مقدمه ای بر GIT & GITHUB

درس: روش پژوهش و ارائه

تهیه شده توسط: یاسمین آشوری
کارشناسی پیوسته مهندسی کامپیوتر
نیمسال دوم سال تحصیلی ۱۴۰۲-۱۴۰۱

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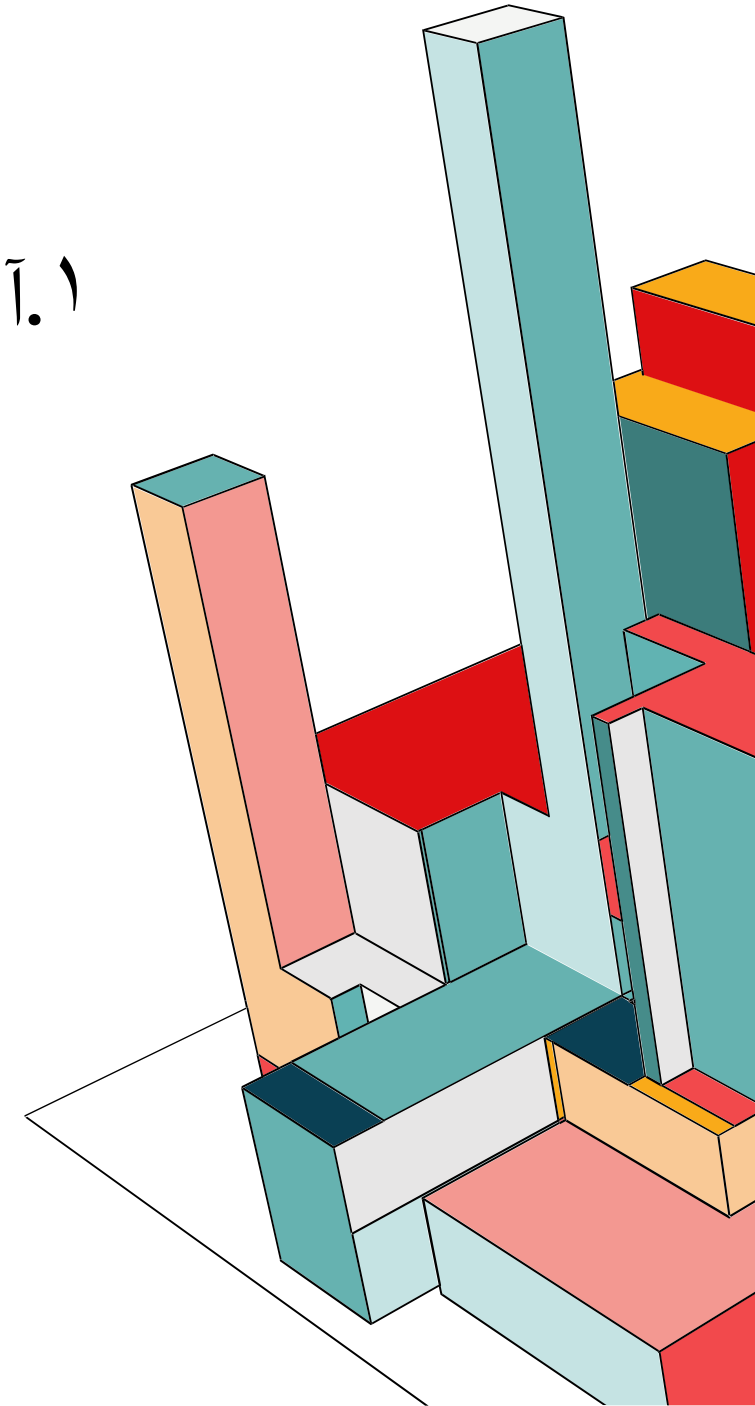
۱.آشنایی با Git

1-a) تاریخچه کوتاهی درمورد Git

1-b) Git چیست ؟

1-c) چرا Git ؟

1-d) معرفی Gitlab, GitHub, Gitkraken



فهرست

۲. مقدمات Repository

2-a) مخزن Git چیست ؟

2-b) Cloning,forks

2-c) Local Repo

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3-a) What is a Commit and push?

3-b) Good Commit Message

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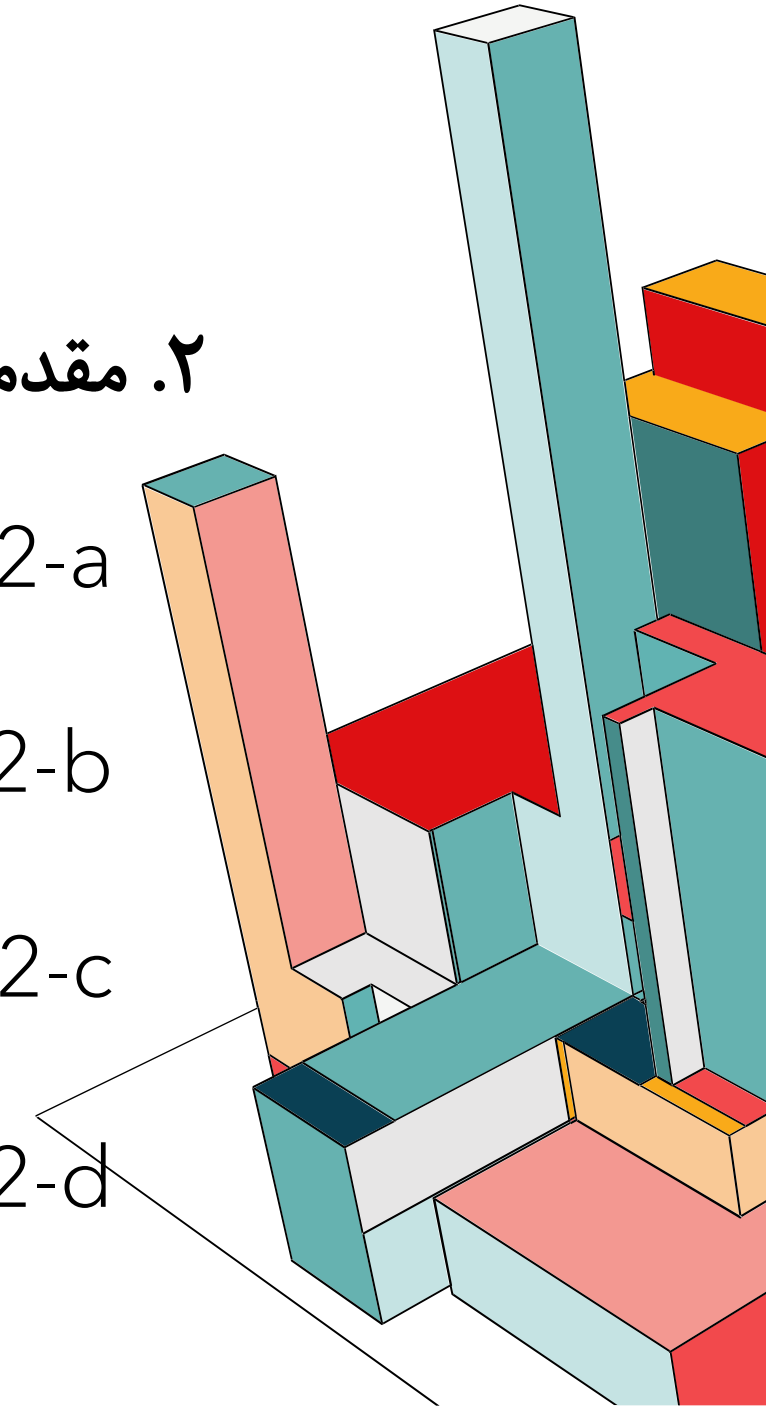
3-d) Revert چیست؟



