

project-tech

GitHub, Terminal & Concept

lab 1/8

today

- I. Course (recap)
- II. GitHub & Git
- III. Terminal (CLI)
- IV. Concept



Course

course

description

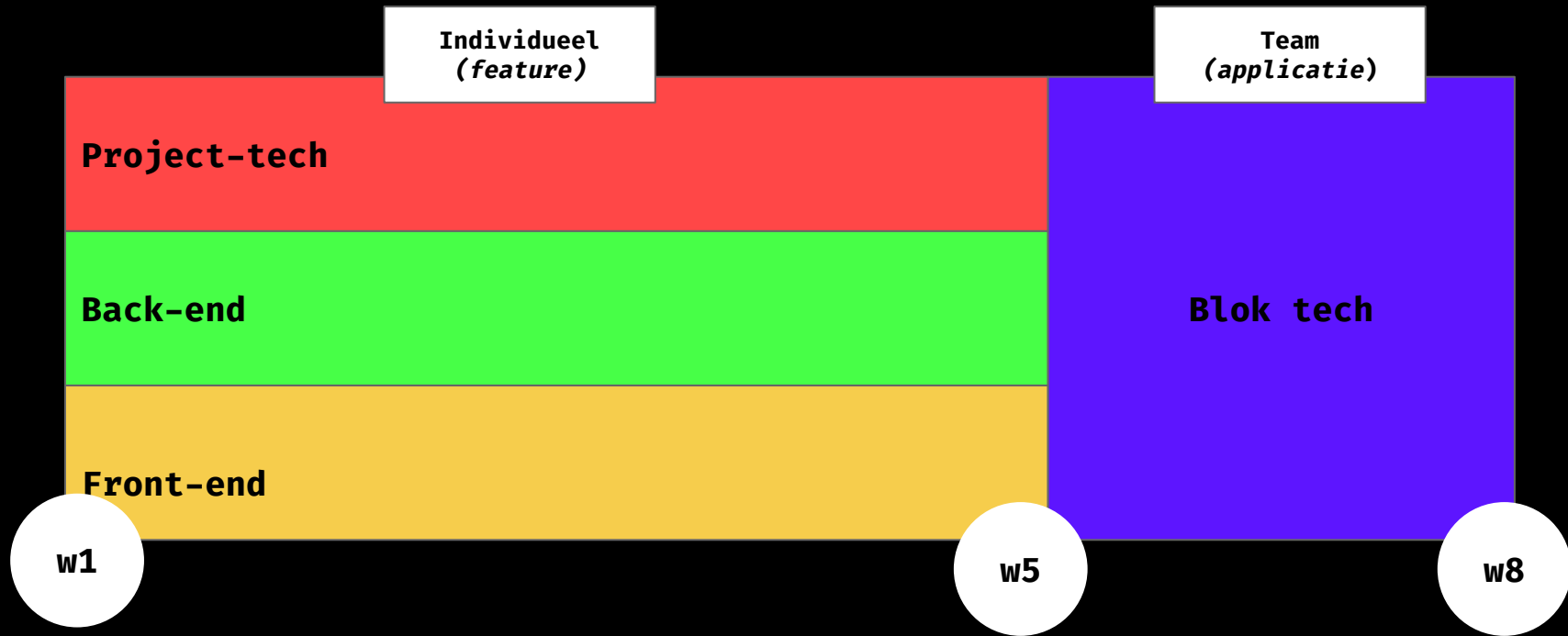
Project Tech is your first stepping stone to become a well-rounded web developer. **You'll build a dynamic prototype of a matching application.** You'll learn about the “softer” skills; reading documentation, collaboration and “harder” skills; how to use the command line, version control.

