



Ten Simple Rules for Taking Advantage of Git and GitHub

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SUMÁRIO

01

Github

02

As 10 regras

03

Hands on!

O que é Github?

GitHub é uma plataforma de hospedagem de código-fonte e arquivos com controle de versão usando o **Git**.

O GitHub foi **desenvolvido** por Chris Wanstrath, J. Hyett, Tom Preston-Werner e Scott Chacon em 2008



<https://github.com/explore>



Linus Torvalds

torvalds

Unfollow

👤 136k followers · 0 following · ☆ 2

🏢 Linux Foundation

📍 Portland, OR



O github usa o sistema Git,
que foi criado pelo mesmo
criador do Linux

– Curiosidade do dia



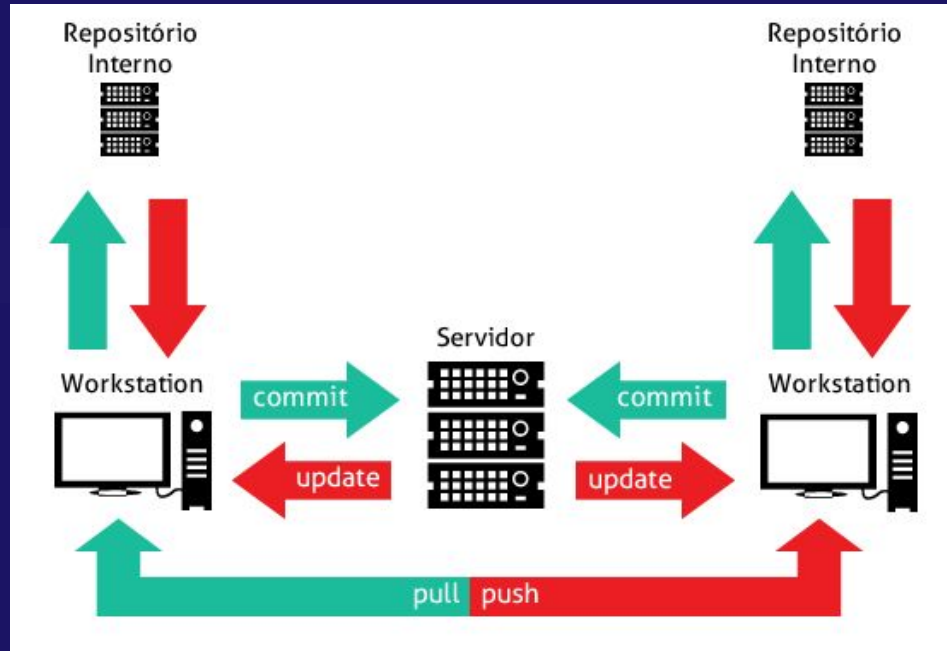
<https://github.com/torvalds>

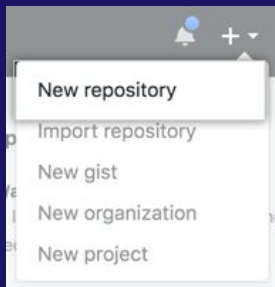


Sobre o artigo




Regra 1: Use o
GitHub para
controlar seus
projetos







Owner * Repository name *

 renandrades ▾ /

Great repository names are short and memorable. Need inspiration? How about **fictional-chainsaw**?

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.

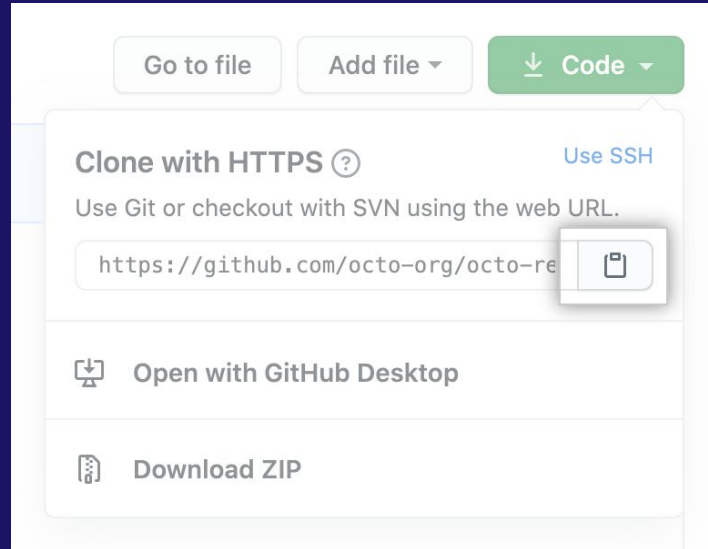
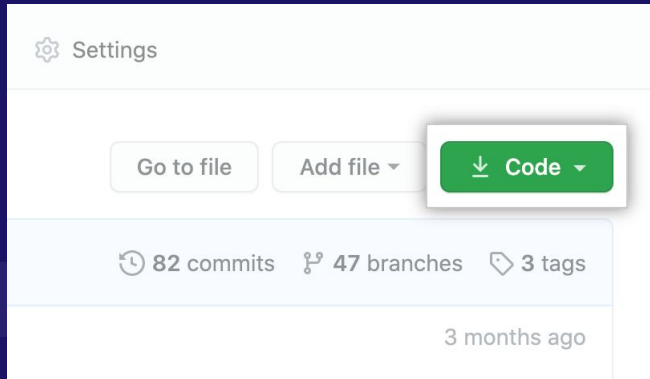
Initialize this repository with:
Skip this step if you're importing an existing repository.