فهرست

۴. Branching

4-a) دستورات Branch

4-b) Branch Strategies

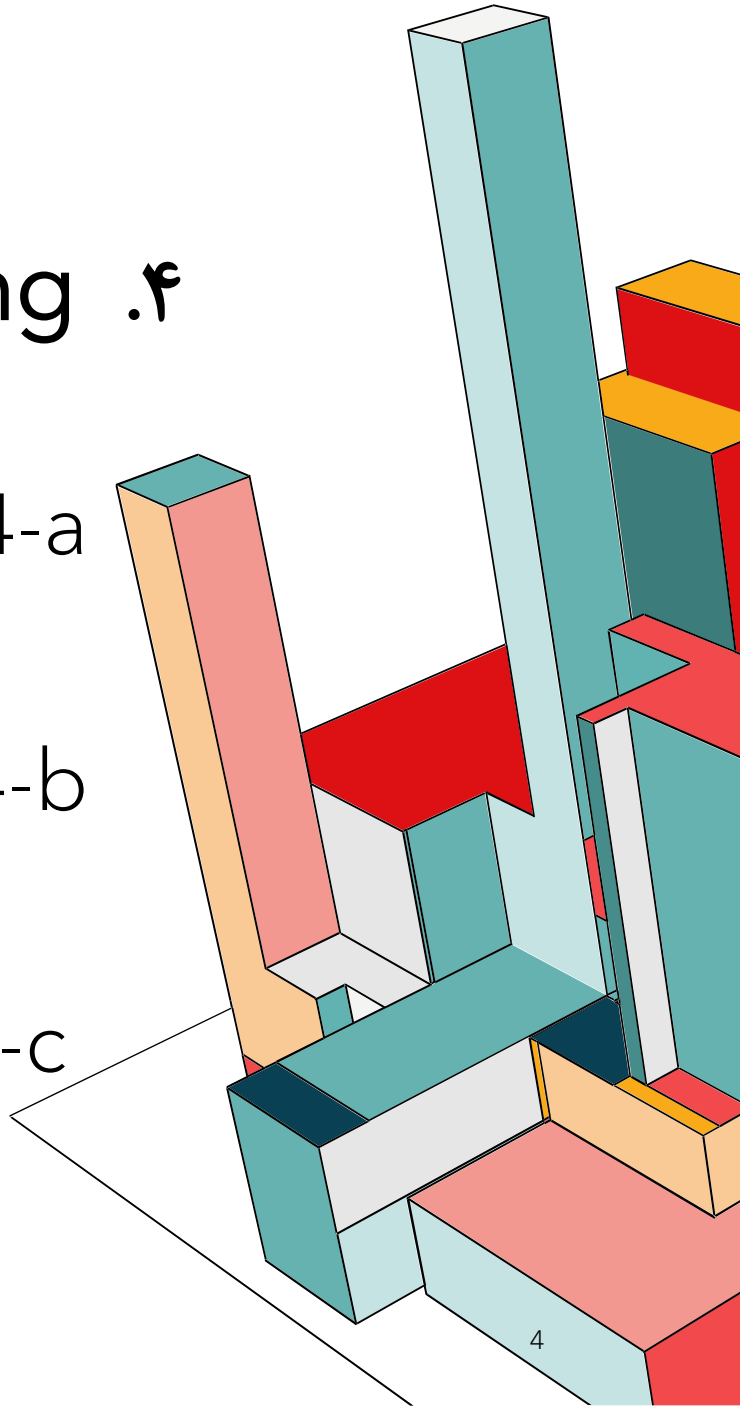
4-c) Merge vs Rebase

۵. Pull, Pull Request,Fork

4-a) What is git pull?