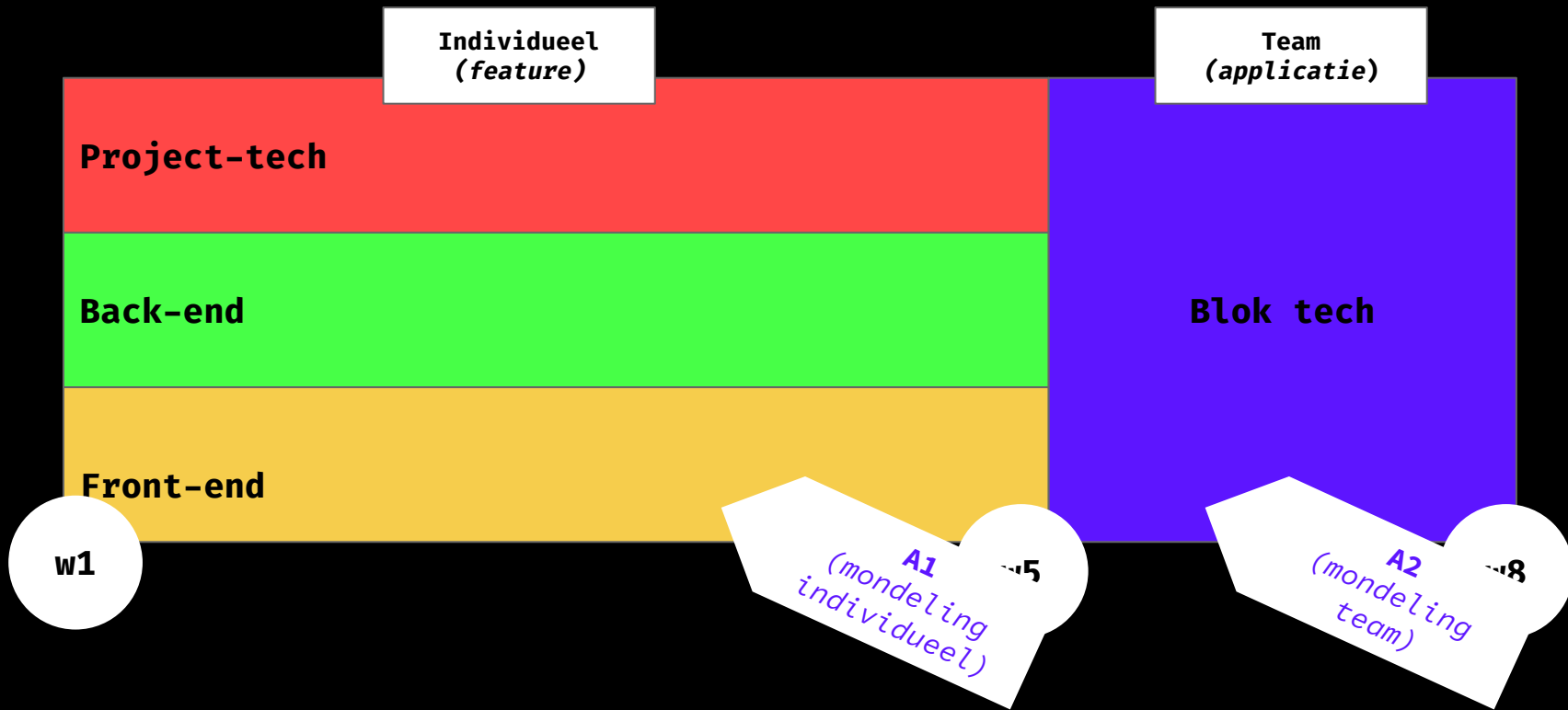
[/readme.md](#)

course

goals

- ❖ You can design and develop a dynamic matching app
- ❖ You can use version control using Git and GitHub
- ❖ You can navigate the terminal
- ❖ You can set-up your own development env
- ❖ You can write documentation
- ❖ You can collaborate and review code
- ❖ You adhere to code standards





course

deliverables

- ❖ **Individual Prototype:** working **interactive feature** for serious relationships
- ❖ **Team Prototype:** working **interactive dating site** for serious relationships
- ❖ **Process book (wiki):** that provides insight into the weekly iterative process

GitHub & Git

Git is version
control for code

```
bash

[examples] $ git init

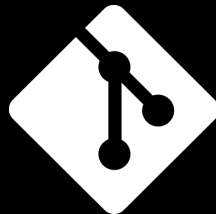
Initialized empty Git repository in
/Users/tilde/projects/oss/examples/.git/

[examples] $ echo "Hello World!" > readme.md

[examples] $ git add --all

[examples] $ git commit --message "Add readme"
[master (root-commit) 0ee1887] Add readme
1 file changed, 1 insertion(+)
create mode 100644 readme.md

[examples] $
```

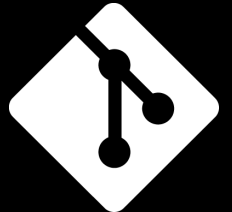


git

description

Git is a version control system for tracking changes in computer files and coordinating work on those files among multiple people.

