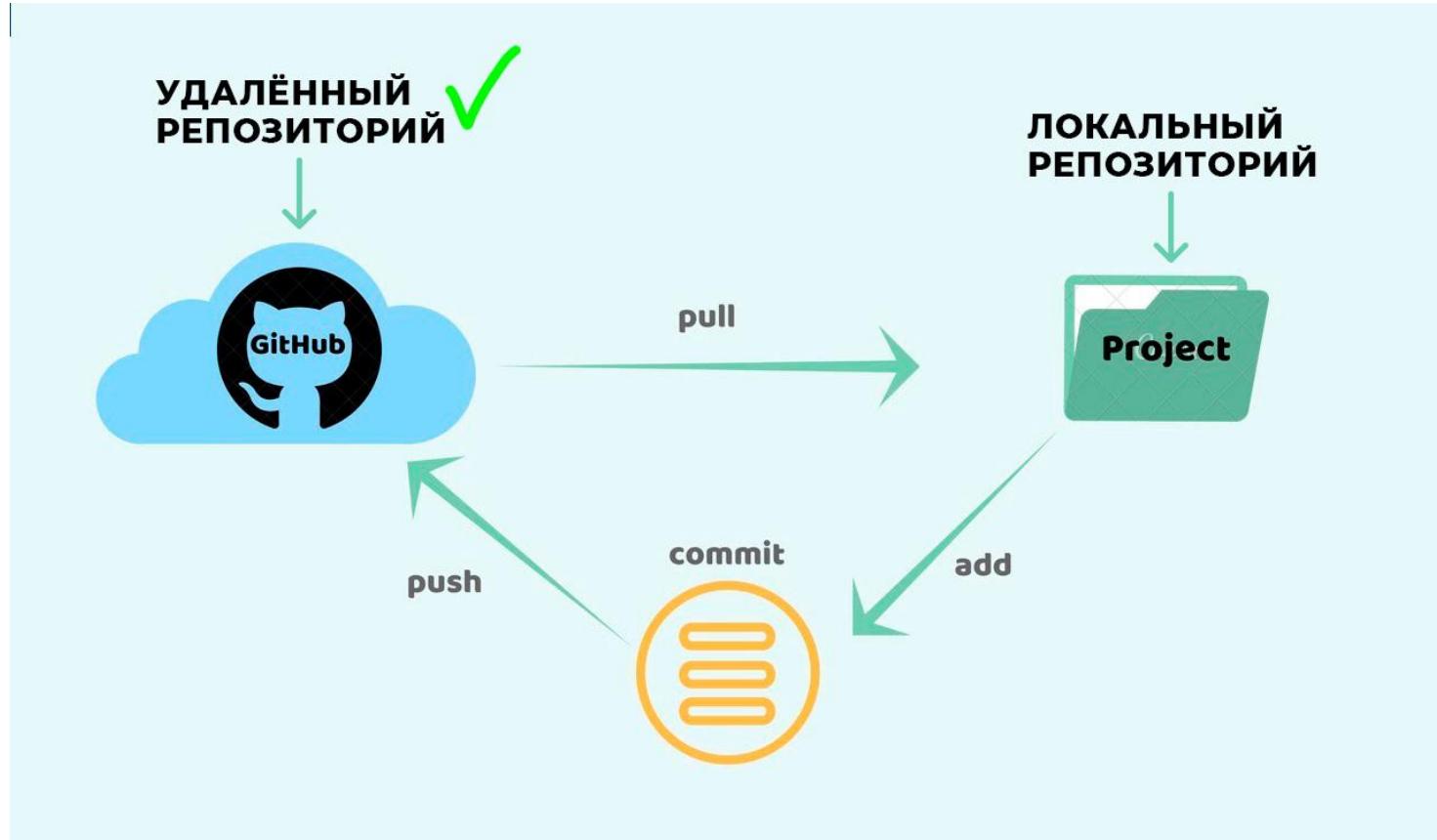
# GitHub - настройки репозитория

The screenshot shows the GitHub repository settings page. At the top, there's a "Theme Chooser" section with a dropdown set to "None". Below it is a "Danger Zone" section containing four items, each with a red arrow pointing to its corresponding button:

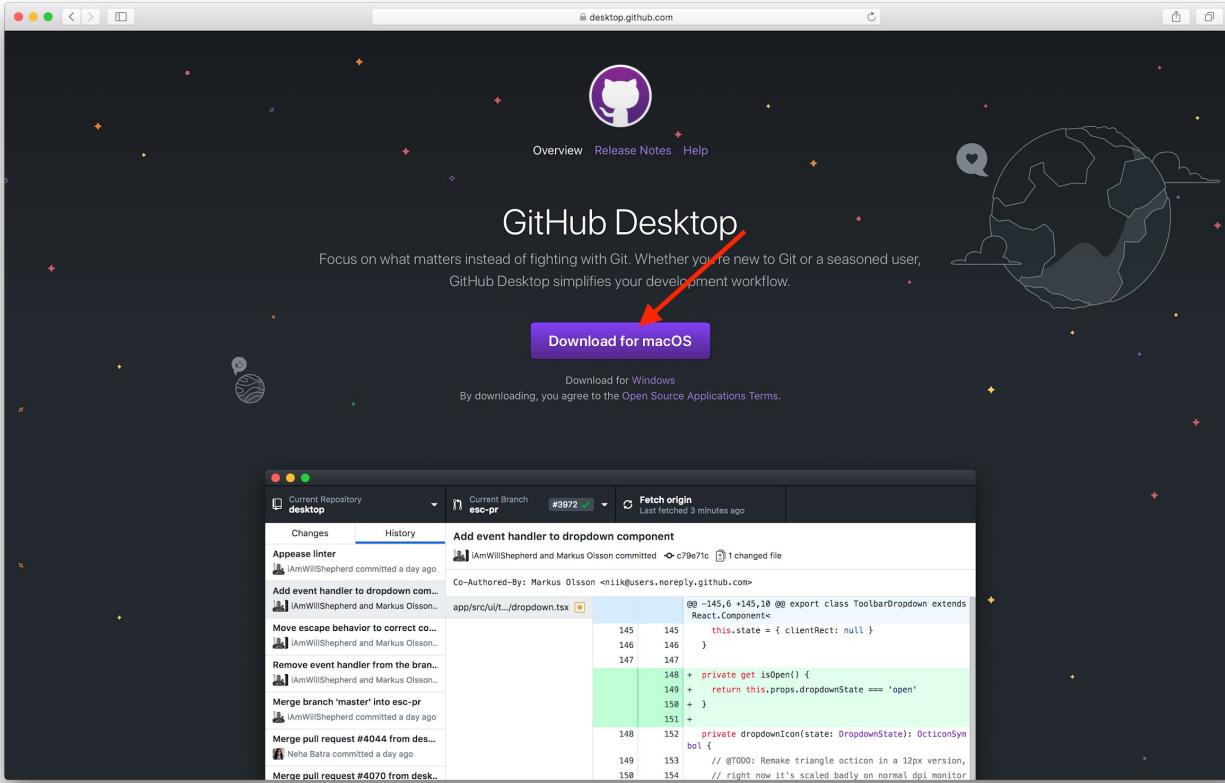
- Make this repository private**: Hide this repository from the public. Button: **Make private**
- Transfer ownership**: Transfer this repository to another user or to an organization where you have the ability to create repositories. Button: **Transfer**
- Archive this repository**: Mark this repository as archived and read-only. Button: **Archive this repository**
- Delete this repository**: Once you delete a repository, there is no going back. Please be certain. Button: **Delete this repository**

At the bottom of the page, there are links for GitHub terms and conditions, and a footer with links to Contact GitHub, Pricing, API, Training, Blog, and About.