☐ **Add a README file**
This is where you can write a long description for your project. [Learn more.](#)

☐ **Add .gitignore**
Choose which files not to track from a list of templates. [Learn more.](#)

☐ **Choose a license**
A license tells others what they can and can't do with your code. [Learn more.](#)

git clone



Exemplo


```
git push origin master  
## push local changes to the remote  
Repository
```

```
git pull origin master  
## pull remote changes into the  
local repository
```

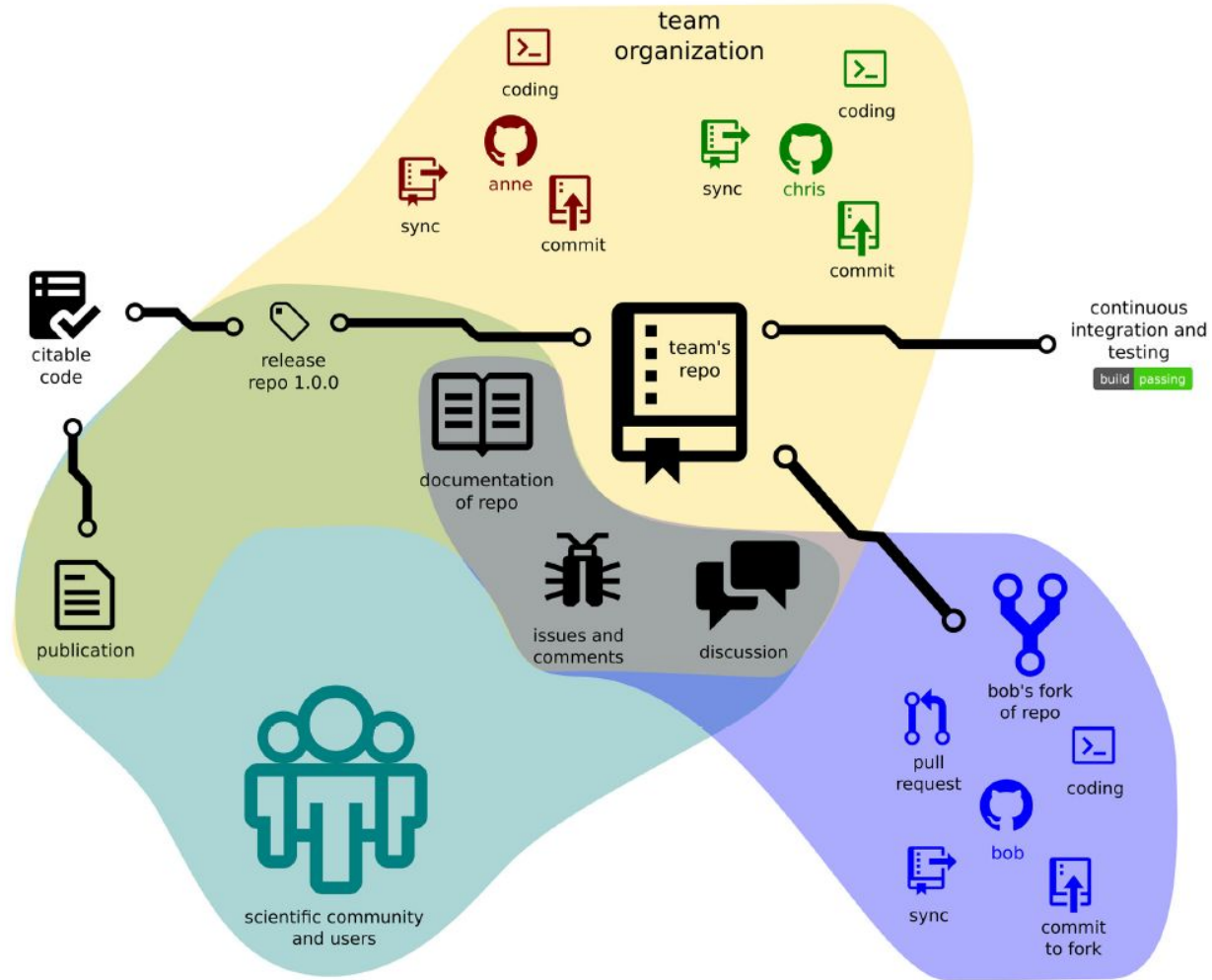
Table 1. Bioinformatics repository examples with good practices of using GitHub. The table contains the name of the repository, the type of example (issue tracking, branch structure, unit tests), and the URL of the example. All URLs are prefixed with <https://github.com/>.