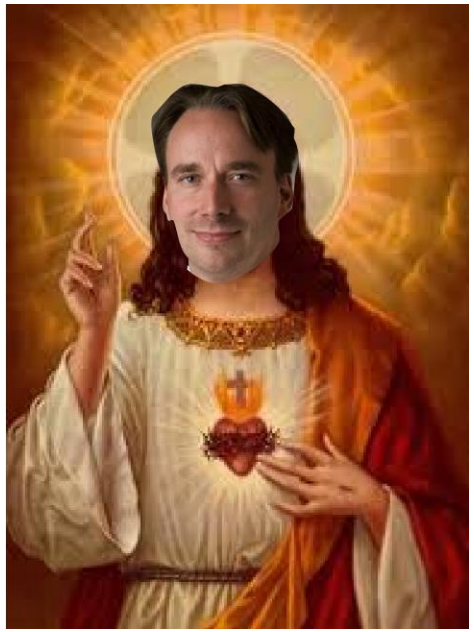
4-b) Pull vs Fetch

4-b) Pull Request & Fork



1-A) تاریخچه کوتاهی درمورد GIT

BitKeeper
Scalable Version Control



git

GIT (1-B چیست ؟

- درمورد Version Control Systems

۱. Local Version Control Systems
۲. Centralized Version Control Systems
۳. Distributed(Decentralized) Version Control Systems
۴. مدل های معروف هر نوع از VCS

- تفاوت گیت با بقیه VCS ها و نحوه کار
- File-based vs snapshots

1-C) چرا GIT ؟

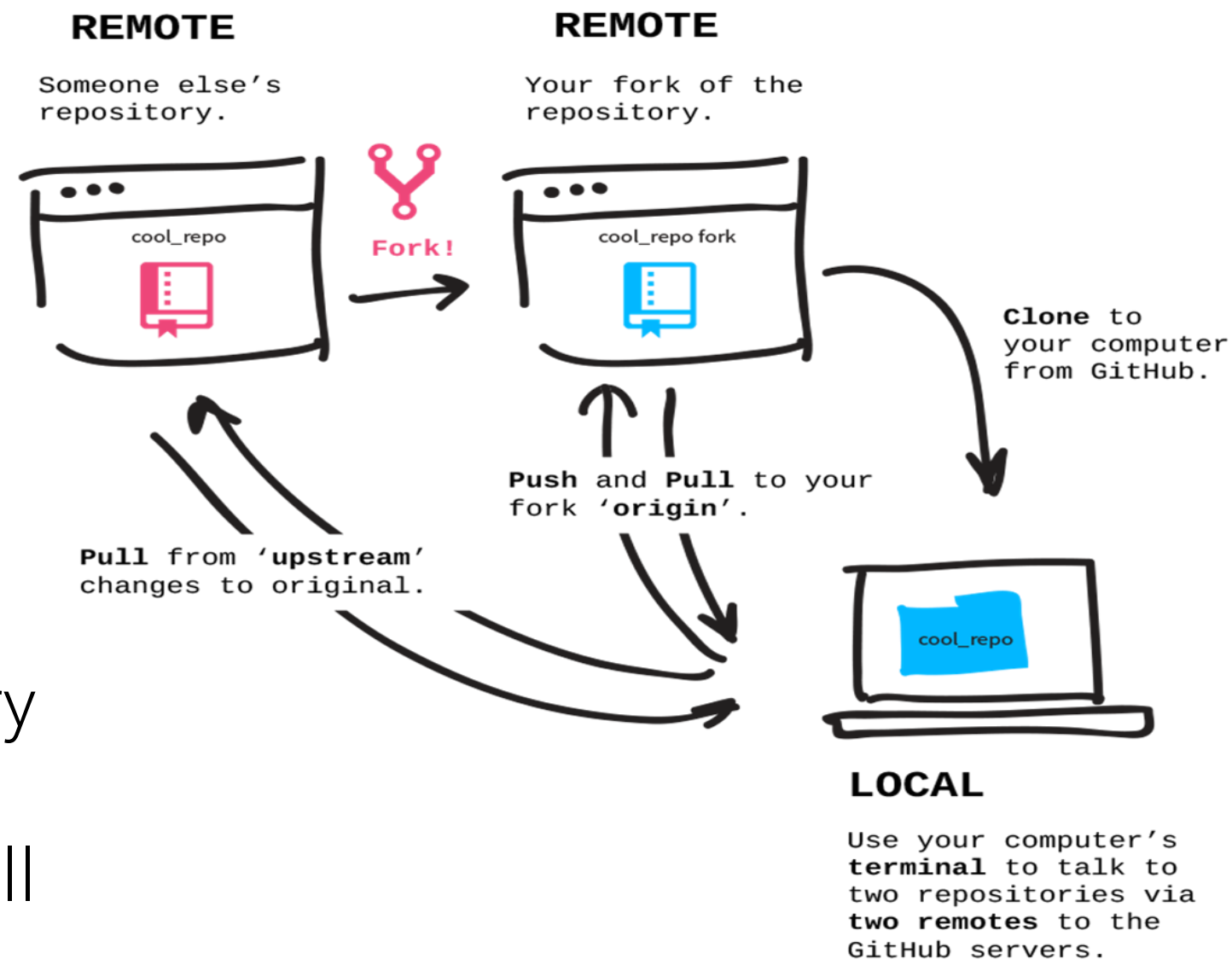
- ذخیره کردن روند پیشرفت
- سیستمی با قابلیت همکاری و اشتراک

