

# Github Introduction

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**GitHub**



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# Plan

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- Github definition
- Github configuration
- Github features
- How to use Github
- Github simulation
  - Create a GitHub repository
  - SSH keys Setup
  - Pull Requests

# Why Github ?

Local  
management of  
projects



Hosting in Cloud



Working  
Directory

Local machine

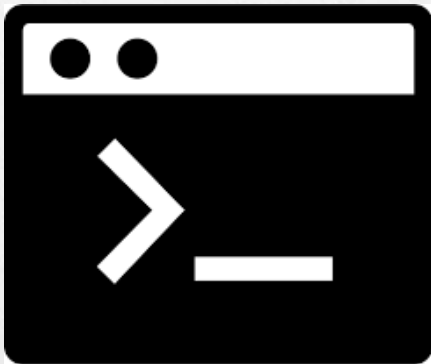


If computer get corrupted or breaks  
we loose the project

Command line  
usage



Graphical  
interface



GUI



# Interactive features

## microsoft/**transductive- vos.pytorch**

a transductive approach for video object segmentation



4

Contributors



8

Issues



142

Stars



32

Forks



# What is Github?



- GitHub was developed by Chris Wanstrath, P. J. Hyett, Tom Preston-Werner and Scott Chacon using Ruby on Rails, and started in February **2008**
- It is a subsidiary of **Microsoft**, which acquired the company in **2018** for \$7.5 billion
- GitHub.com is **a site for online storage of Git repositories**.
- The most popular hosting provider for Git(bitbucket, GitLab , AWS codecommit,...)
- You can get free space for open source projects or you can pay for private projects.

**Question:** Do I have to use Github in order to use Git?

**Answer:** No!

# Git

vs.

# GitHub



Git is installed and maintained on your local system (rather than in the cloud)



First developed in 2005



One thing that really sets Git apart is its branching model

Git is a high quality version control system

GitHub is designed as a Git repository hosting service



GitHub is exclusively cloud-based



You can share your code with others, giving them the power to make revisions or edits



GitHub is a cloud-based hosting service



# Github configuration





# General workflow



Working Directory



Local machine

git add

STAGING AREA

git commit

Commit History

COMMIT

COMMIT

COMMIT

git push

Remote Server



GitHub

Bitbucket

AWS CodeCommit



GitLab

# Github Must know features



Développement collaboratif



- Outils de communication



- Travail d'équipe



- Communauté « Open Source »

# GitHub Command Line Interface

[www.cli.github.com](https://www.cli.github.com)

**GitHub CLI**  
**is here**

Take GitHub to the command line

```
$ gh pr status
```

```
Relevant pull requests in cli/cli
```

```
Current branch
```

```
There is no pull request associated with [
```

```
Created by you
```

```
You have no open pull requests
```

```
Requesting a code review from you
```

```
#1640 Add auth command and flag usage to
```

```
✓ Checks passing
```

```
$ gh --version
```

```
gh version 1.0.0
```

```
https://github.com/cli/cli/releases/tag/v1.0
```