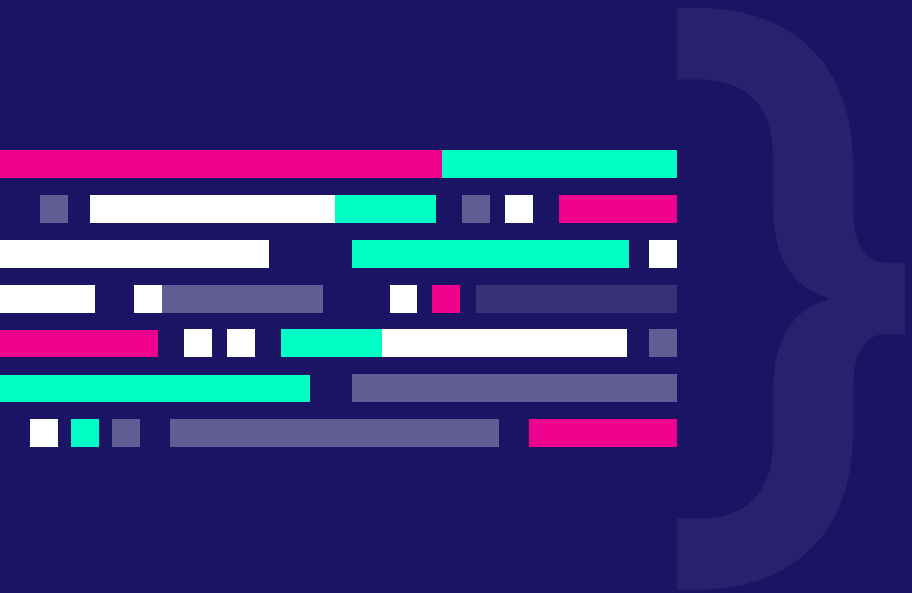
Name of the Repository	Type	URL
Adam	Community Project, Multiple forks	https://github.com/bigdatagenomics/adam
BioPython [18]	Community Project, Multiple contributors	https://github.com/biopython/biopython/graphs/contributors
Computational Proteomics Unit	Lab Repository	https://github.com/ComputationalProteomicsUnit
Galaxy Project [19]	Community Project, Bioinformatics Repository	https://github.com/galaxyproject/galaxy
GitHub Paper	Manuscript, Issue discussion, Community Project	https://github.com/ypriverol/github-paper
MSnbase [20]	Individual project repository	https://github.com/lgatto/MSnbase/
OpenMS [21]	Bioinformatics Repository, Issue discussion, branches	https://github.com/OpenMS/OpenMS/issues/1095
PRIDE Inspector Toolsuite [22]	Project Organization, Multiple projects	https://github.com/PRIDE-Toolsuite
Retinal wave data repository [23]	Individual project, Manuscript, Binary Data organized	https://github.com/sje30/waverepo
SAMtools [24]	Bioinformatics Repository, Project Organization	https://github.com/samtools
rOpenSci	Community Project, Issue discussion	https://github.com/ropensci
The Global Alliance For Genomics and Health	Community Project	https://github.com/ga4gh

doi:10.1371/journal.pcbi.1004947.t001



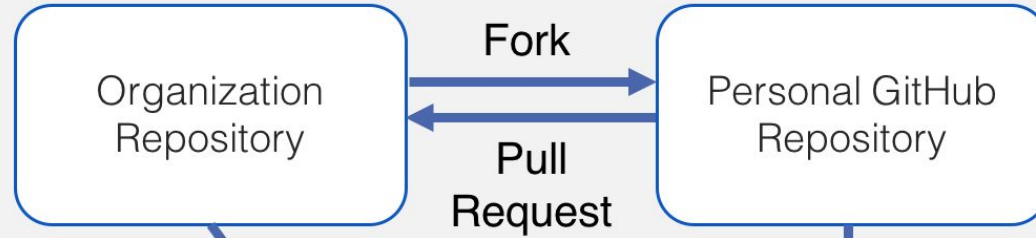
Regra 2: GitHub
para “lobos
solitários”,
grupos, e / ou
labs e
organizações