# Git + GitHub

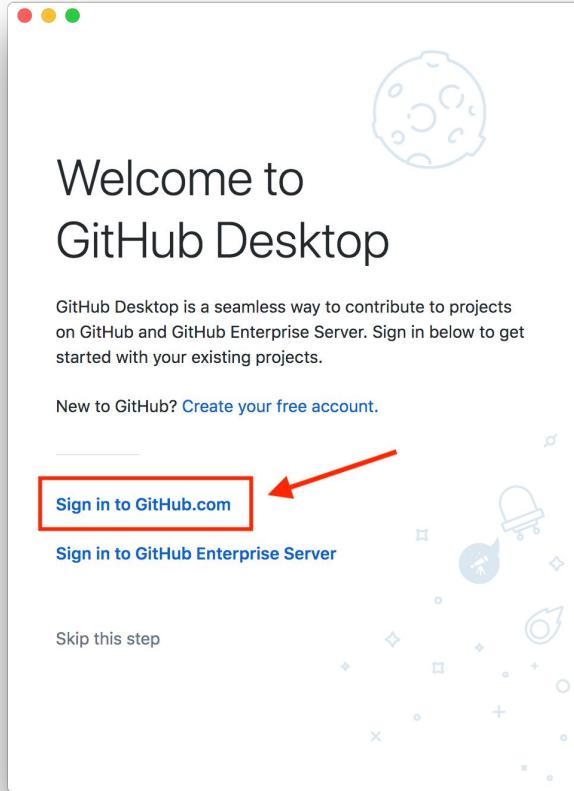


# GitHub Desktop - установка

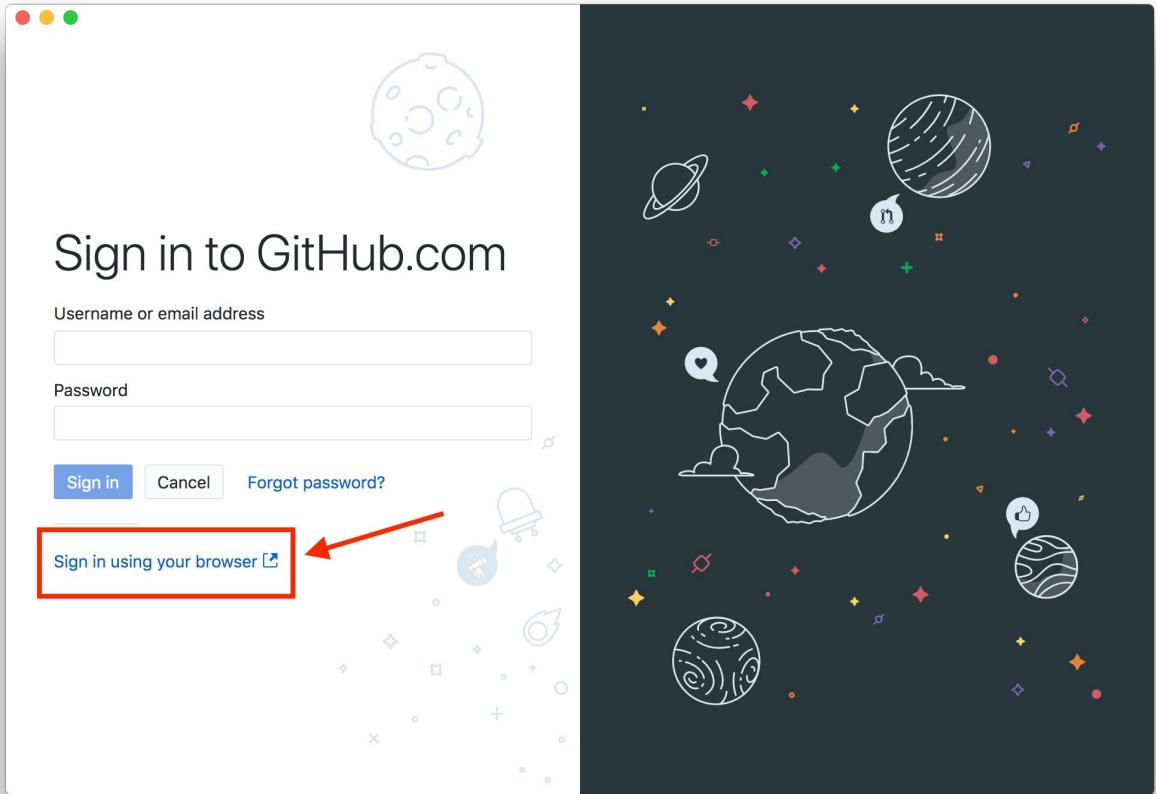


<https://desktop.github.com>

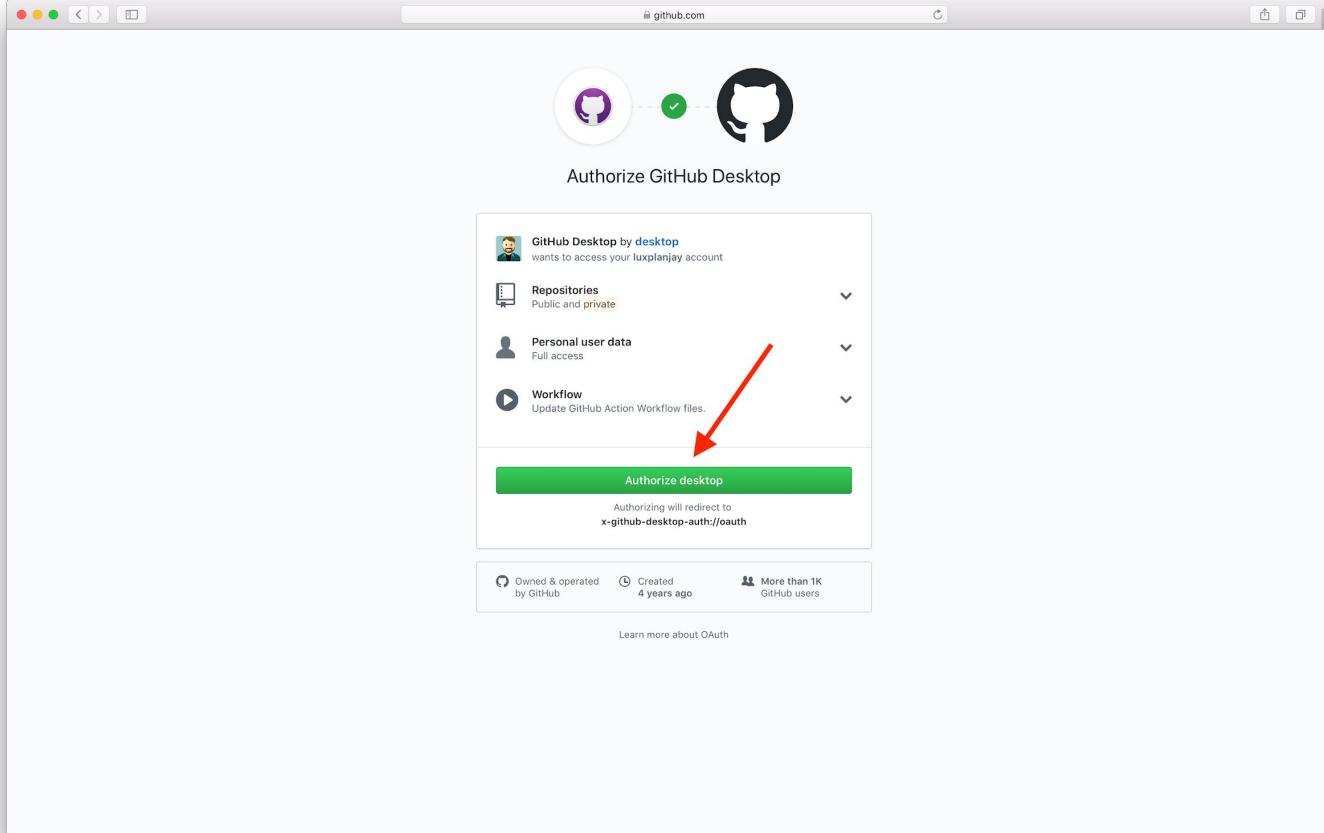
# GitHub Desktop - логин



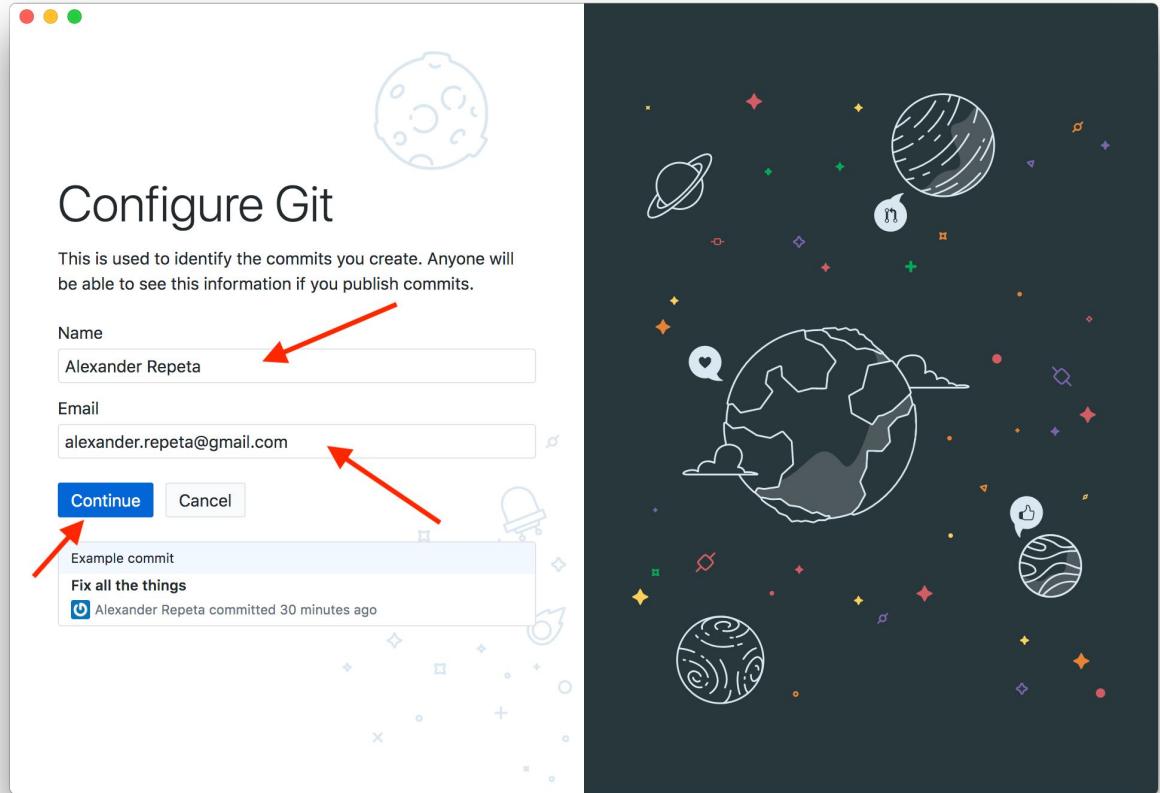