[wikipedia.org](https://en.wikipedia.org/wiki/Git)



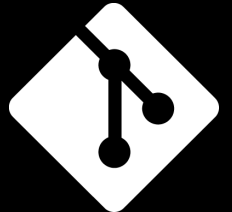
git

description

Collaborate, track,
roll back

Git is a version control system for tracking changes in computer files and coordinating work on those files among multiple people.

[wikipedia.org](https://en.wikipedia.org/wiki/Git)



GitHub, Inc. github.com/nodejs/node

This repository Search Pull requests Issues Marketplace Explore

nodejs / node Watch 2,406 Unstar 39,275 Fork 7,939

Code Issues 584 Pull requests 202

Node.js JavaScript runtime 🌟🐉🚀 <https://nodejs.org>

18,833 commits 128 branches 443 releases 1,519 contributors

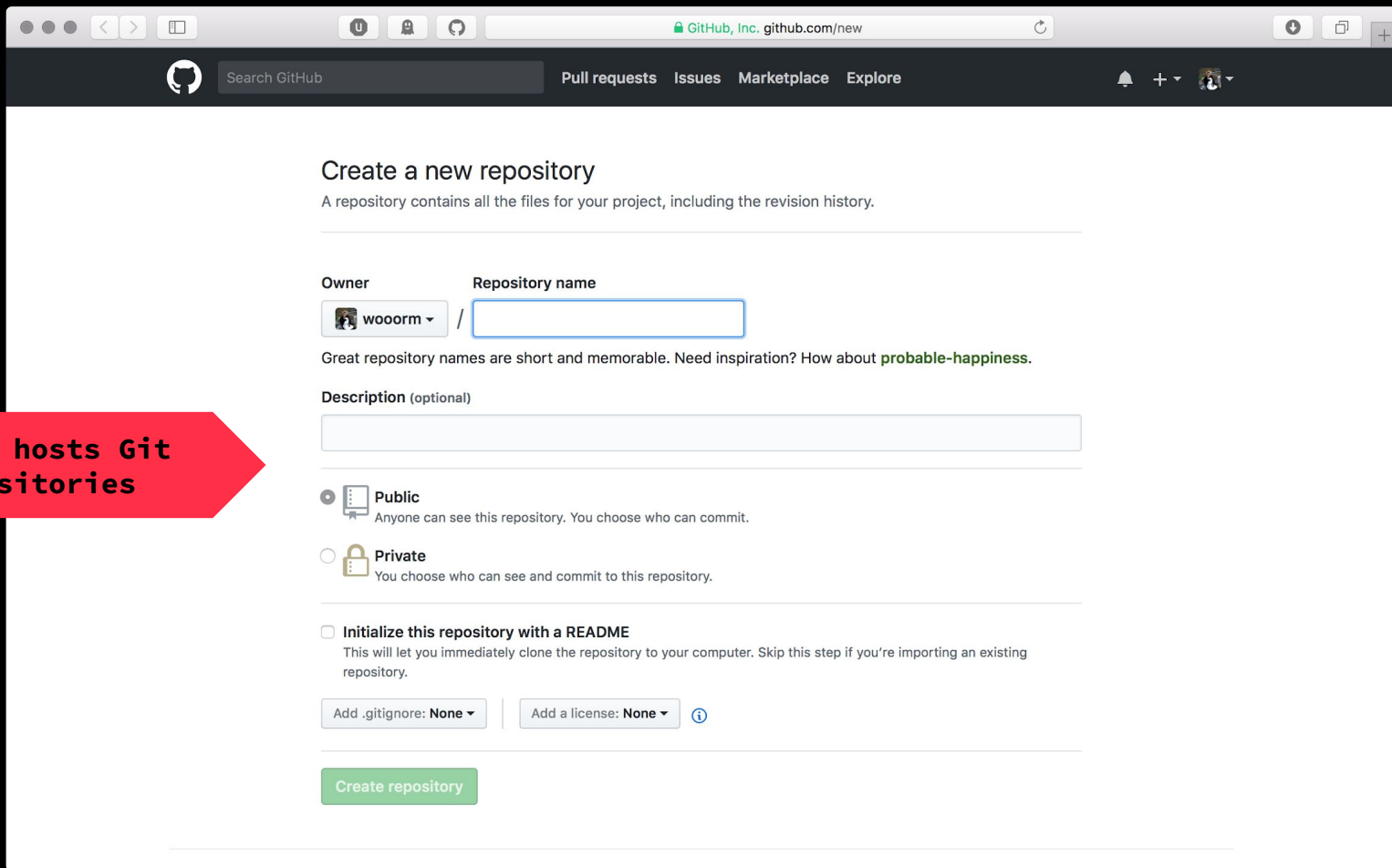
Branch: master New pull request Create new file Upload files Find file Clone or download