1-d) معرفی Gitlab, GitHub, Gitkraken

2-A) مخزن GIT چیست ؟

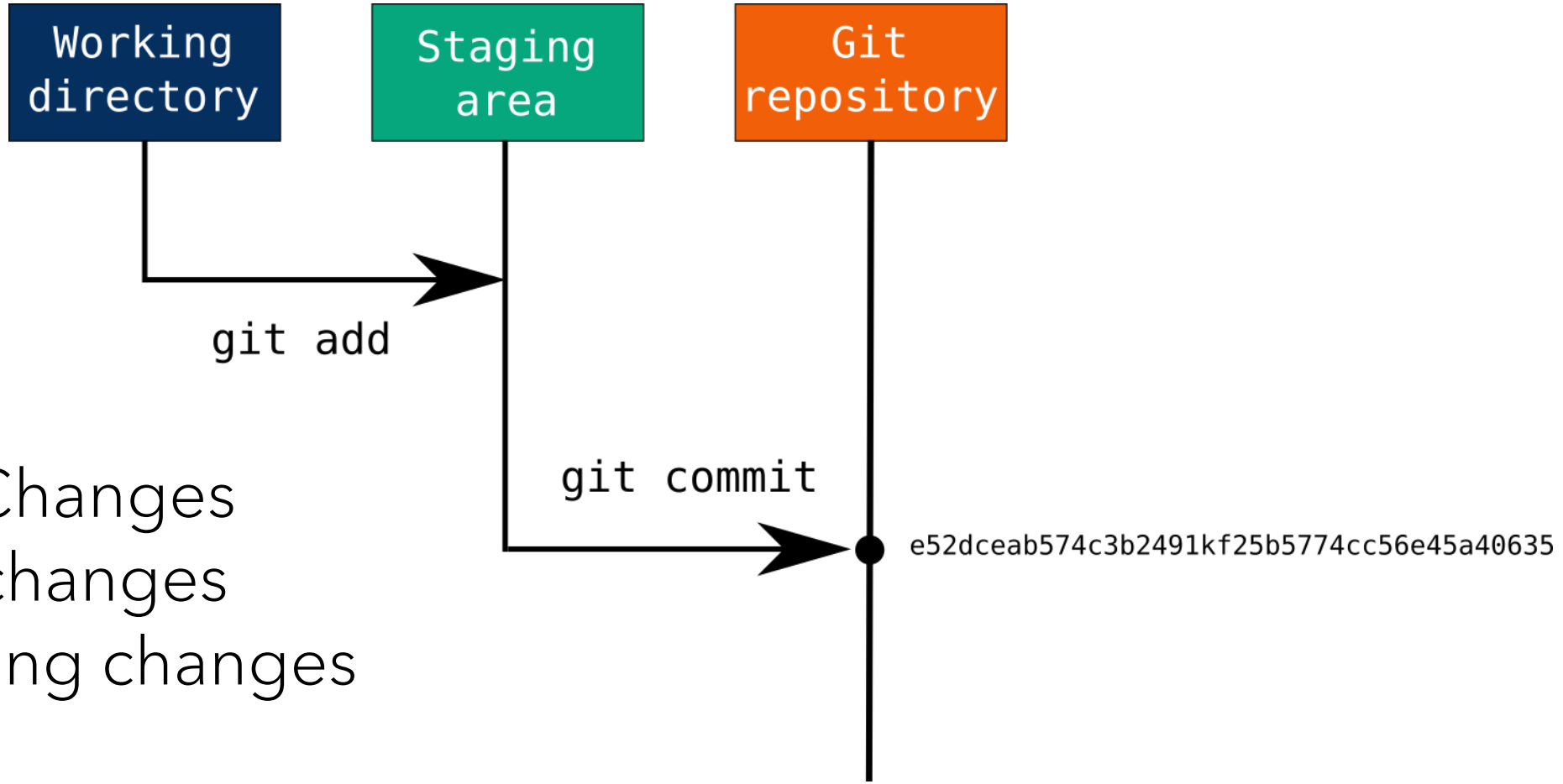
- . git/ folder
- Git Init
- What is a Repository ?

2-B-D)CLONE, FORK, REMOTE, LOCAL



- Remote Repository
- Local Repository
- Fork, push and pull

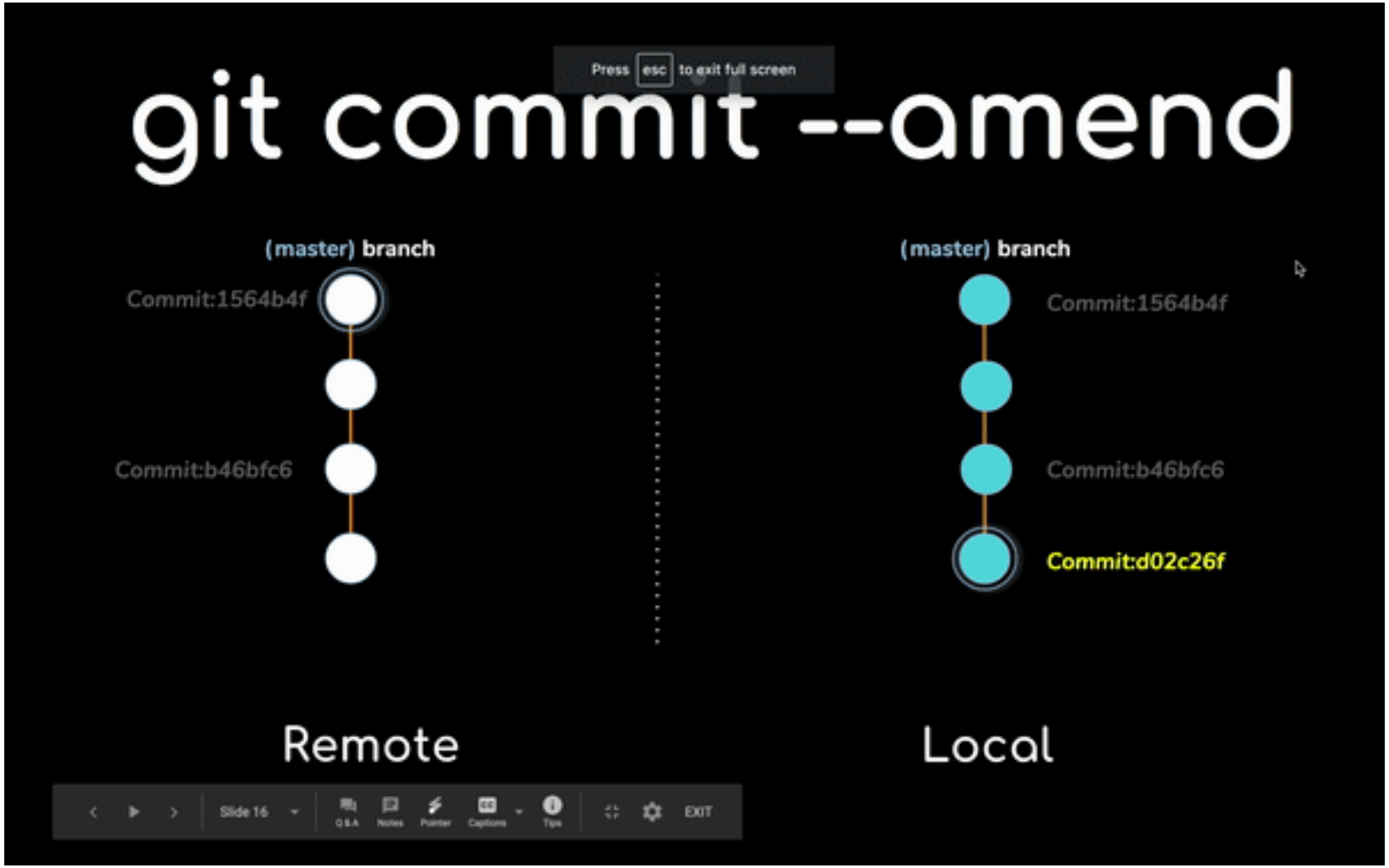
3-a) What is a Commit and push?