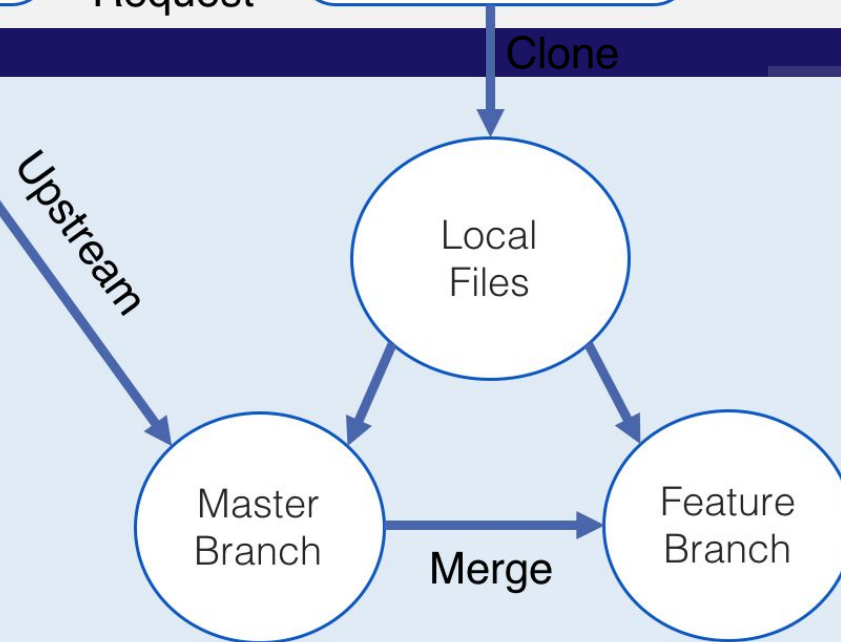


Regra 3:
Colaborando e
desenvolvendo:
Branching
E Forking

GitHub



Local Machine



 Watch ▾

39

 Star

42

 Fork

33

   github.com/bioinfo-hcpa/github-paper README.md 

Ten Simple Rules for Taking Advantage of git and GitHub

build **passing**

Description

This repository contains the manuscript entitled: [Ten Simple Rules for Taking Advantage of git and GitHub](#). Our aim here is to describe how the bioinformatics community can use GitHub features and tools on a daily basis.

- Pre-print: <http://biorxiv.org/content/early/2016/05/13/048744>
- In PLoS Computational Biology: <http://dx.doi.org/10.1371/journal.pcbi.1004947>

Commenting and contributing

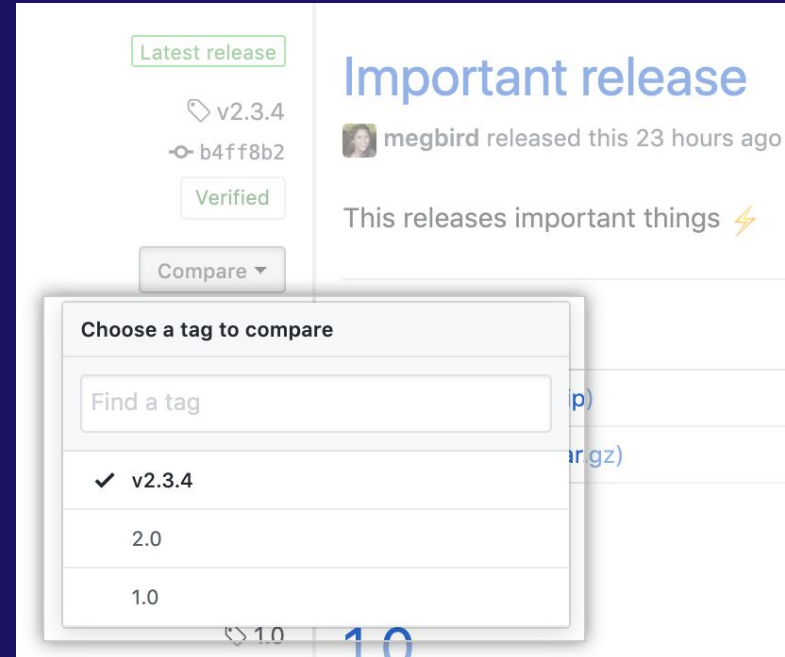
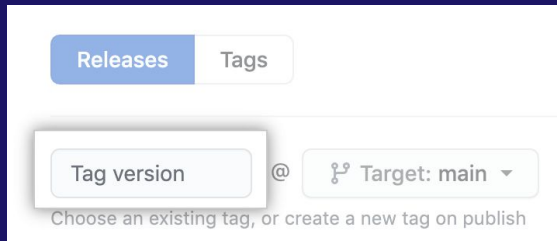
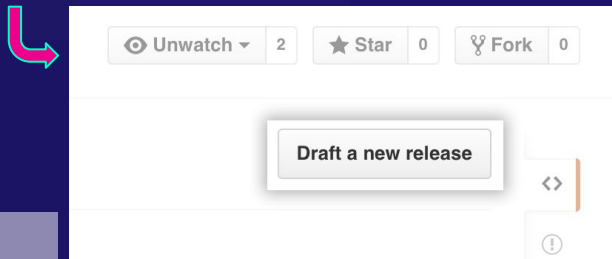
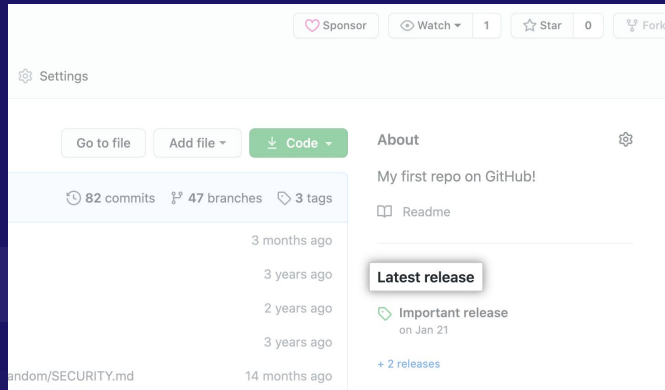
We hope to finalise the manuscript and re-submit soon and won't accept any new pull requests. Feel free to open an issue if there is any point you would like to raise or discuss.