	Latest commit b0d3bec 28 days ago
doc: fix commit guideline url	4 months ago
benchmark: provide default methods for assert	11 hours ago
deps: cherry-pick 9b21865822243 from V8 upstream	14 hours ago
assert: use Same-value equality in deepStrictEqual	7 hours ago
assert: use Same-value equality in deepStrictEqual	7 hours ago
module: coverity fixes for ESM C++	11 hours ago
assert: use Same-value equality in deepStrictEqual	7 hours ago
test: fix single test runner regression	4 days ago
tools: disallow trailing whitespace for markdown	10 months ago
test: remove disabled tests directory	2 months ago
module: Allow runMain to be ESM	9 days ago
src: limit .gitattributes eol to vcbuild.bat	3 years ago

deps doc lib src test tools .editorconfig .eslintignore .eslintrc.yaml .gitattributes

GitHub is a social platform around Git

**GitHub hosts Git
repositories**




GitHub, Inc. github.com/new

Search GitHub Pull requests Issues Marketplace Explore

Create a new repository

A repository contains all the files for your project, including the revision history.

Owner:  woorm /

Repository name

Great repository names are short and memorable. Need inspiration? How about **probable-happiness**.

Description (optional)

☒ **Public**
Anyone can see this repository. You choose who can commit.

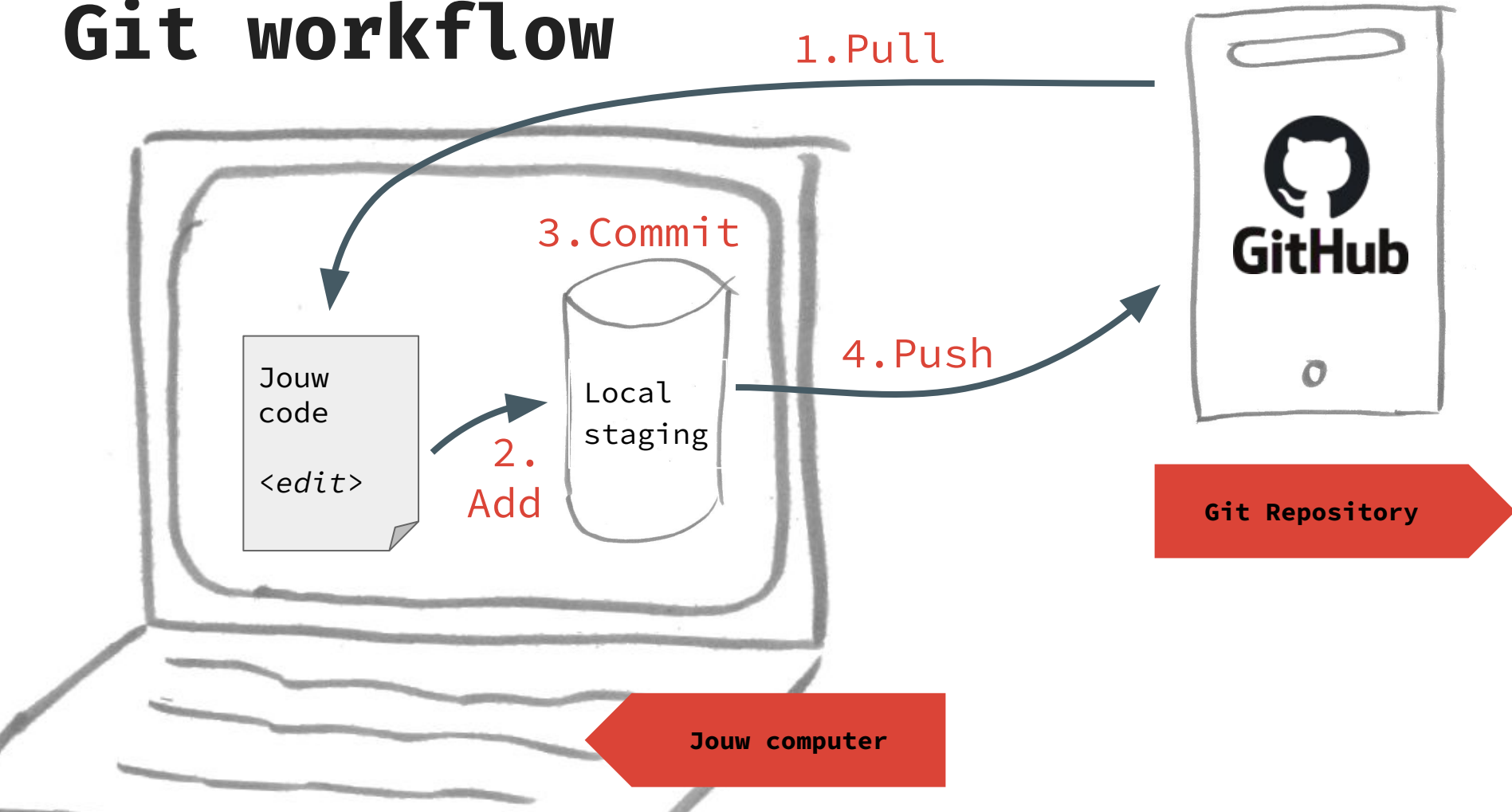
☐ **Private**
You choose who can see and commit to this repository.