- Workflow:
  - 1-Making Changes
  - 2-Staging changes
  - 3-Committing changes

3-A) WHAT IS A COMMIT AND PUSH?

- Amend command



3-B) GOOD COMMIT MESSAGE

- **Summary in present tense.**
- Type: chore, docs, feat, fix, refactor, style, or test.
- Good Commits:
  - feat: add hat wobble
  - Updated the left navigation with 12.2 feature update
  - Bumped nodegit version up to 6.4.2
- Bad commits:
  - made fixes
  - Applied patch.
  - Updated the left & bumped nodegit to v6.4.2

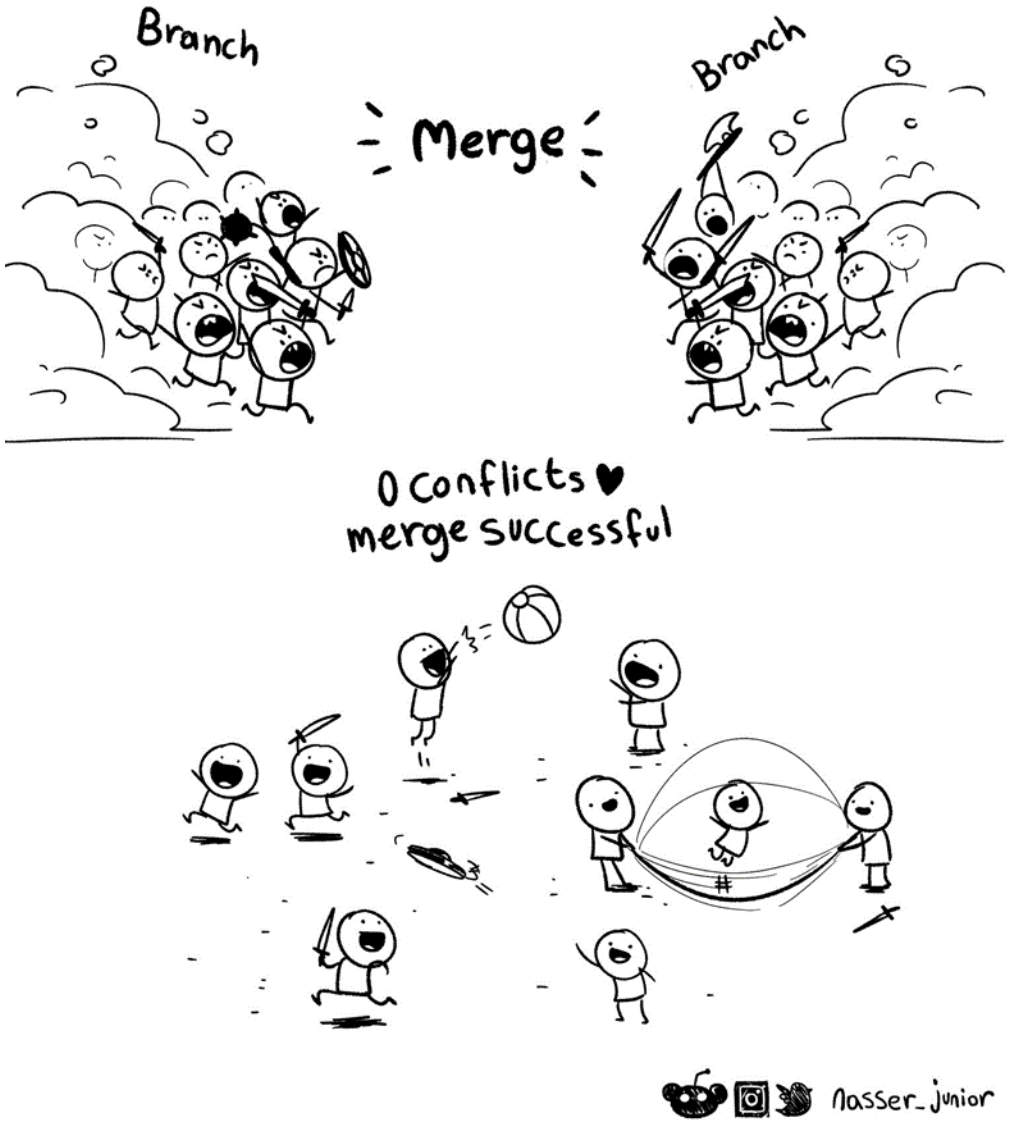
DIFF (3-C چیست ؟

- Review Changes
- Decide rebase or merge
- Copy and Paste code

REVERT (3-D چیست؟

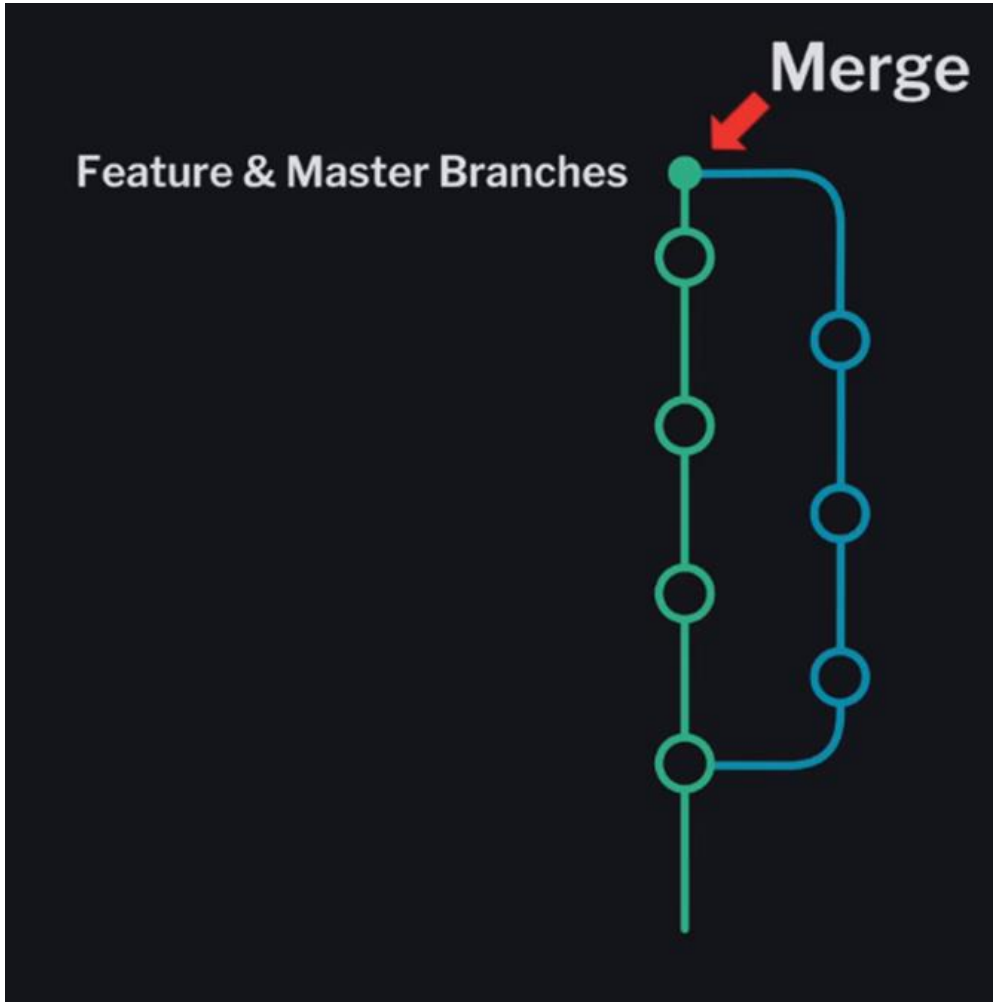
- Review Changes
- Decide rebase or merge
- Copy and Paste code

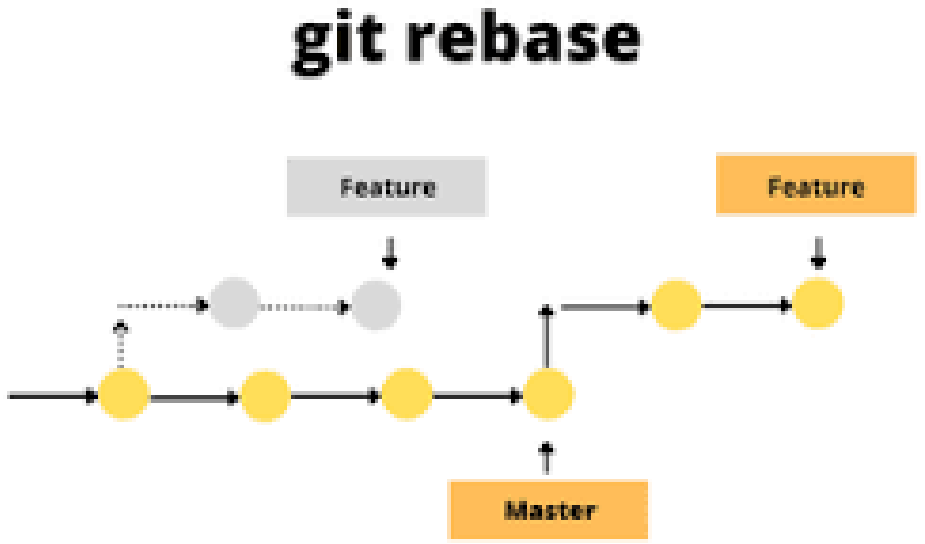
4.BRANCHING



- مفهوم Branch
- Checkout
- ایجاد، حذف و عوض کردن نام Branch
- Merging and Conflicts
- Git Flow Branch Strategies
- Merging vs Rebasing

