

PT()

LAB II/VI

SCHEDULE

Lab I

❖ Project intro

❖ Context &
Interaction

❖ GitHub

❖ Git

❖ Markdown

Lab II (today)

I. Homework

II. Command line

III. Demo GH Pages

IV. Local machine

V. Job story

VI. Static site

Assignments

❖ Run

❖ GH Pages

❖ (Profile)

❖ Research

SCHEDULE PROJECT TECH

Wk 1: 20-24 Apr Kick-off + Lab 1

Free ~

Wk 2: 04-08 May Lab 2

Wk 3: 14-18 May Lab 3 - Present job story + static prototype (feedback)

Wk 4: 18-22 May Lab 4

Wk 5: 25-29 May Lab 5

Wk 6: 01-05 Jun Lab 6 - Present indiv. assignment (grade indiv.)

Wk 7: 08-12 Jun Lab 7

Wk 8: 15-19 Jun Lab 8

Wk 9: 22-26 Jun Final presentation (grade team)

... ..

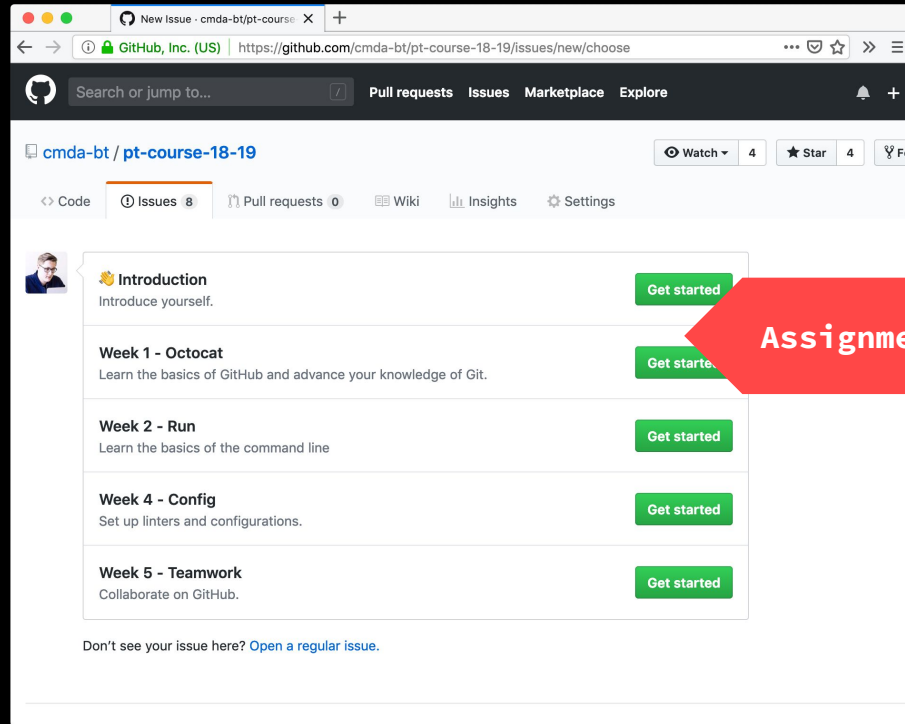
Wk 10: 29-03 Jul Resit (herkansing)

HOMework

I/VI

HAND-IN

GITHUB



Assignments

[HTTPS://GITHUB.COM/CMDA-BT/PT-COURSE-19-20](https://github.com/cmda-bt/pt-course-19-20)

COMMAND LINE

I/VI

II CLI

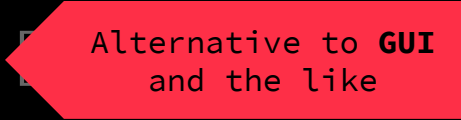
?

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)

II CLI

?

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)

II CLI

?

A command-line interface [...] 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**

“Thing” where you
talk to

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

II CLI

?

A command-line interface [...] 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.

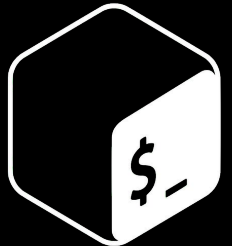
Note: Servers often have a CLI (not a GUI).
To control a server you need elementary knowledge of CLIs.