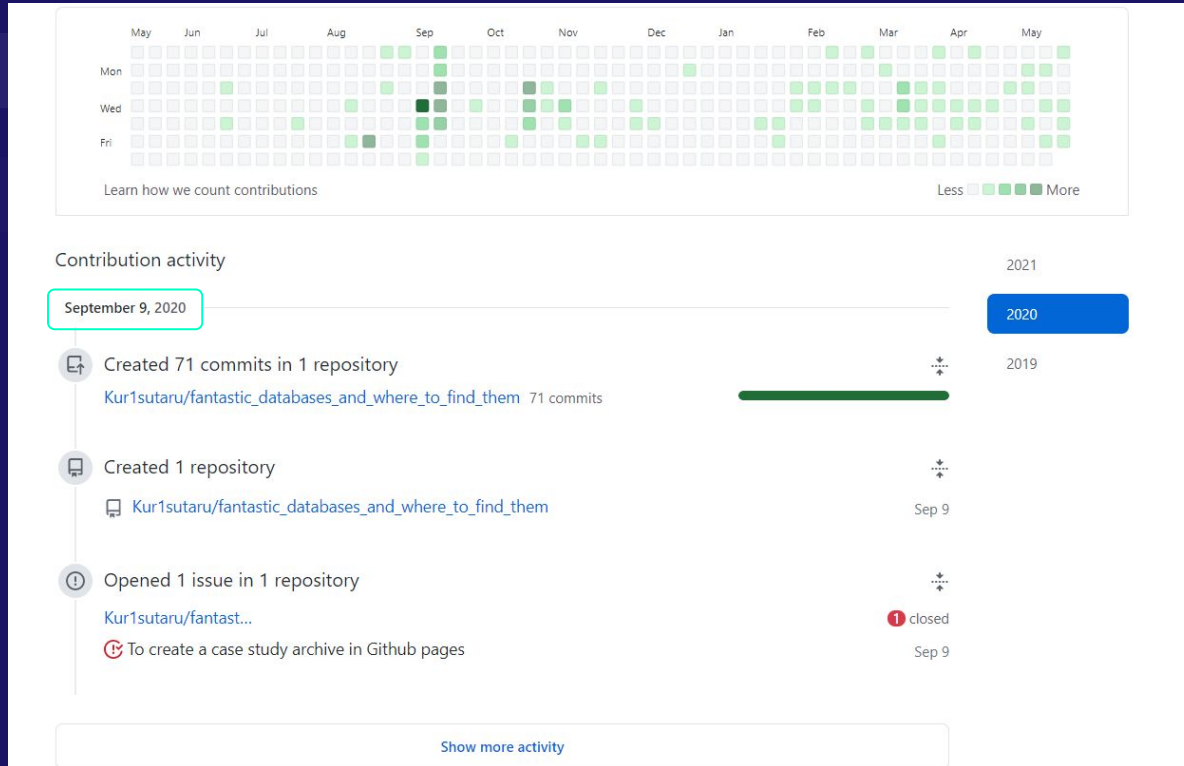
 ypriverol / github-paper
 alex-konovalov / github-paper
 bioinfo-hcpa / github-paper
 cjfields / github-paper
 Daniel-Mietchen / github-paper
 elahi / github-paper
 frssp / github-paper
 fu / github-paper
 julianu / github-paper
 kblin / github-paper
 Kur1sutaru / github-paper
 lgatto / github-paper
 javizca / github-paper
 mcvidomi / github-paper
 michaelhabeck / github-paper
 nemochina2008 / github-paper
 nguyendoanquyet / github-paper