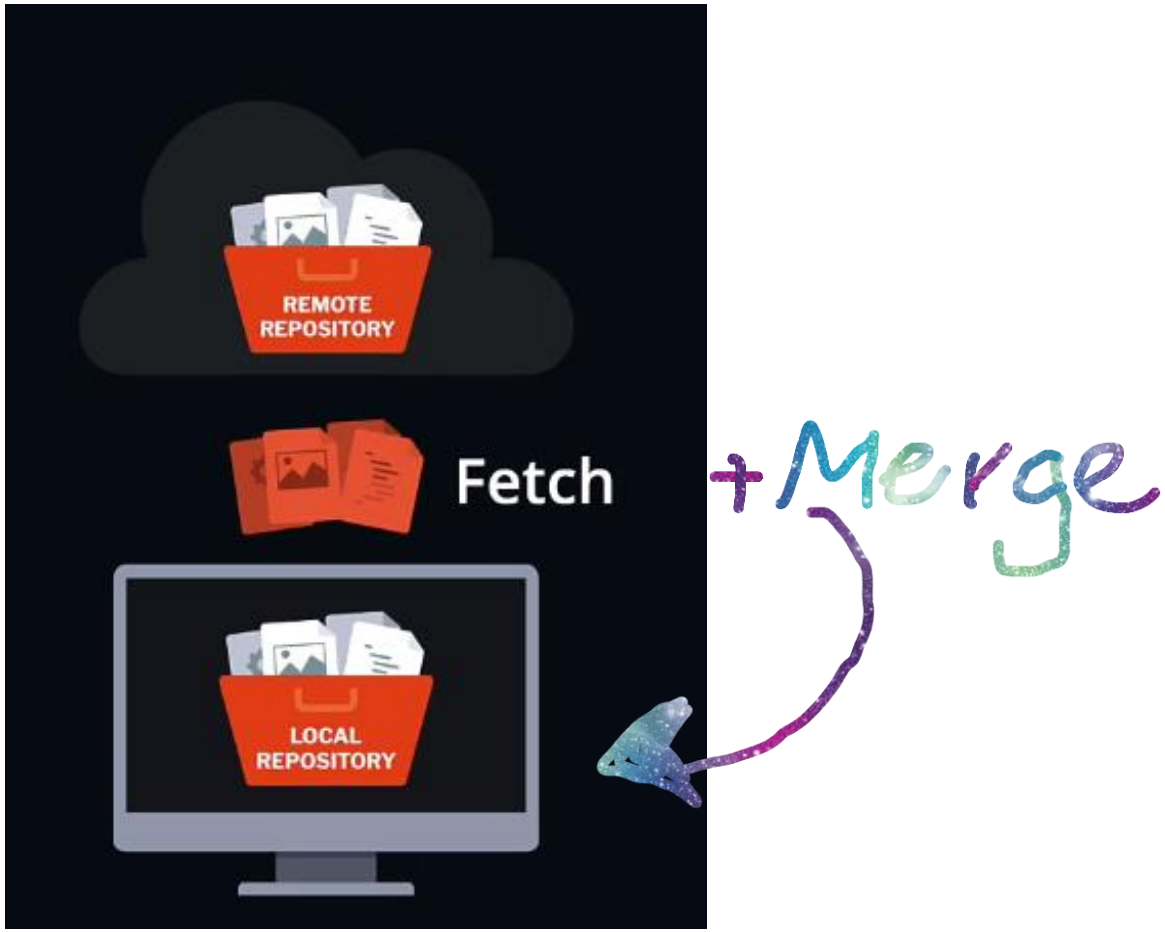
4.BRANCHING


Merge
Feature & Master Branches

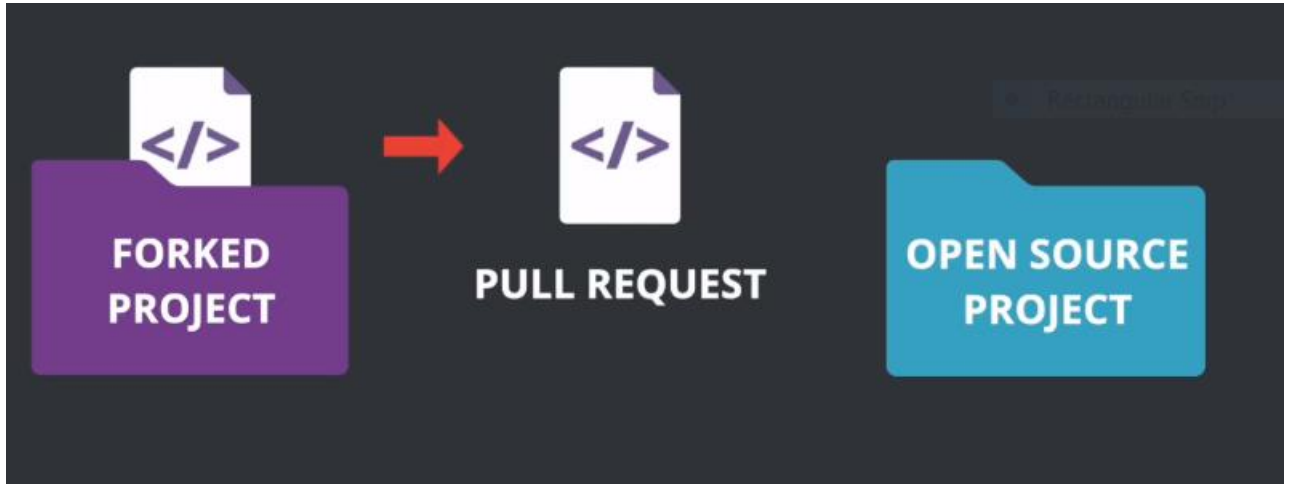

git rebase
Feature
Feature
Master

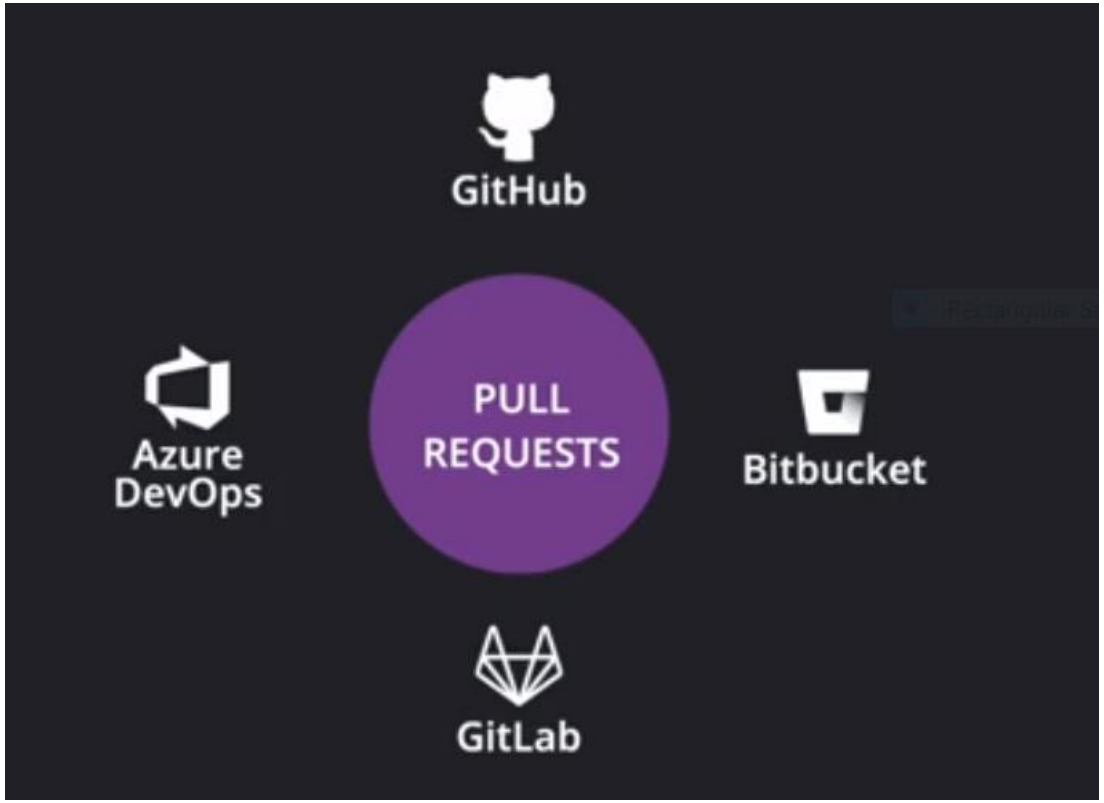
5.Pull, Pull Request, Fork

- Git Pull :
  1. Git Fetch
  2. Git Merge



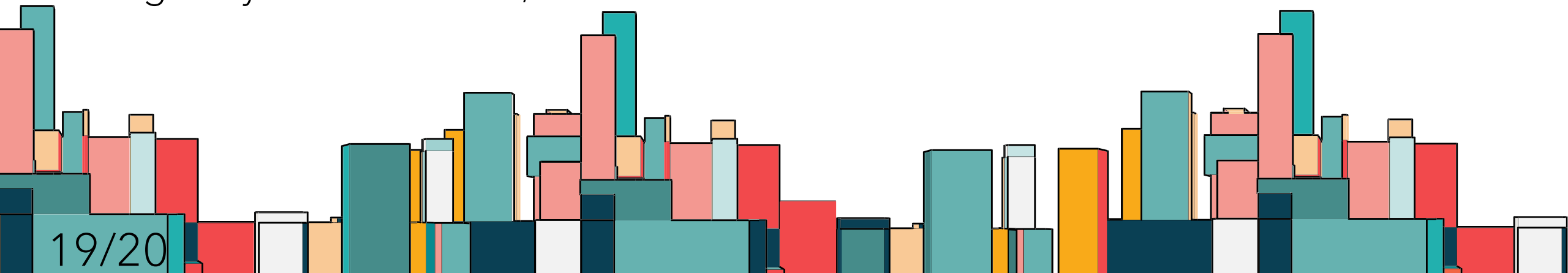