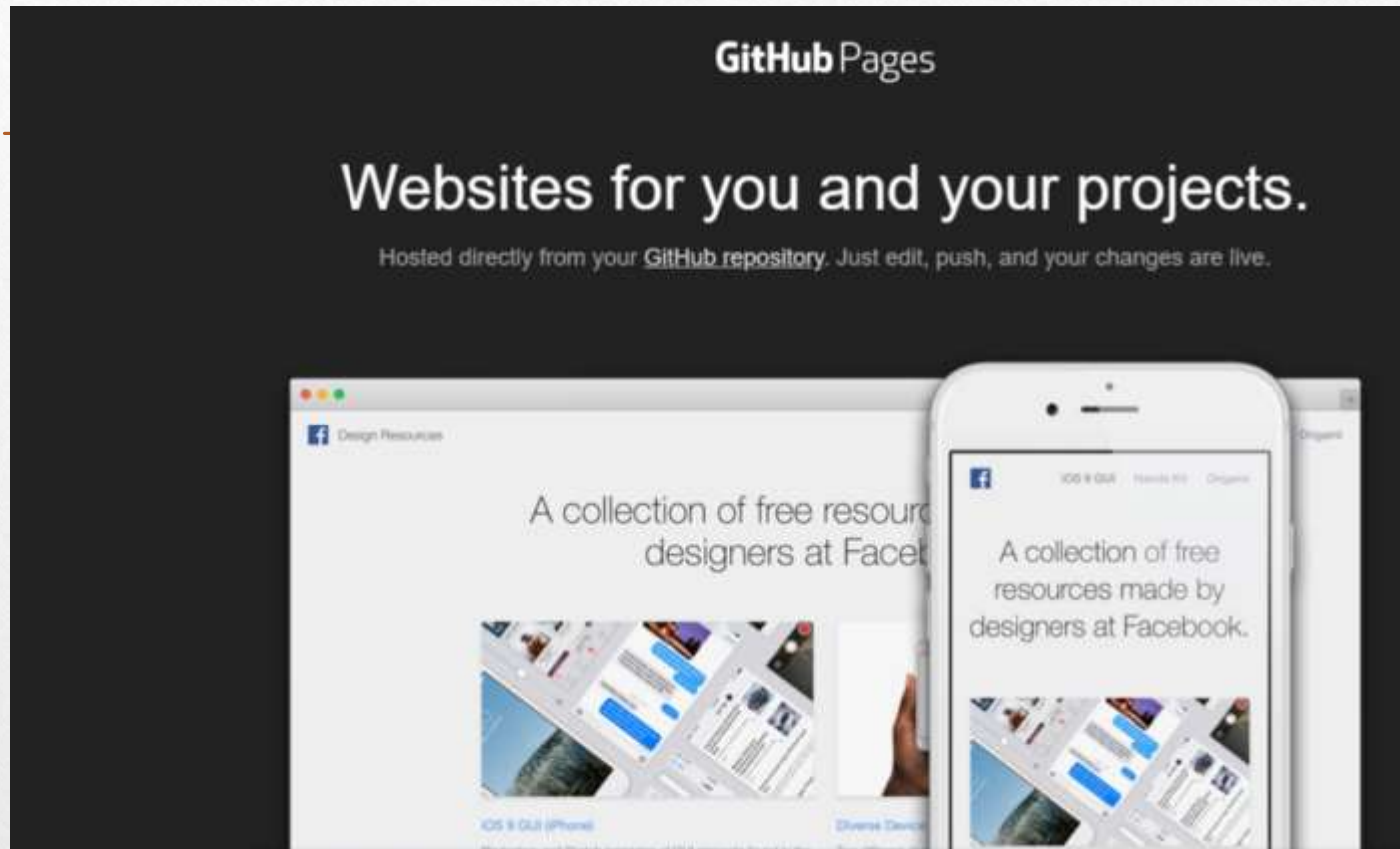


# GitHub Student Developer Pack

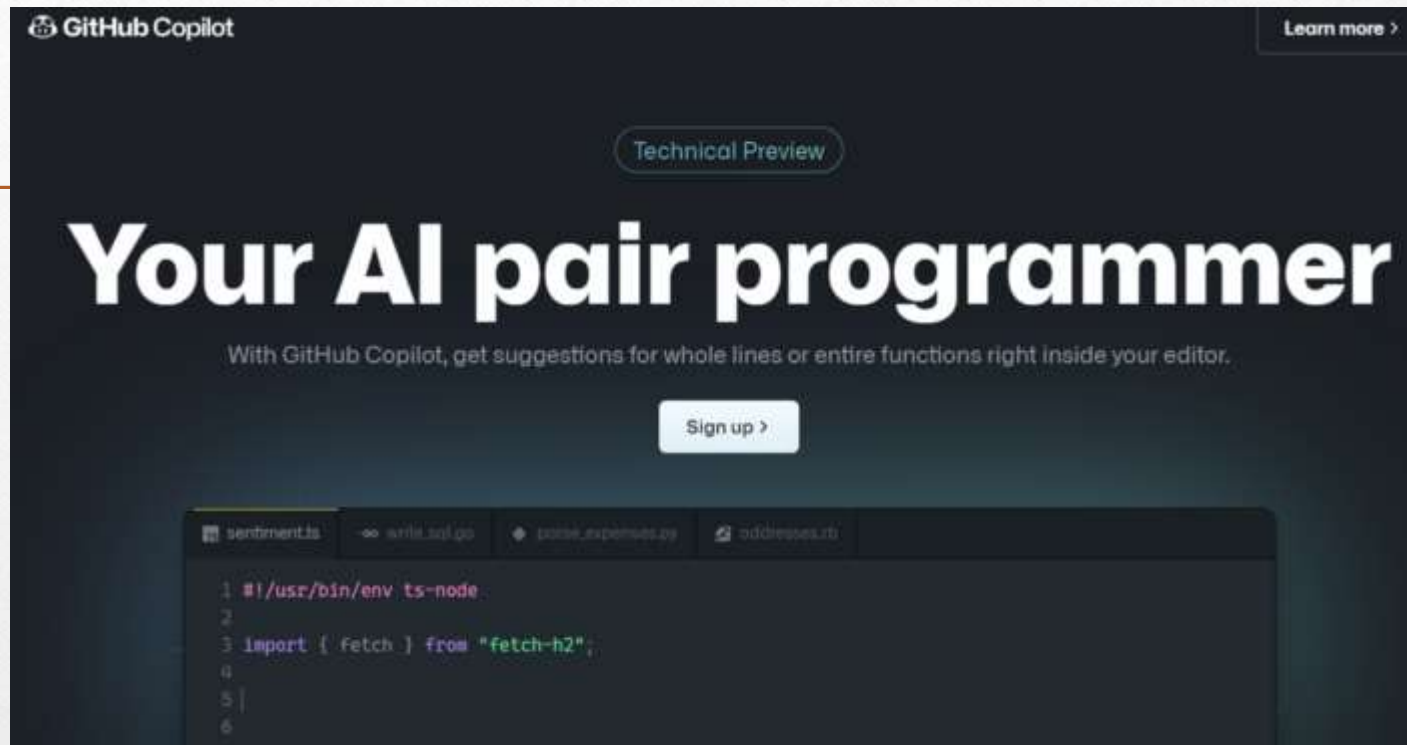


Free GitHub Pro while you are a student

# GitHub Pages



# GitHub Copilot



get suggestions for whole lines or entire functions right  
inside your editor

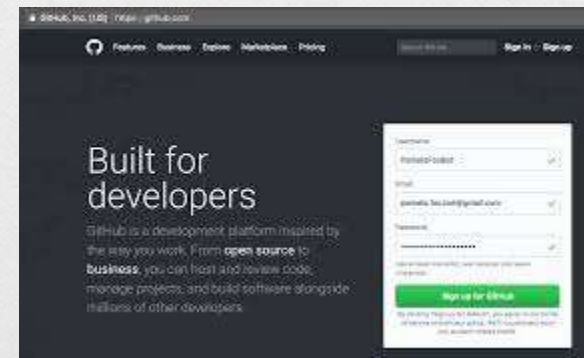


# How to use Github

Application  
Github Desktop

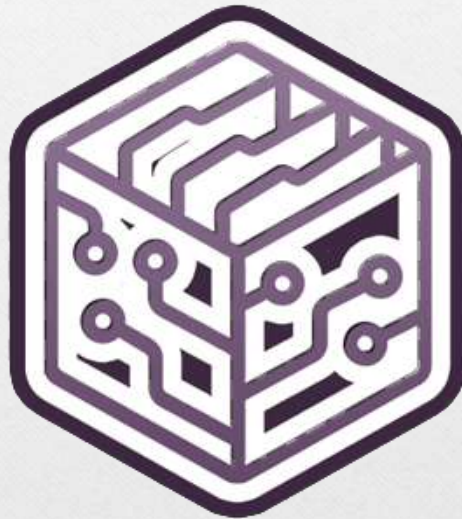


Online platform  
[www.github.com](https://www.github.com)



# Practice Example

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# Create a Github repository

## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Owner \*



Mohammedelka ▾

Repository name \*

/

Great repository names are short and memorable. Need inspiration? How about **refactored-rotary-phone**?