# GitHub Desktop - логин



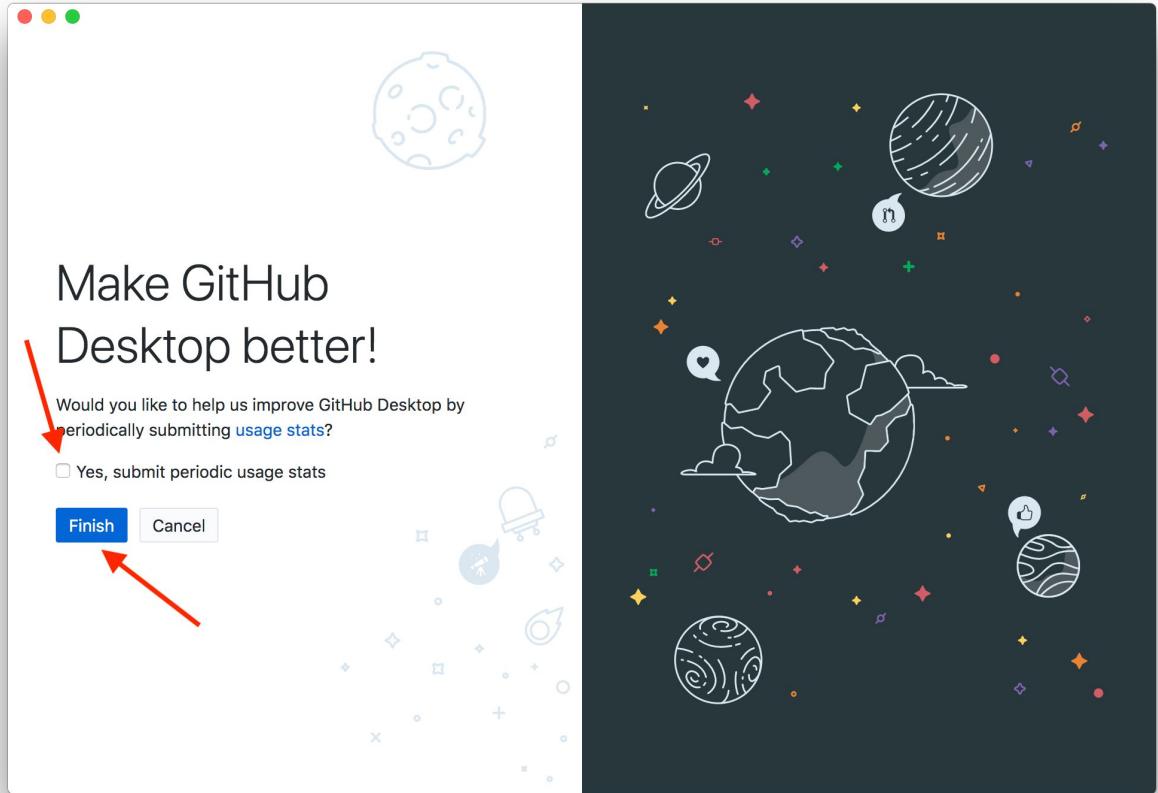
# GitHub Desktop - логин



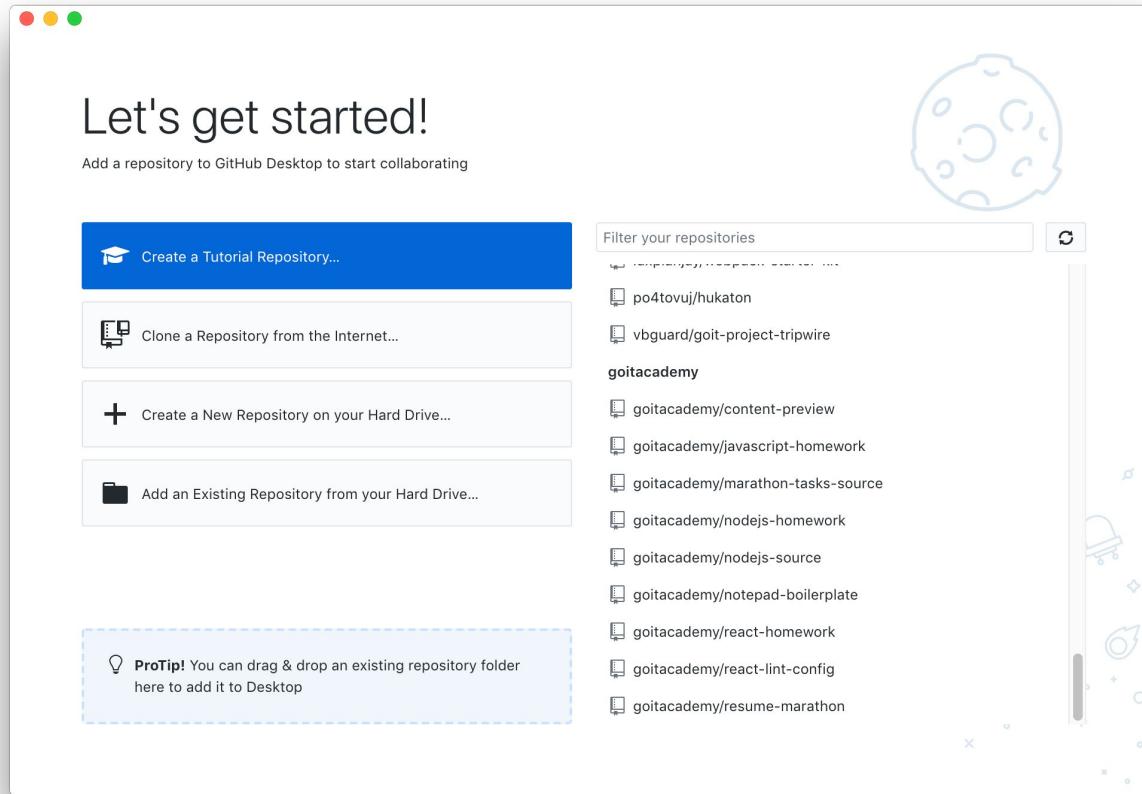
# GitHub Desktop - настройка



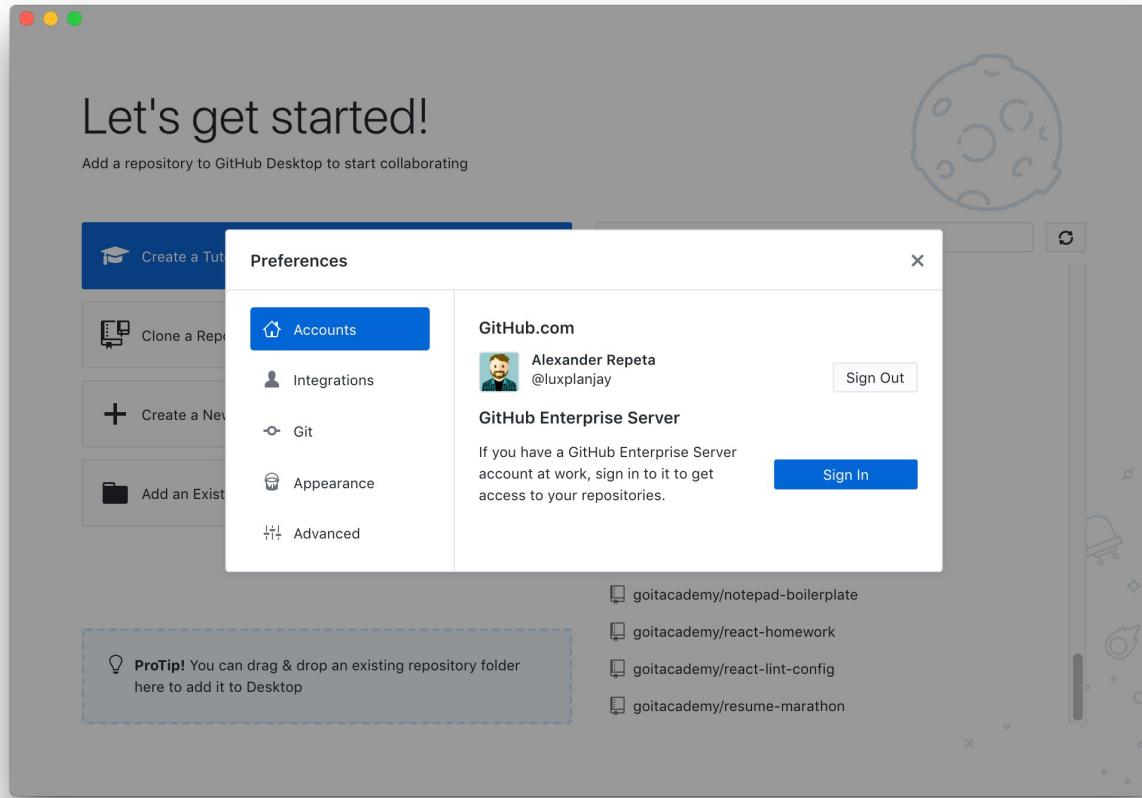
# GitHub Desktop - настройка



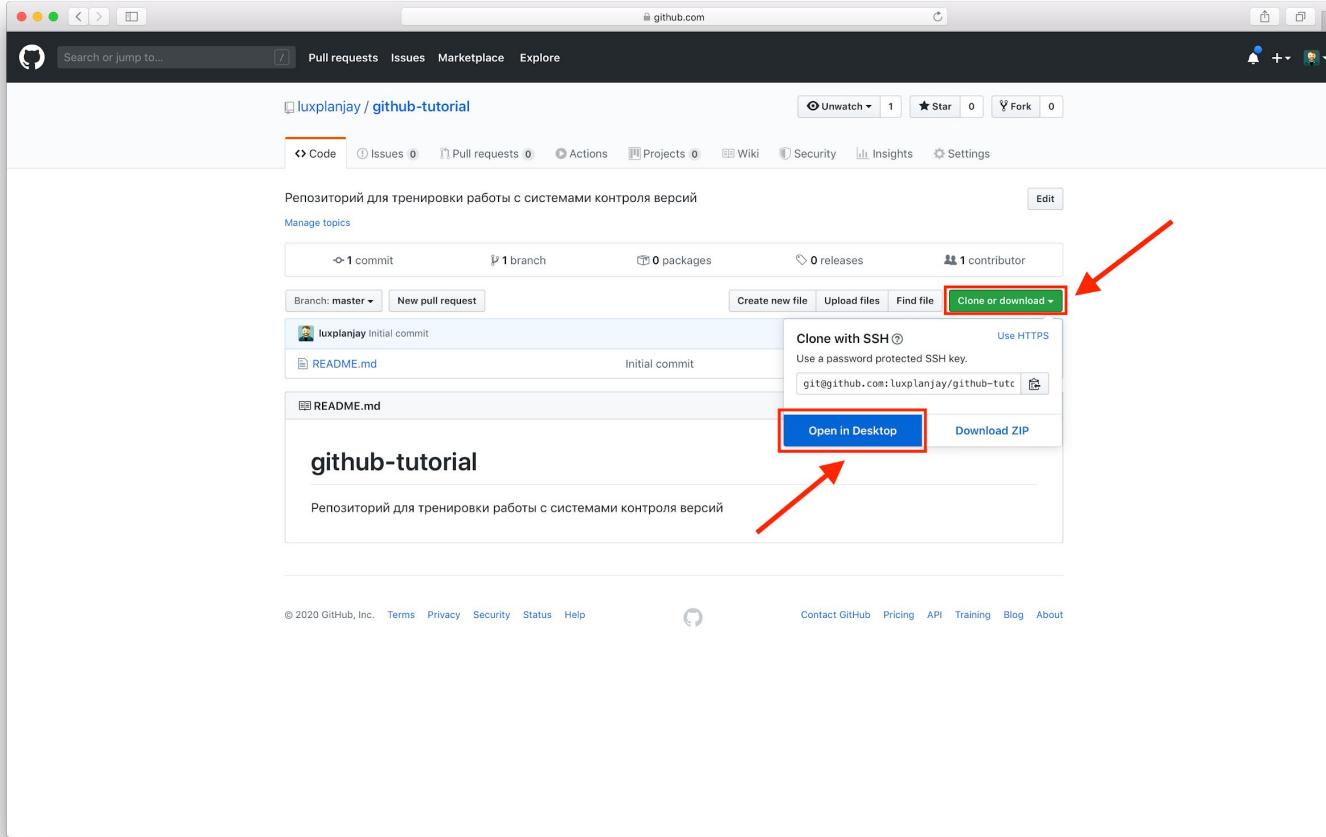