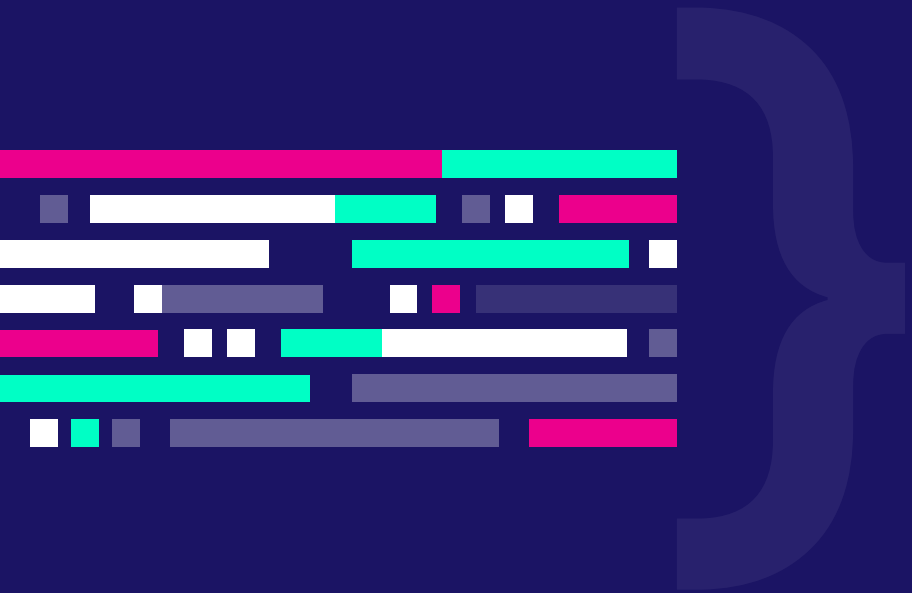


Regra 4: Nomeando Branches e fazendo Commits



Aqui podemos observar uma cientista prestes a publicar e qualificar



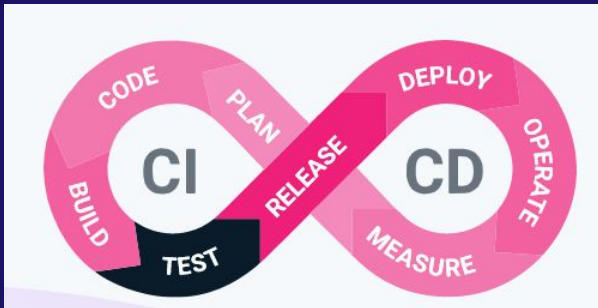


Regra 5:
Deixando o
GitHub fazer
algumas tarefas
por nós:
Integração

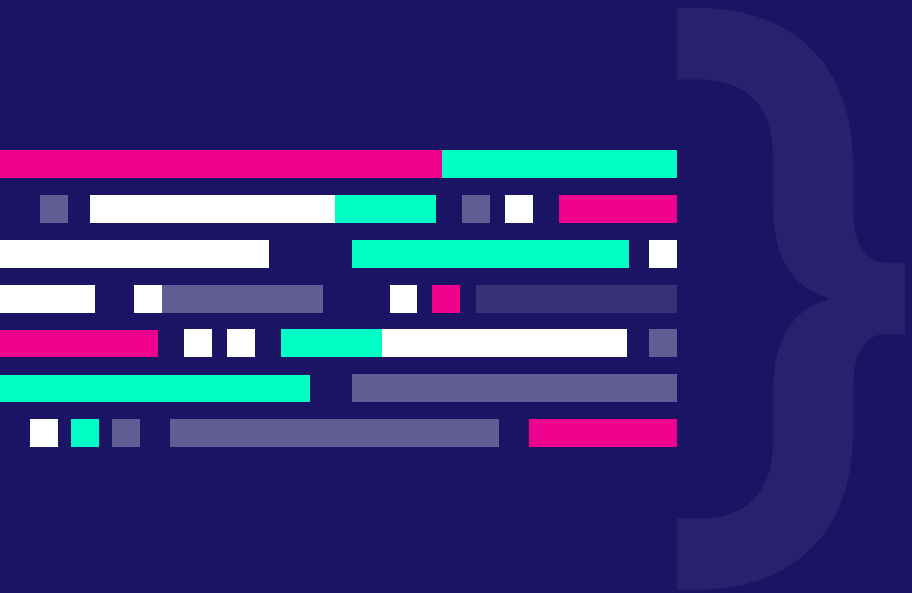
Melhorar a qualidade de um repositório antigo

Testar códigos automaticamente

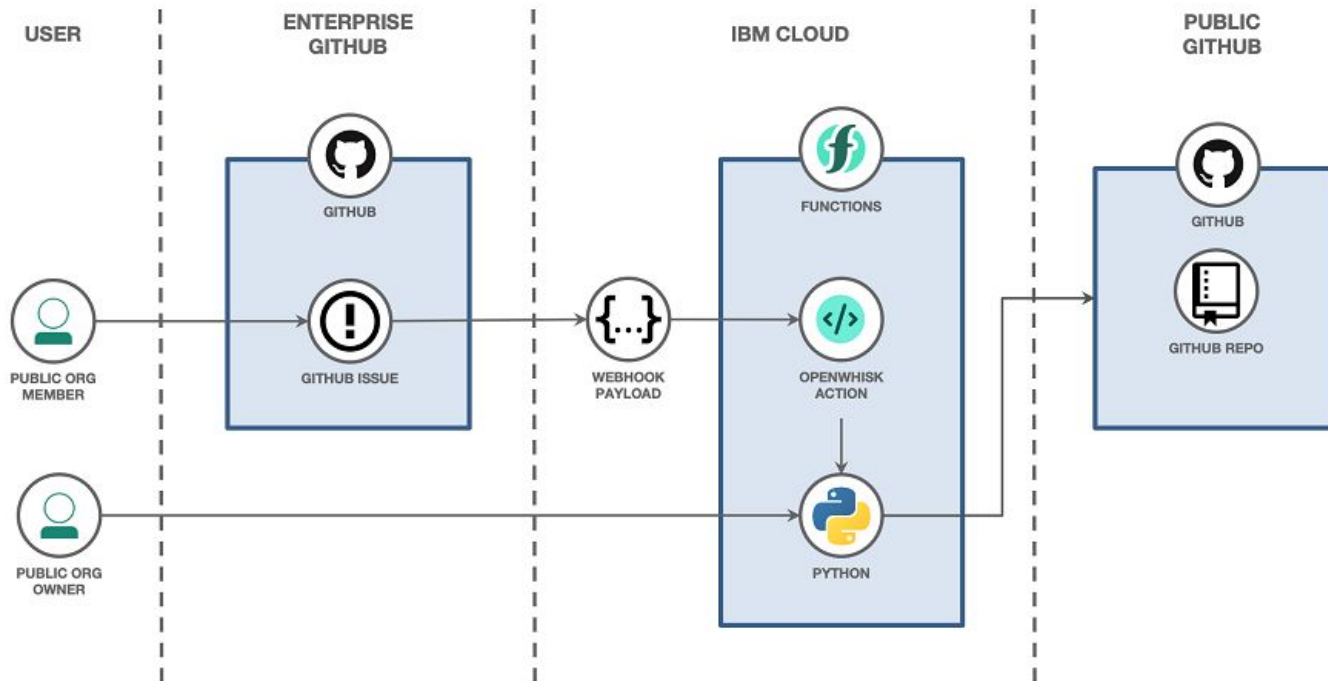
Diminuir o tempo de implementação e runtime