II 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))

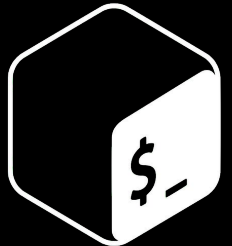


II CLI

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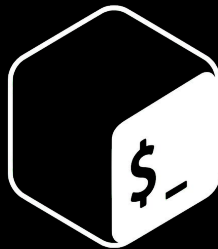
[wikipedia.org](https://en.wikipedia.org/wiki/Bash_(Unix_shell))



II CLI

BASH

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



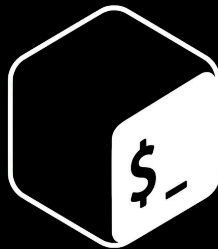
II CLI

BASH

[~]\$

rm -f foo.txt

Prompt

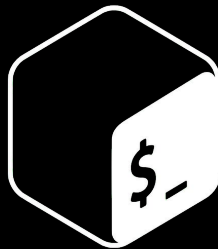


II CLI

BASH

[~]\$ **rm** -f foo.txt

Command

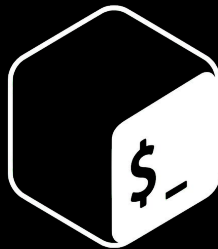


II CLI

BASH

[~]\$ rm -f foo.txt

Options



II CLI

BASH

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



Arguments

II CLI

COMMANDS

- ❖ Navigate
- ❖ Files
- ❖ Apps
- ❖ Rights

II CLI

RECAP

❖	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

II CLI: FI

```
bash

[examples] $ echo "Hello World!"
Hello World!

[examples] $
```

ECHO

Print



II CLI: N

Print working
directory

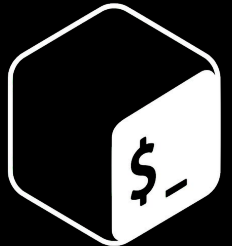
```
bash

[17-18] $ pwd

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

[17-18] $
```

PWD



II CLI: N

LS

```
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.

On macOS, Finder creates **.DS_Stores**: ignore them.

On macOS in finder, `cmd+Shift+.` to show then

II CLI: N

```
bash

[17-18] $ cd quarter-1
quarter-1 quarter-2 quarter-3 smoe1en

[quarter-1] $ pwd

/Users/tilde/Dropbox/hva/17-18/quarter-1

[quarter-1] $ cd ../../16-17/quarter-3

[quarter-3] $ pwd

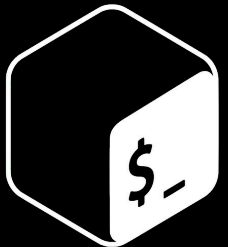
/Users/tilde/Dropbox/hva/16-17/quarter-3

[quarter-3] $ cd ~
[tilde] $ pwd

/Users/tilde
```

User directory

CD



II CLI: N

CD

```
bash

[17-18] $ cd quarter-1
quarter-1 quarter-2 quarter-3 smoe1en

[quarter-1] $ pwd

/Users/tilde/Dropbox/hva/17-18/quarter-1

[quarter-1] $ cd ../../16-17/quarter-3

[quarter-3] $ pwd

/Users/tilde/Dropbox/hva/16-17/quarter-3

[quarter-3] $ cd ~
[tilde] $ pwd
```

User directory

Tip: use lower-dash-case for file names: it's easier to type.
Definitely don't use anything other than letters, periods,
underscores, or dashes

II CLI: N

CD

```
bash

[17-18] $ cd quarter-1
quarter-1 quarter-2 quarter-3 smoe1en

[quarter-1] $ pwd

/Users/tilde/Dropbox/hva/17-18/quarter-1

[quarter-1] $ cd ../../16-17/quarter-3

[quarter-3] $ pwd

/Users/tilde/Dropbox/hva/16-17/quarter-3

[quarter-3] $ cd ~
[tilde] $ pwd
```

User directory

Tip: type a tab (↵) for autocomplete!

cd A↵

cd Applications/

II CLI: FI

```
bash
[examples] $ cat readme.md
* Milk
* Eggs
* Whisky

[examples] $ cat intro.html head.html body.html

<!doctype html>

<head><title>Hello...</title></head>

<body><h1>...World!</h1></body>

[examples] $
```

CLEAR

Tip: `clear` or `cmd+k` to clear the screen.

II CLI: AP

```
bash
[examples] $ vim /usr/share/dict/words
A
a
aa
aal
aali
aam
Aani
aardvark
aardwolf
Aaron
Aaronic
Aaronical
Aaronite
```

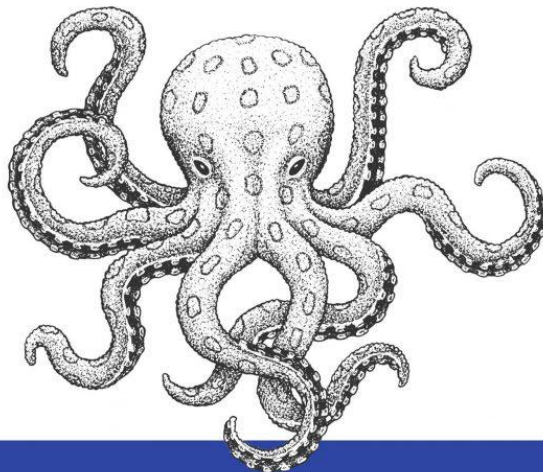


Tip: **:q!** to stop!

II CLI: APPS



Just memorize these fourteen contextually dependant instructions

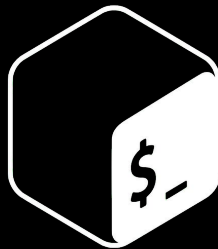


Exiting Vim

Eventually

ONLY?

@ThePracticalDev



II CLI: RI