# GitHub Desktop



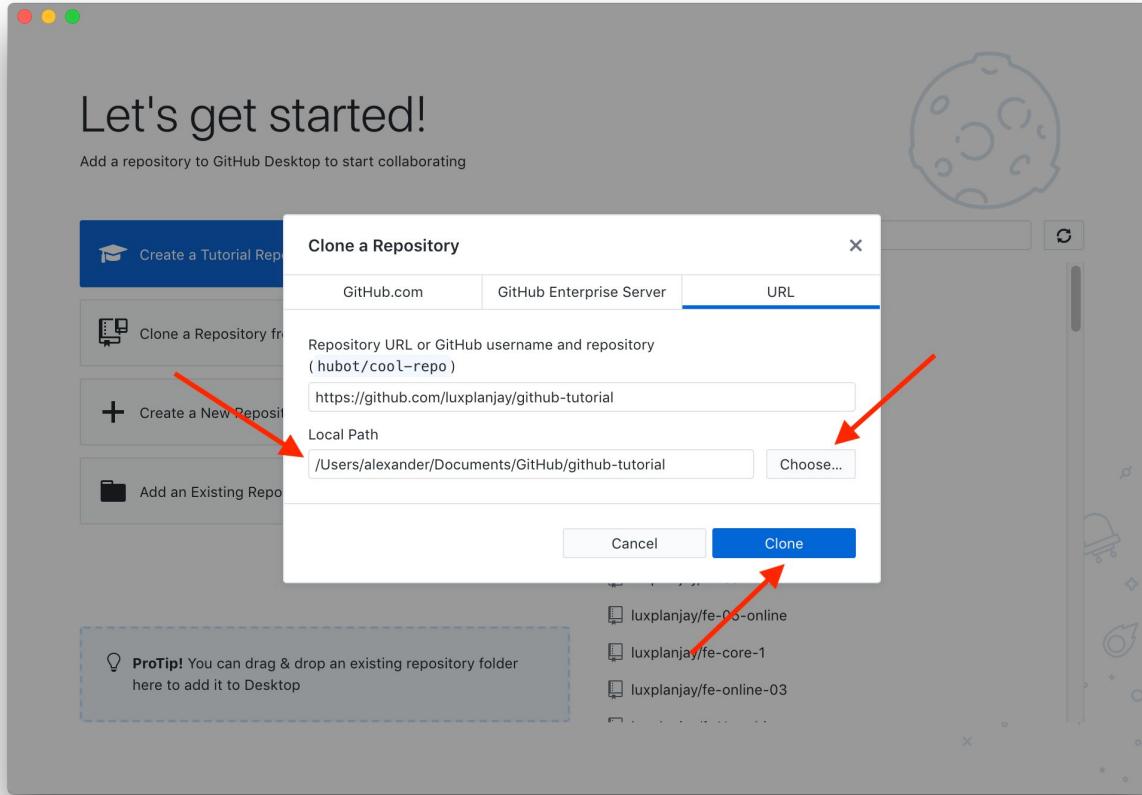
# GitHub Desktop - настройки



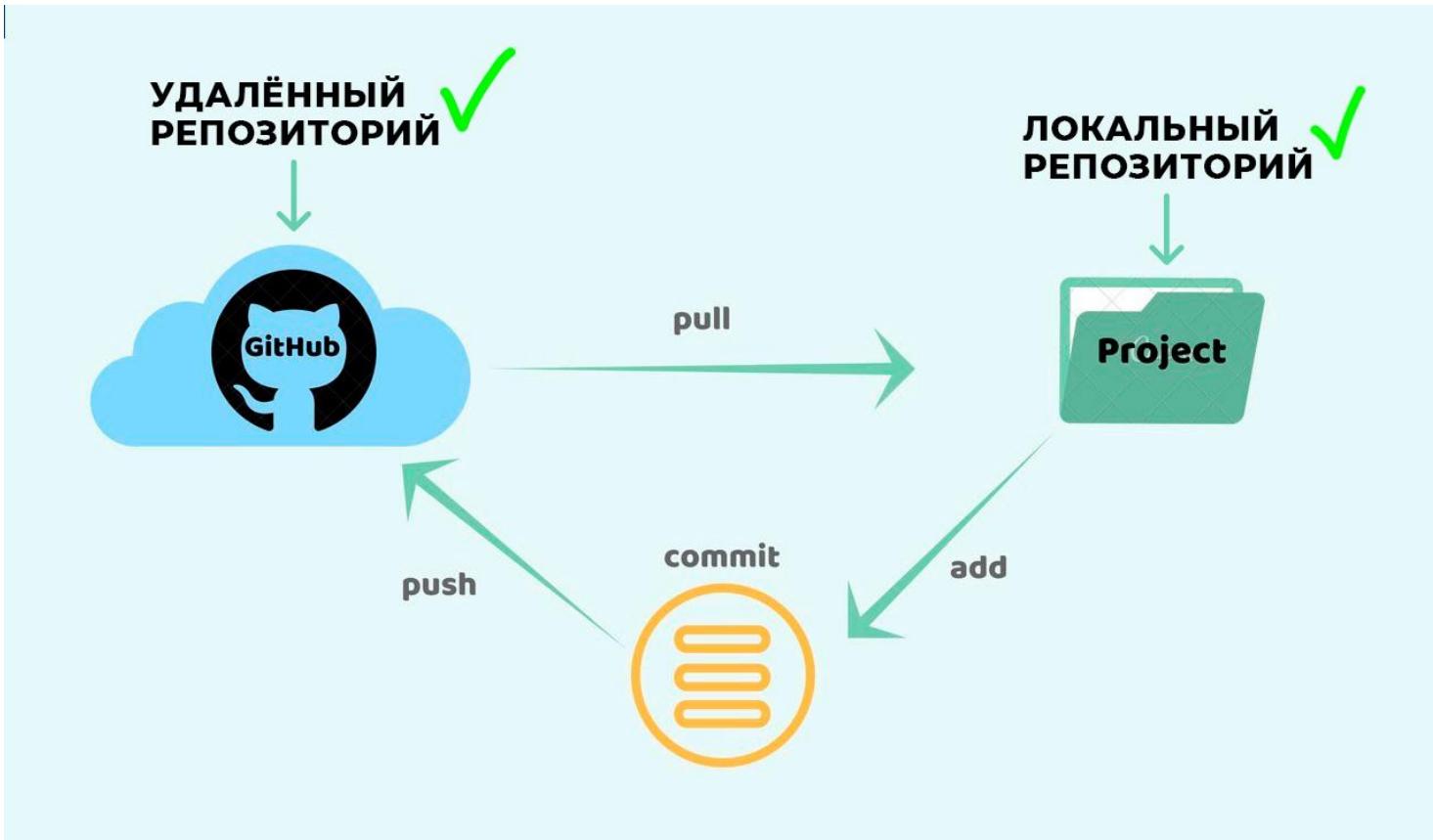
# Клонирование репозитория



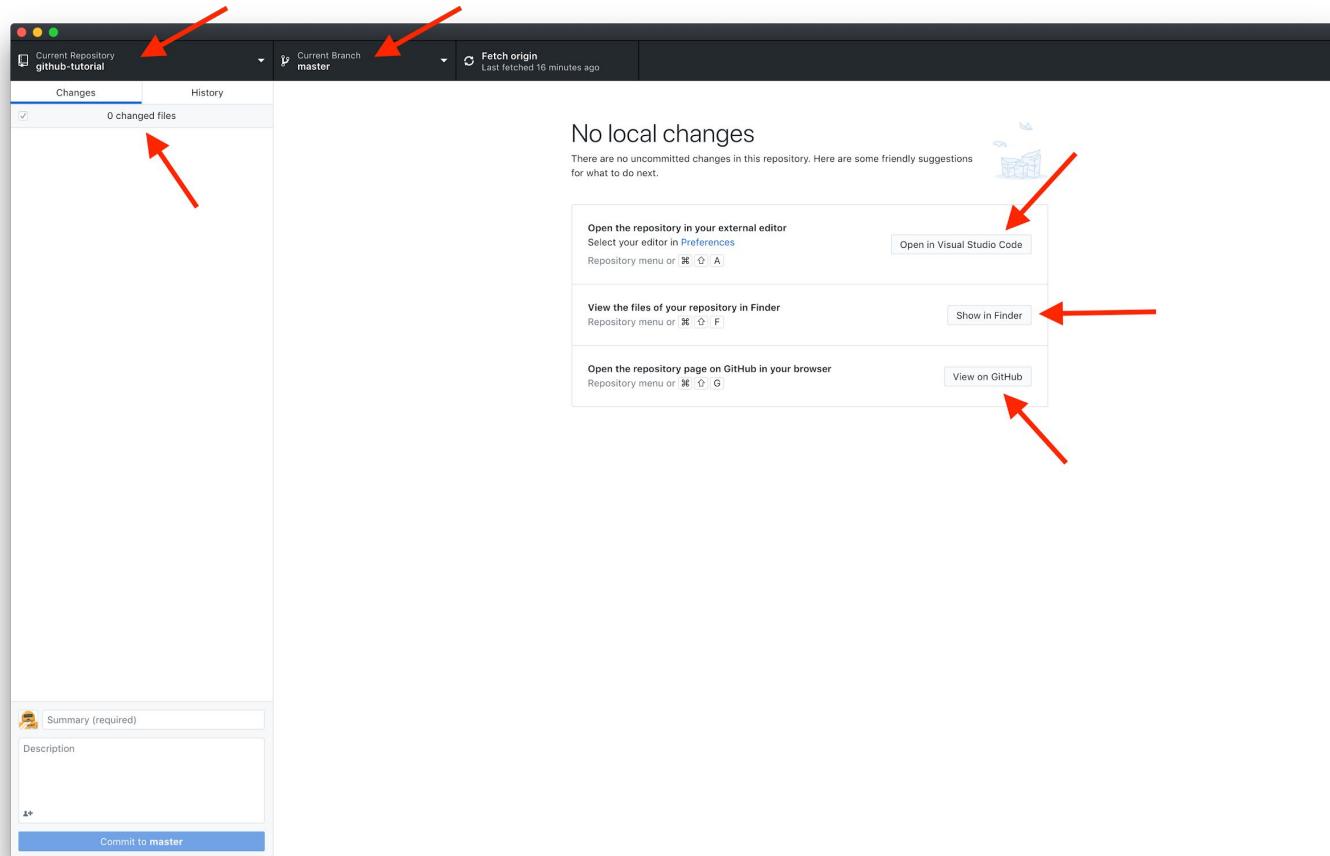