☐ **Initialize this repository with a README**
This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: **None** | Add a license: **None** ⓘ

Create repository

Git workflow



nodejs / node

Watch 3k Star 76.2k Fork 19.1k

Code Issues 943 Pull requests 229 Discussions Actions Projects 3 Security Insights

master 31 branches 646 tags

Go to file

Add file

Code



ruyadorno deps: upgrade npm to 7.4.3

✓ a35b32e 10 hours ago 32,759 commits

.github	meta: notify slack when someone force pushes	17 days ago
benchmark	test,benchmark: stop requiring URL and URLSearchParams	4 days ago
deps	deps: upgrade npm to 7.4.3	10 hours ago
doc	doc: fix maintaining ICU guide	2 days ago
lib	lib: refactor to use validateArray	2 days ago
src	src: use BaseObject::kInternalFieldCount in Blob	2 days ago

About

Node.js JavaScript runtime 🦄



nodejs.org/

nodejs javascript windows
macos linux node mit
js runtime

Readme

View license

live demo **GitHub repository**

Terminal

cli

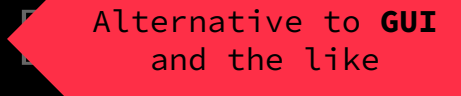
description

A command-line interface (CLI) [...] is a means of interacting with a computer program where the user [...] issues commands to the program in the form of successive lines of text [...]. A program which handles the interface is called a [...] shell

[wikipedia.org](https://en.wikipedia.org)

cli

description

A command-line **interface**  Alternative to **GUI** and the like ns of interacting with a computer program where the user [...] issues commands to the program in the form of successive lines of text [...]. A program which handles the interface is called a [...] shell

[wikipedia.org](https://en.wikipedia.org/wiki/Command-line_interface)

cli

description

A command-line **interface** is an alternative to GUIs of interacting with a computer program where the user [...] issues commands to the program in the form of successive lines of text [...]. A program which handles the interface is called a [...] shell.

Alternative to **GUI**
and the like

Note: Servers often have a CLI (not a GUI).

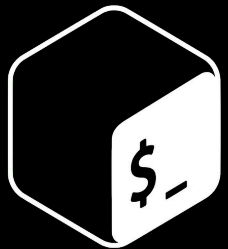
To control a server you need elementary knowledge of CLIs.

cli

bash

Bash is a Unix shell and command language [...] it has been distributed widely as the default login shell for most Linux distributions and Apple's macOS [...]. A version is also available for Windows 10.