Description (optional)



Public

Anyone on the internet can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.



# SSH keys setup

The screenshot shows the GitHub Docs interface. On the left is a sidebar with navigation links: 'All products', 'Authentication', 'Account security', 'Secure your account with 2FA', 'Connect with SSH' (expanded), 'About SSH', 'Check for existing SSH key', 'Generate new SSH key' (selected), 'Add a new SSH key', 'Test your SSH connection', 'SSH key passphrases', 'Troubleshooting SSH', 'Verify commit signatures', and 'Troubleshoot verification'. The main content area has a breadcrumb trail: 'Authentication / Connect with SSH / Generate new SSH key'. It features a title 'Generating a new SSH key and adding it to the ssh-agent', a sub-header 'After you've checked for existing SSH keys, you can generate a new SSH key to use for authentication, then add it to the ssh-agent.', and tabs for 'Mac', 'Windows', and 'Linux'. Below this is a section 'About SSH key passphrases' with two paragraphs explaining the use of passphrases for SSH keys. On the right, an 'In this article' section lists links to 'About SSH key passphrases', 'Generating a new SSH key', 'Adding your SSH key to the ssh-agent', and 'Generating a new SSH key for a hardware security key'. The top of the page includes the 'GitHub Docs' logo, a search bar, and links for 'Free, Pro, & Team' and 'English'.

GitHub Docs

Authentication / Connect with SSH / Generate new SSH key

Free, Pro, & Team • English • Search GitHub Docs

## Generating a new SSH key and adding it to the ssh-agent

After you've checked for existing SSH keys, you can generate a new SSH key to use for authentication, then add it to the ssh-agent.

Mac Windows Linux

### About SSH key passphrases


You can access and write data in repositories on GitHub.com using SSH (Secure Shell Protocol). When you connect via SSH, you authenticate using a private key file on your local machine. For more information, see "[About SSH.](#)"




When you generate an SSH key, you can add a passphrase to further secure the key. Whenever you use the key, you must enter the passphrase. If your key has a passphrase and you don't want to enter the passphrase every time you use the key, you can add your key to the SSH agent. The SSH agent manages your SSH keys and remembers your passphrase.

**In this article**




- About SSH key passphrases
- Generating a new SSH key
- Adding your SSH key to the ssh-agent
- Generating a new SSH key for a hardware security key

# Pull Requests

 **Technocolabs100 / Bandora-Financial-Risk-Predictions-towards-Demographics-and-financial-Factors** Private

 Watch **2**  Fork **19**  Star **5**

[Code](#) [Issues](#) [Pull requests](#) **13** [Actions](#) [Projects](#) [Security](#) [Insights](#)

 **Mohammedelkasr...**  **17 branches**  **0 tags**




[Go to file](#) [Add file](#) [Code](#)





Create new file

Upload files

Contribute


This branch is **3 commits ahead**, **4 commits behind** main.


 **Mohammedelka** EDA step on Bondora dataset  **45a2cde** · 2 days ago  **35 commits**


 Bandora-Financial-Risk-Predictio...	Add files via upload	7 days ago
 Bandora-Financial-Risk.ipynb	Data preprocessing version-2	6 days ago
 Bondora EDA.ipynb	EDA step on Bondora dataset	2 days ago
 Bondora data preprocessing V2.i...	Machine learning Internship Project	4 days ago


About


The main purposes of this analysis are to summarize the characteristics of variables that can affect the loan status and to get some ideas about the relationships among variables.

 Readme

 Apache-2.0 license

 5 stars

 2 watching

 19 forks

# Thank You

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## Bonus: Github.dev