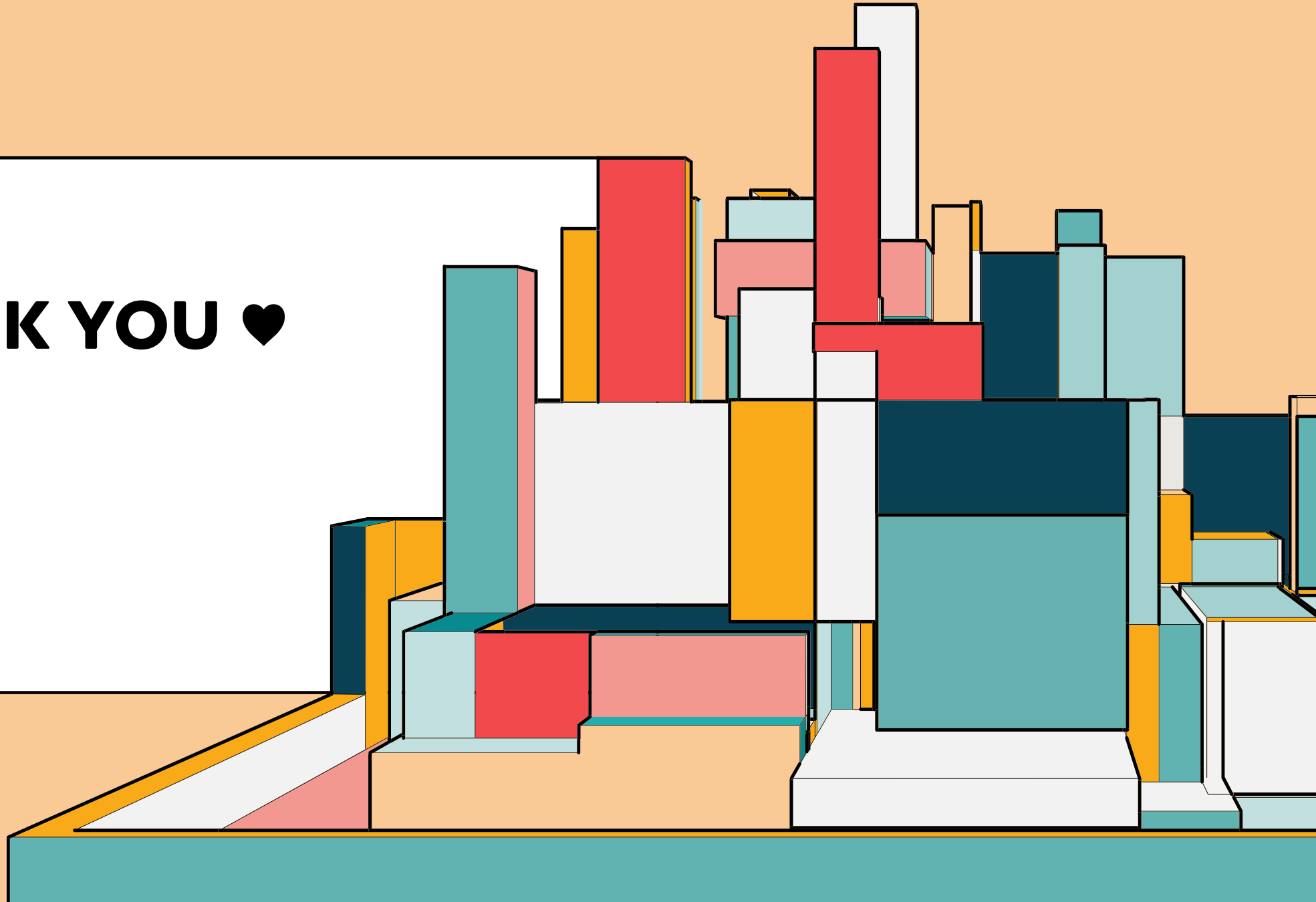
5.PULL, PULL REQUEST, FORK





REFERS:

- GitKraken Course
- Pro Git Book by Scott Chacon and Ben Straub
- Head First Git Book by Raju Gandhi
- Ashkan Rahmani Git & Github Course
- Gitlab CI/CD by Mahdi Akhi
- Images by: Nasser Junior, GitKraken Course



THANK YOU ♥