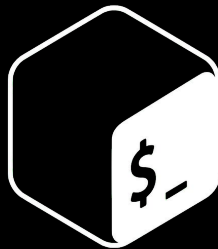
[wikipedia.org](https://en.wikipedia.org/wiki/Bash_(Unix_shell))



cli

command

```
[~]$ rm -f foo.txt
```



cli

command

[~]\$

rm

-f

foo.txt

Prompt

Command

Options

Arguments

\$-

cli

commands

❖	pwd	navigate	print working directory
❖	ls	navigate	list directory contents
❖	cd	navigate	change working directory
❖	touch	files	create file or change file access time
❖	mkdir	files	make directory
❖	rm	files	remove
❖	mv	files	move
❖	cp	files	copy
❖	cat	files	concatenate files
❖	echo	files	print
❖	curl	files	transfer data
❖	less	apps	read
❖	vim	apps	write
❖	man	apps	read the manual
❖	sudo	rights	do something as someone else



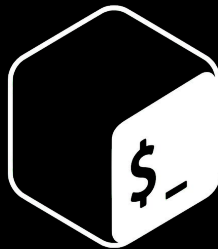
bash


[17-18] \$ pwd

/Users/tilde/Dropbox/hva/17-18

[17-18] \$

This it the
terminal





```
bash

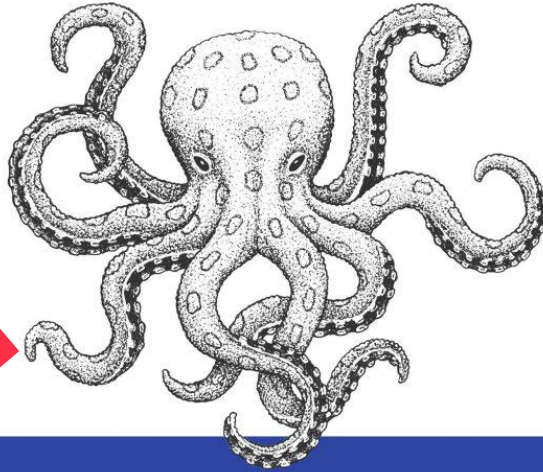
[17-18] $ ls
quarter-1 quarter-2 quarter-3 smoelen

[17-18] $ ls -a
.          ..          .DS_Store quarter-1 quarter-2
quarter-3 smoelen

[17-18] $
```

Note: files starting with a `.` are hidden by default
`ls -a` shows them. These are called ‘dotfiles’.

Just memorize these fourteen contextually dependant instructions



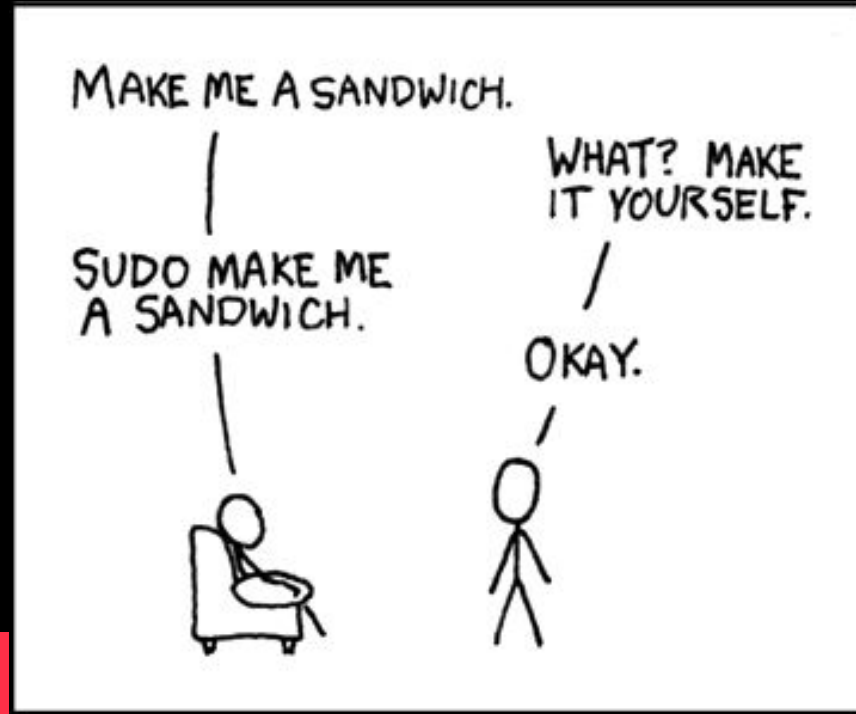
Tip: **!q** to stop

Exiting Vim

Eventually

ONLY?

@ThePracticalDev



Note: things often are not allowed because they are dangerous.
Sudo is **very** dangerous.