# Клонирование репозитория



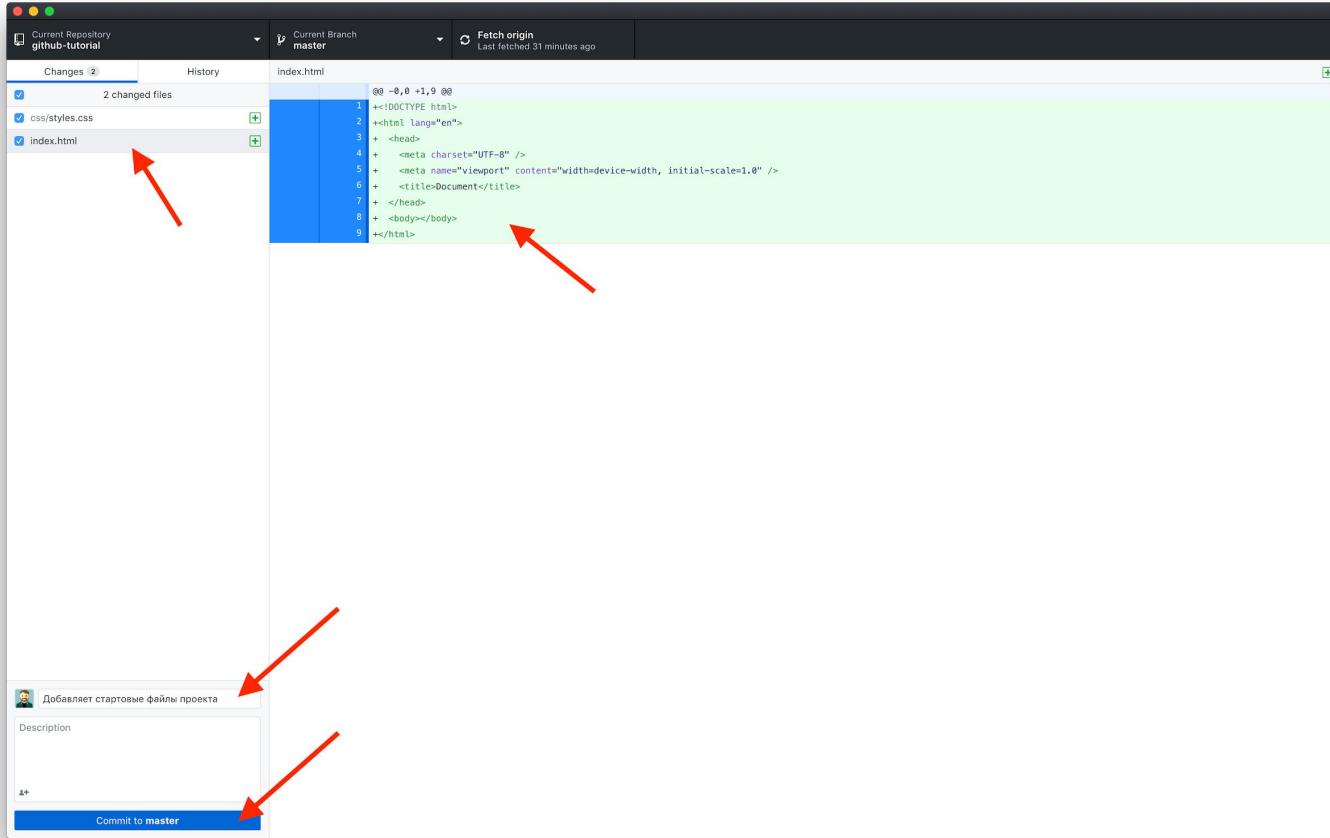
# Клонирование репозитория



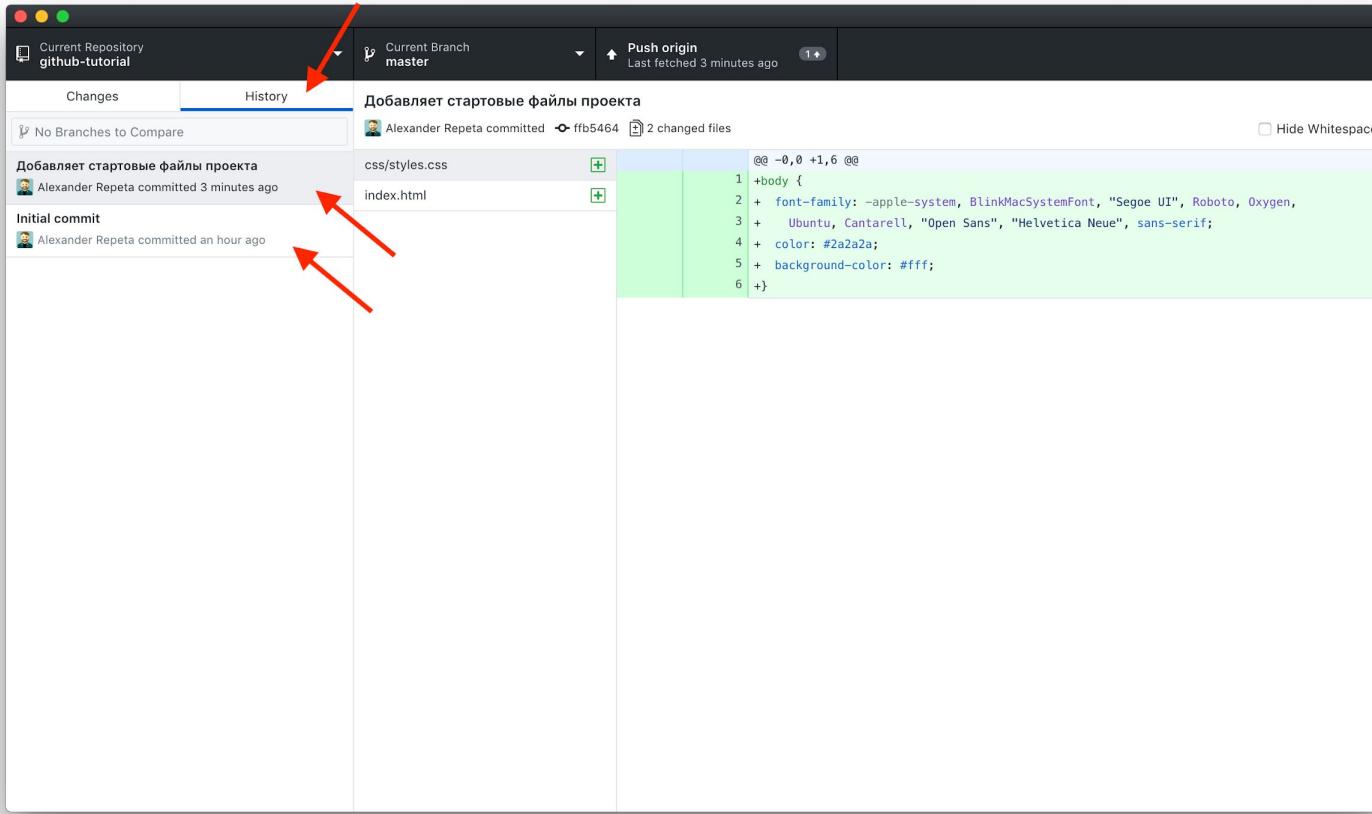
# GitHub Desktop - интерфейс



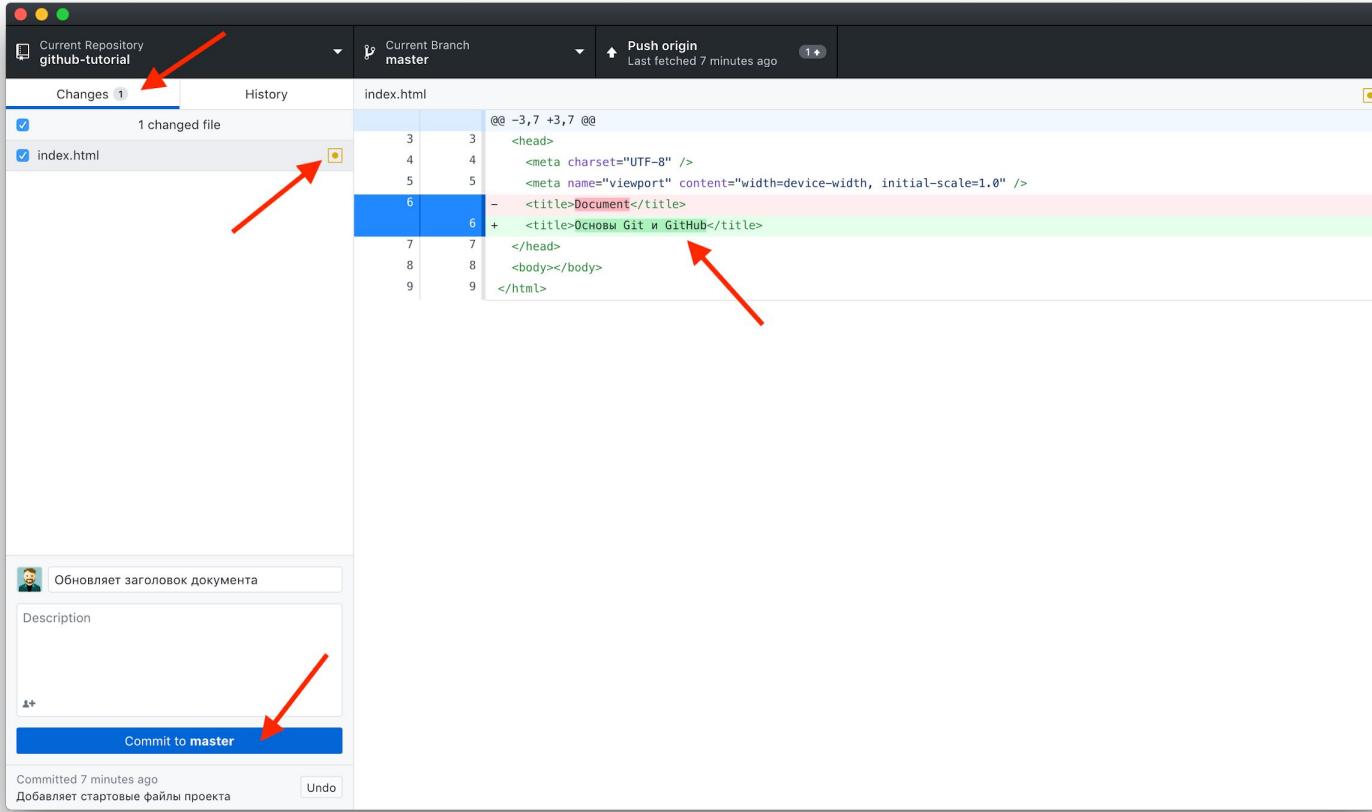
# GitHub Desktop - коммиты



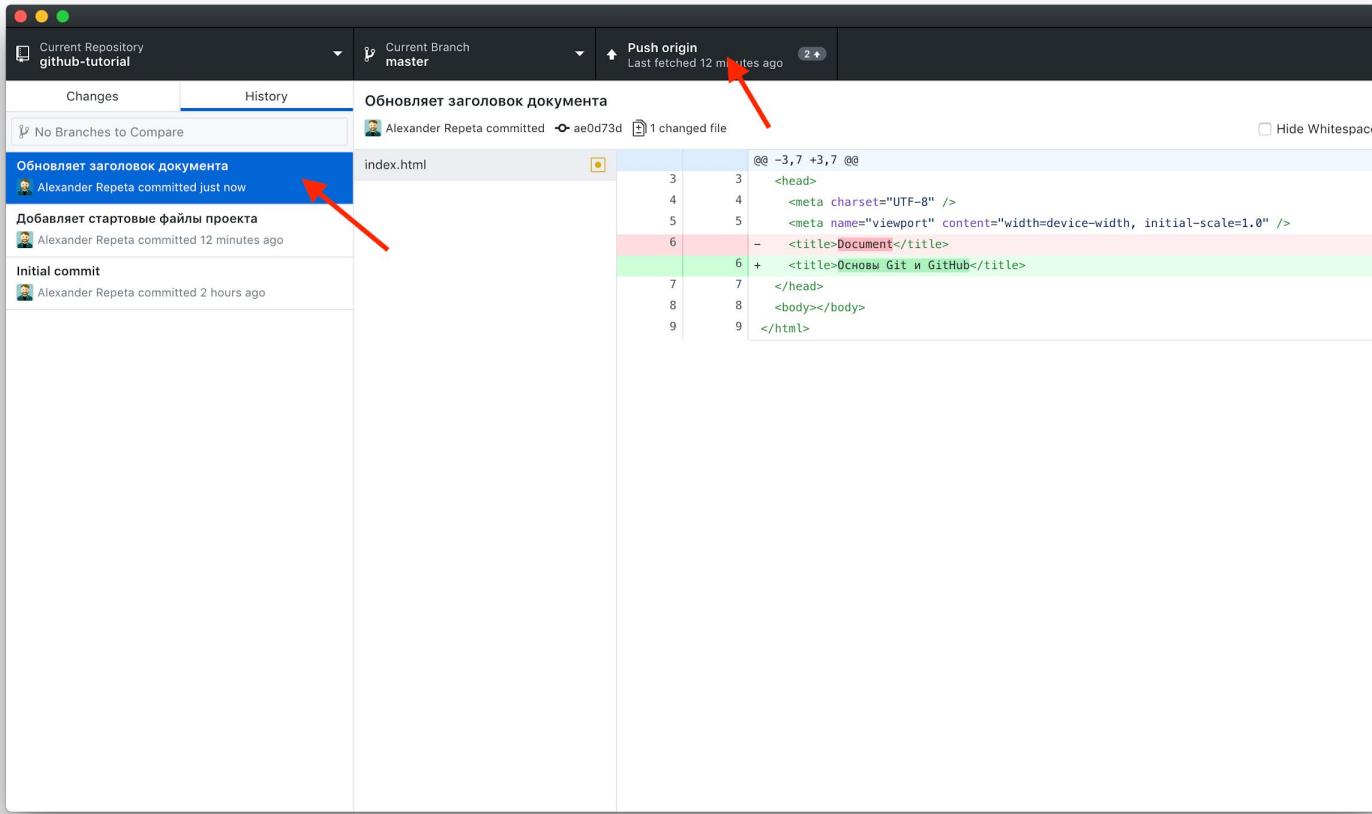
# GitHub Desktop - история коммитов



# GitHub Desktop - типы изменений



# Синхронизация репозиториев (пуш)



# Синхронизация репозиториев (пуш)

The screenshot shows a GitHub repository page for 'luxplanjay / github-tutorial'. The page displays the following information:

- Repository Summary:** 3 commits, 1 branch, 0 packages, 0 releases, 1 contributor.
- Commit History:** Branch: master
- Latest Commit:** luxplanjay Обновляет заголовок документа (6 minutes ago)
- Recent Commits:**
  - css: Добавляет стартовые файлы проекта (17 minutes ago)
  - README.md: Initial commit (2 hours ago)
  - index.html: Обновляет заголовок документа (6 minutes ago)
- File Preview:** README.md
- Description:** Репозиторий для тренировки работы с системами контроля версий

Red arrows point to the commit count, the latest commit author and message, and the first commit in the history.

# GitHub - ИСТОРИЯ КОММИТОВ

luxplanjay / github-tutorial

Branch: master

Commits on Apr 8, 2020

Обновляет заголовок документа  
luxplanjay committed 9 minutes ago

Добавляет стартовые файлы проекта  
luxplanjay committed 20 minutes ago

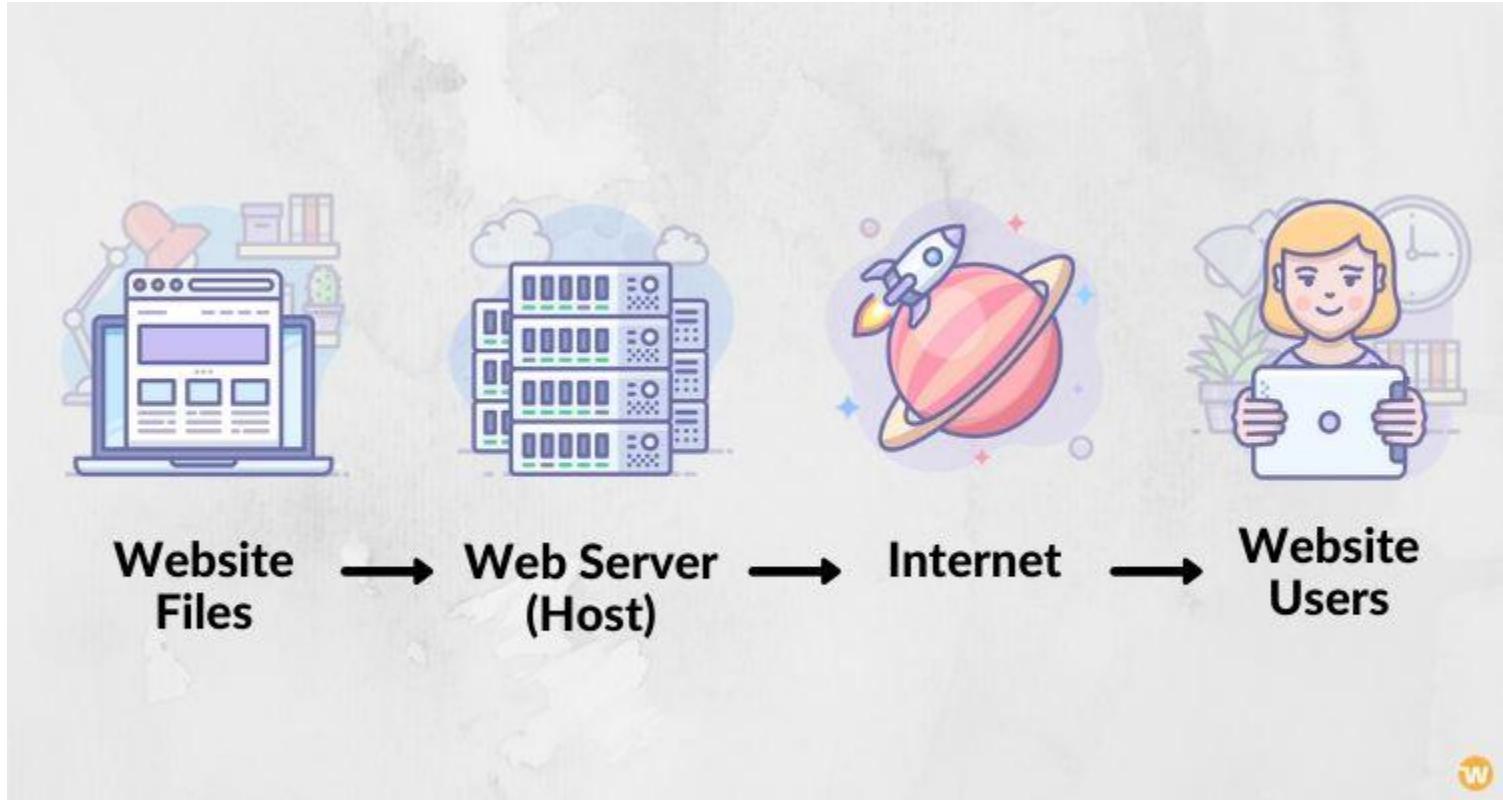
Initial commit  
luxplanjay committed 2 hours ago

Newer Older

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# ХОСТИНГ

# ХОСТИНГ



[Что такое хостинг](#)