[Codecov - The Leading Code Coverage Solution](#)



Regra 6:
Deixando o
GitHub fazer
(ainda mais)
tarefas por nós:
Automação





Regra 7:
Utilizando o
Github como
fórum de
discussão,
criando issues,
projetos e
insights

main

Updated on Jan 21

Filter cards

+ Add cards

Fullscreen

Menu

2 To do

+ ...

! Colocar o objetivo explícito da página

#2 opened by lubianat



! Colocar resumo das atas

#6 opened by lubianat



0 In progress

+ ...

3 Done

+ ...

! Colocar alguma lista de membros do grupo

#4 opened by lubianat



1 linked pull request



! Colocar o link de contato do telegram

#3 opened by lubianat



📅 Criar um Kanban

Added by lubianat



+ Add column

Contributors 6



Environments 1

github-pages Active

Automated as To do

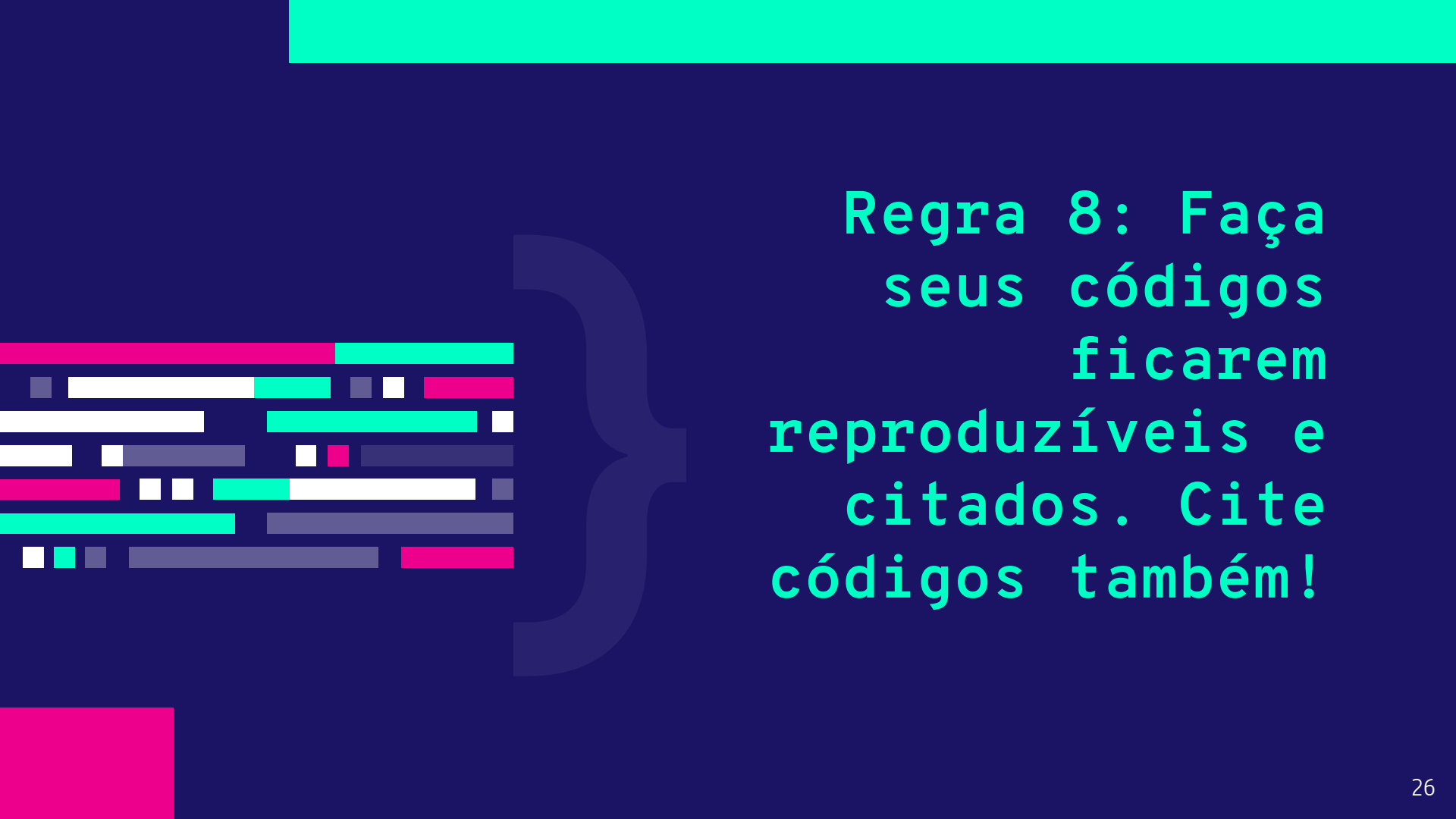
Manage

Automated as In progress

Manage

Automated as Done

Manage



Regra 8: Faça
seus códigos
ficarem
reproduzíveis e
citados. Cite
códigos também!

Home / Account / GitHub

Settings

- Profile
- Change password
- Linked accounts
- Applications
- Shared links
- GitHub**

GitHub Repositories (updated 11 seconds ago) [Sync now ...](#)

Get started

- 1 Flip the switch**

Select the repository you want to preserve, and toggle the switch below to turn on automatic preservation of your software.

☒ ON
- 2 Create a release**

Go to GitHub and [create a release](#). Zenodo will automatically download a .zip-ball of each new release and register a DOI.
- 3 Get the badge**