Last login: Fri Jan 22 09:29:05 on co

~

→ echo "danny is gek"
danny is gek

~

→

live demo **Terminal**

Concept

concept

matching

- ❖ **Finding connection;** being together, mutual interest
- ❖ **Main user interactions:** liking, filtering, chatting
- ❖ **Difficulties:** connection, truthfulness
- ❖ **Dangers:** fake persons, cheaters

concept

types

communal

exchange



The Mathematics of Love by Hannah Fry

concept

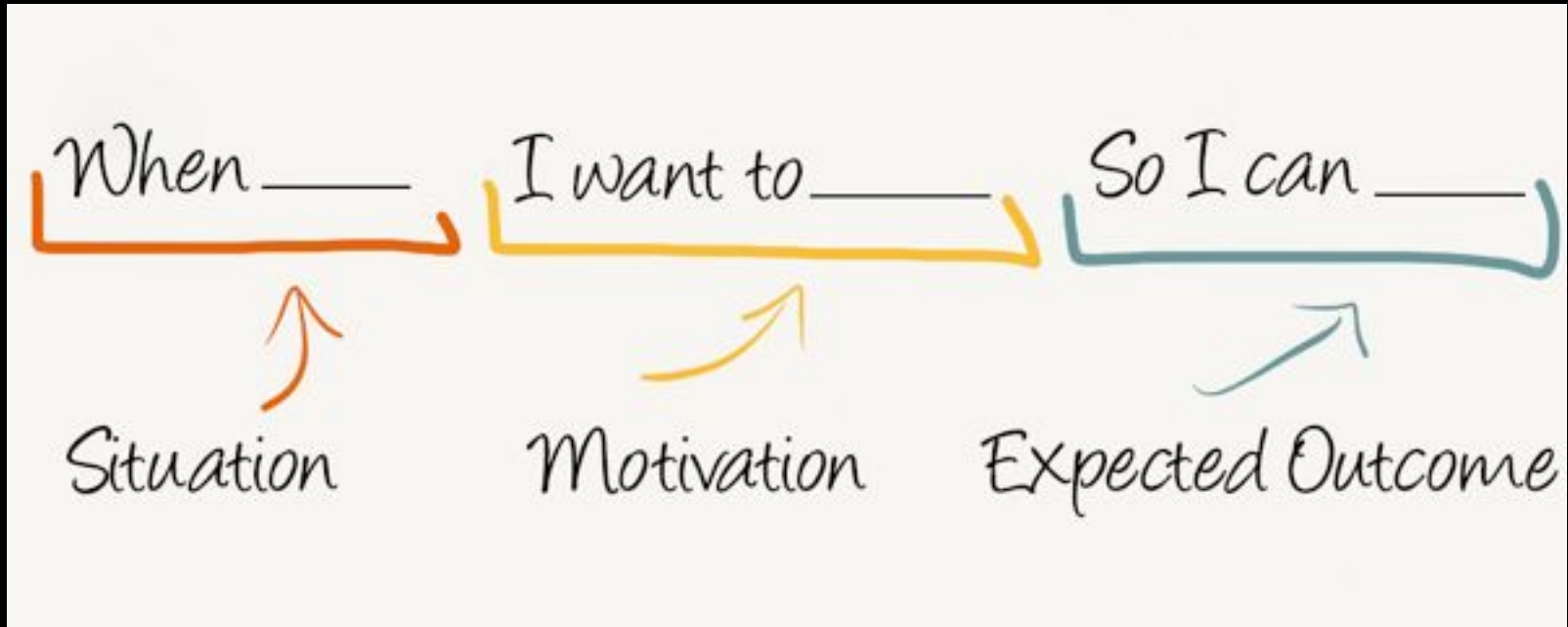
connection



Human Emotion 10.3 by Yale University

concept

job stories



Replacing the User Story with Job Story

assignment



Draw & write down as many **concept ideas** that you have right now for the feature that you are going to create.

- What's the target audience going to be?
- What's the look and feel of the application?
- What are the main user interactions?

assignment



Once you have an idea about your overall concept, make it concrete by **picking a specific feature to work on.**

- Write ~5 **job stories** and pick one
- Split up your job story into a **requirements list**
- **Sketch a wireframe** of the interface

Assignments

Octocat



octocat

Learn the basics of Git and the social coding platform GitHub.

Synopsis

- **Time:** 3:00h
- **Goals:** subgoal 1, subgoal 2
- **Due:** before week 2

Take a couple of hours to understand what open-source means and how GitHub and Git works. It's not a ton of reading material, these are usually short articles you can read in ~7/8 minutes.

work on **octocat, terminal & concept**



exit;

see you in lab-2!