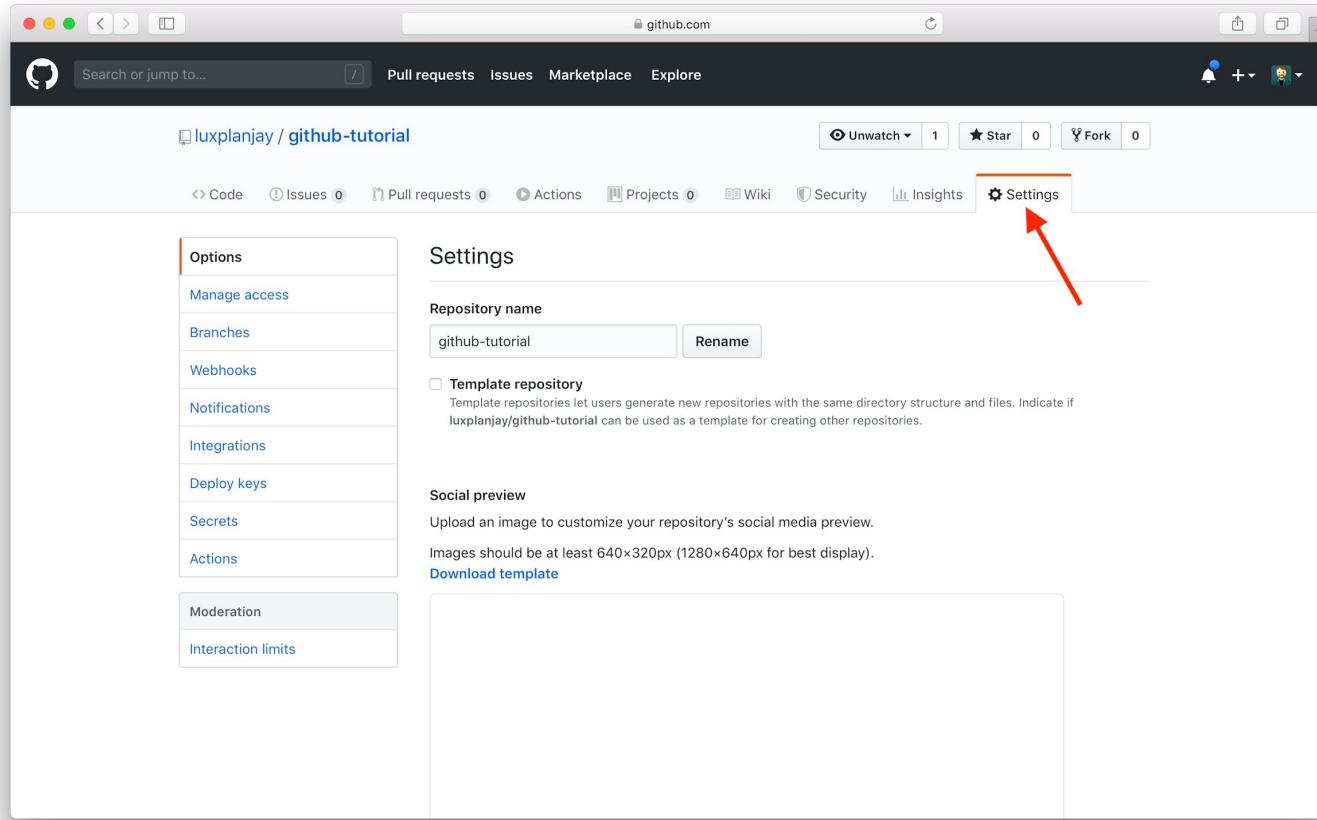


# Сервер

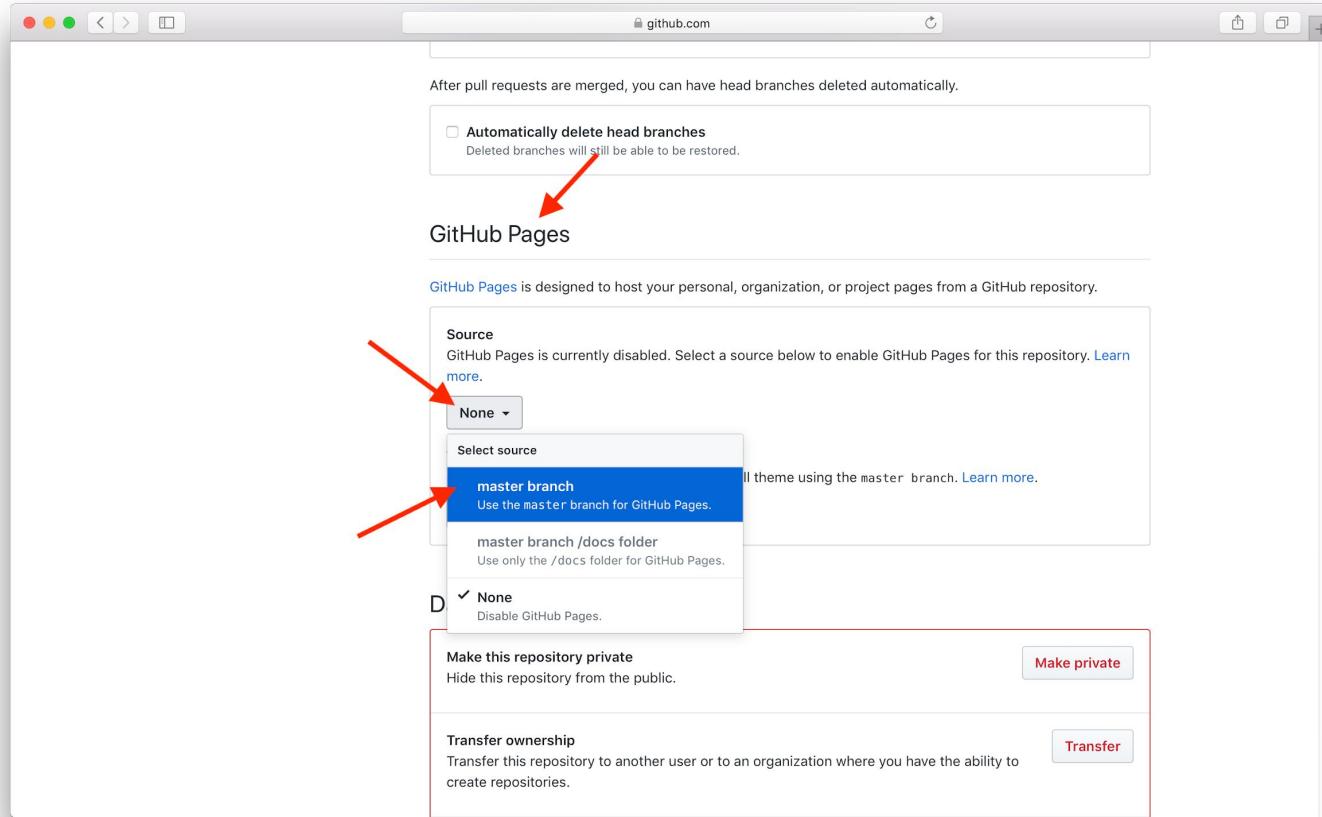


Что такое сервер

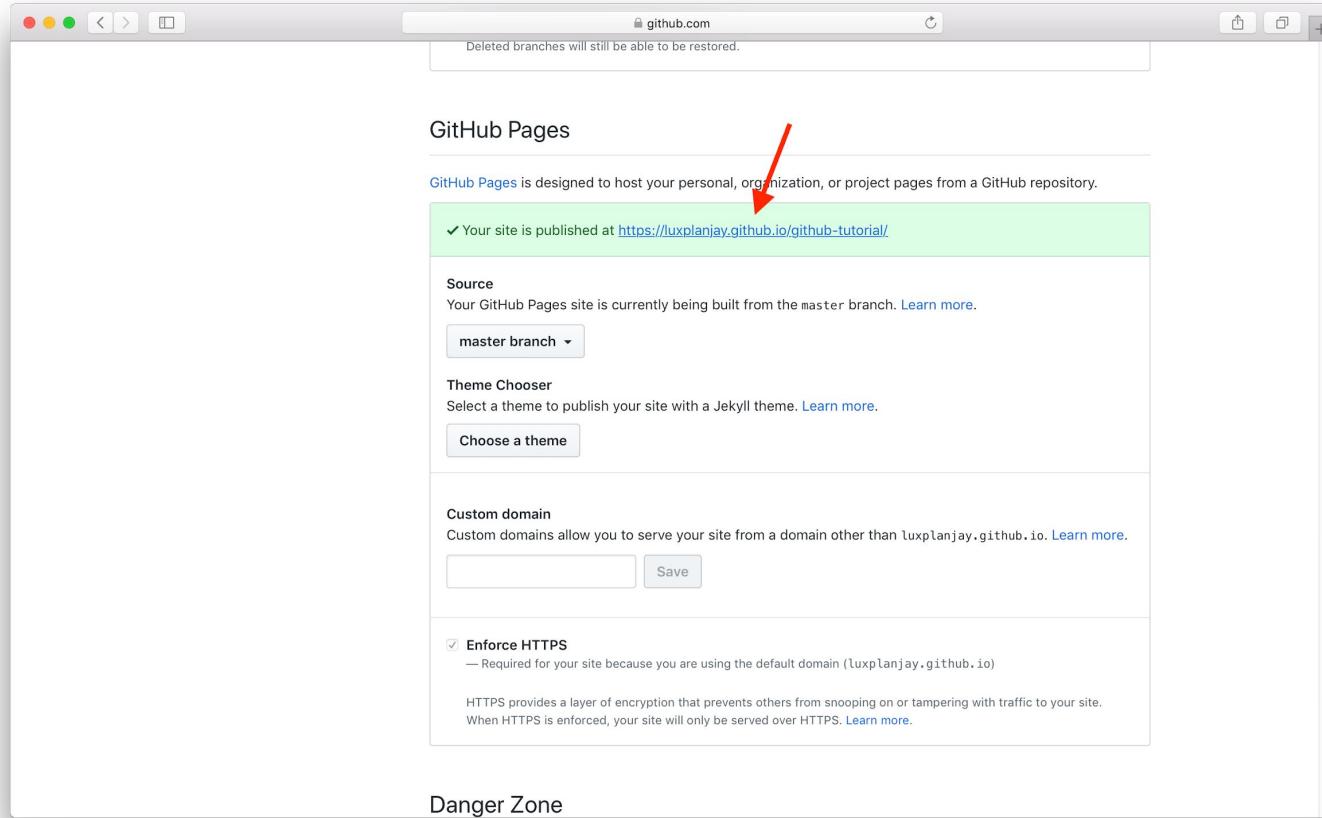
# GitHub Pages - хостинг



# GitHub Pages - хостинг



# GitHub Pages - хостинг



A screenshot of a web browser window showing the GitHub Pages settings for a repository. The URL in the address bar is `github.com`. A message at the top says "Deleted branches will still be able to be restored." Below it, the heading "GitHub Pages" is displayed. A red arrow points to a green success message box containing the text "✓ Your site is published at <https://luxplanjay.github.io/github-tutorial/>". The main content area includes sections for "Source" (set to "master branch"), "Theme Chooser" (button labeled "Choose a theme"), "Custom domain" (input field and "Save" button), and "Danger Zone" (checkbox for "Enforce HTTPS").

Deleted branches will still be able to be restored.

## GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

✓ Your site is published at <https://luxplanjay.github.io/github-tutorial/>

**Source**  
Your GitHub Pages site is currently being built from the master branch. [Learn more.](#)

master branch ▾

**Theme Chooser**  
Select a theme to publish your site with a Jekyll theme. [Learn more.](#)

Choose a theme

**Custom domain**  
Custom domains allow you to serve your site from a domain other than luxplanjay.github.io. [Learn more.](#)

Save

**Enforce HTTPS**  
— Required for your site because you are using the default domain (luxplanjay.github.io)

HTTPS provides a layer of encryption that prevents others from snooping on or tampering with traffic to your site. When HTTPS is enforced, your site will only be served over HTTPS. [Learn more.](#)

Danger Zone

T1 H4 E1  
E1 N1 D2