After your first release, a DOI badge that you can include in GitHub README will appear next to your repository below.

DOI [10.5281/zenodo.8475](#) (example)

Repositories

If your organization's repositories do not show up in the list, please ensure you have enabled [third-party access](#) to the Zenodo application. Private repositories are not supported.

[octocat/Hello-World](#) ☐ OFF

[octocat/Hello-World](#) ☒ ON



Regra 9:
Promovendo e
discutindo
projetos: Github
pages



Código Bonito

Um grupo livre para falar sobre ciência aberta,
bioinformática e programação

Página inicial.



Voluntári@s do grupo Código Bonito • 2021 • [codigo-bonito](#)

Powered by [Beautiful Jekyll](#)

fantastic_databases_and_where_to_find_them

Repository of databases for omic data

[View on GitHub](#)

Case study: Exploratory *ACE2* analysis using multi-omic web tools

Table of contents

- Step 1 Searching basic information on *ACE2*
- Step 2 Genomic and sequence databases
- Step 3 Searching of *ACE2* Gene expression
- Step 4 Searching in Cancer databases



Regra 10: Utilizando o Github como rede social (?)





Kur1sutaru

Follow



Renan Andrades
renandrades

Follow

Algumas razões para usar Github

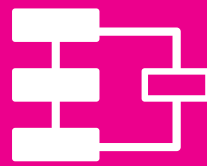
Ciência Aberta e
Reprodutibilidade



Controle das
versões

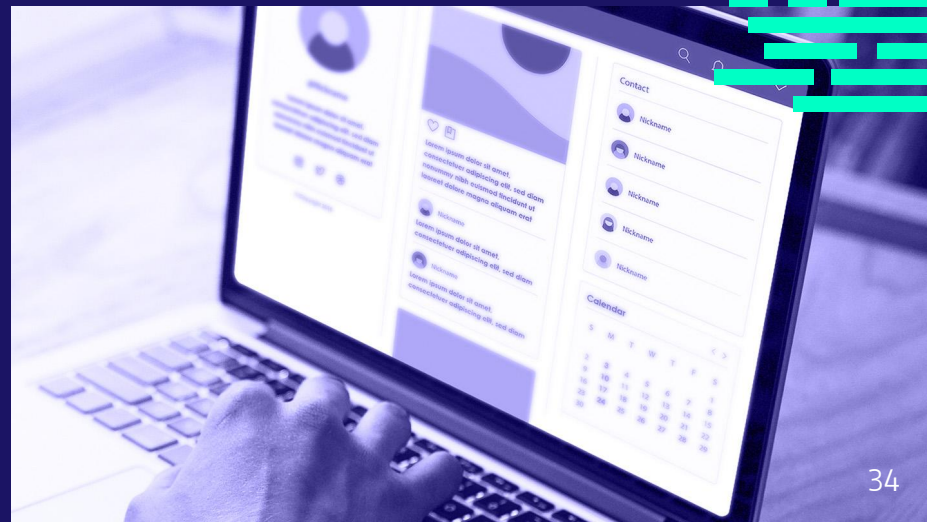


Porfólio:
Aprender e
Colaborar!



BORA USAR MAIS O GITHUB?

— — —



OBRIGADA !

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