```
bash

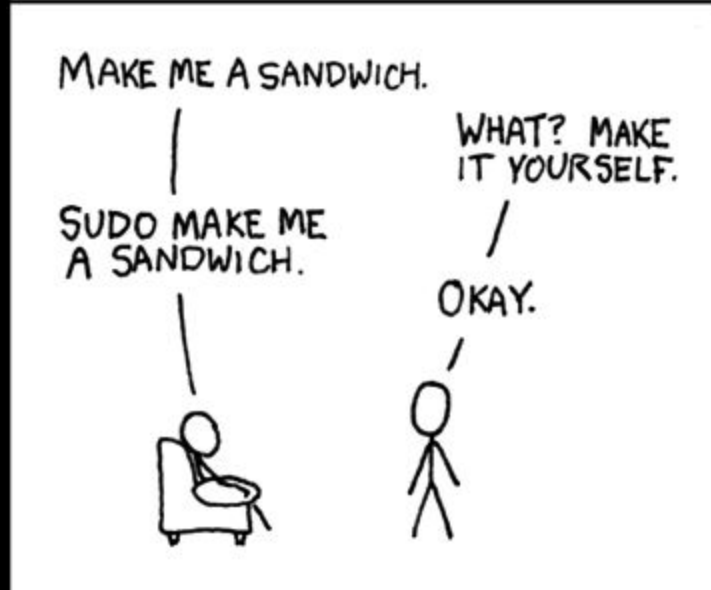
[examples] $ rm example.md
rm: example.md: Operation not permitted

[examples] $ sudo rm example.md
Password: .....

[examples] $
```



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



“Sandwich” via xkcd

II CLI

RECAP

❖	pwd	navigate	print working directory
❖	ls	navigate	list directory contents
❖	cd	navigate	change working directory
❖	touch	files	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

DEMO

COMMAND LINE

Assignments

Run the Command Line

In this assignment you'll learn the basics of the command line.


Synopsis

- Practice
- Time: 0:30h
- Due: before [lab 3](#)

Step A

Create a directory on your computer, `run`. In it, create a file `tutorial.sh` and paste the Gist into it:

[tutorial.sh gist](#)

 If you are on Windows, make sure to select LF line endings (Unix) when saving the file. In Atom, you can click on CRLF in the status bar and switch to LF. In SublimeText, go to the View menu, and click Line Endings.

In your terminal, go to the `run` directory and enter it (hint: use the `cd` command to "change directories").

If you now run `ls` (to print out files) in the directory, you should see the tutorial:

```
$ ls
# tutorial.sh
```



TAKE 30M TO BEGIN THE **RUN** ASSIGNMENT ON GITHUB

DEMO GH PAGES

III/VI

MACHINE

IV / VI

II MACHINE

PRETTY

In this course, you'll find yourself staring at that black screen with green letters a lot. You'll type the same commands over and over again. **As you'll spend so much time there, it makes sense to make the command line more useful, and prettier.**

II MACHINE

PROFILE

You can customise your command line by changing a **config file**. The file in question, called your **profile**, is often named *.bash_profile*, *.profile*, or *.bashrc*, depending on your operating system.

```
karinliu — -bash — 80x24
Last login: Sat Feb 10 16:56:29 on ttys000
Welcome Karin! 🌿
Weather report: Seoul, South Korea

Overcast
-10--4 °C
🌧️ 19 km/h
18 km
0.0 mm

[🌿 karinliu$ ls -a
.
..
.CFUserTextEncoding
.DS_Store
.Trash
.adobe
.android
.atom
.bash_history
.bash_sessions
.bashrc
.bashrc.save
.bashrc.save.1
.config
.cups
.dropbox
.git
.gitconfig
.jssc
.lessht
.npm
.oracle_jre_usage
.profile
.putty
.viminfo
Applications
Creative Cloud Files
Desktop
Documents
Downloads
Dropbox
Library
Movies
Music
Pictures
Public
VirtualBox VMs
🌿 karinliu$ ]
```

Karinliu/karinliu-dotfiles

```
1. jonah@Jonahs-MacBook-Pro: ~/projects/dotfiles (zsh)
Last login: Sun Feb 11 10:46:29 on ttys000
-----
< Hey Jonah, how you doin'? >
-----
      ^ ^
      (-) \
      (-) \      ) \
          ||----w |
          ||      ||

10:47:26 in ~
z /Users/jonah/projects/dotfiles

10:47:34 in dotfiles on master
█
```

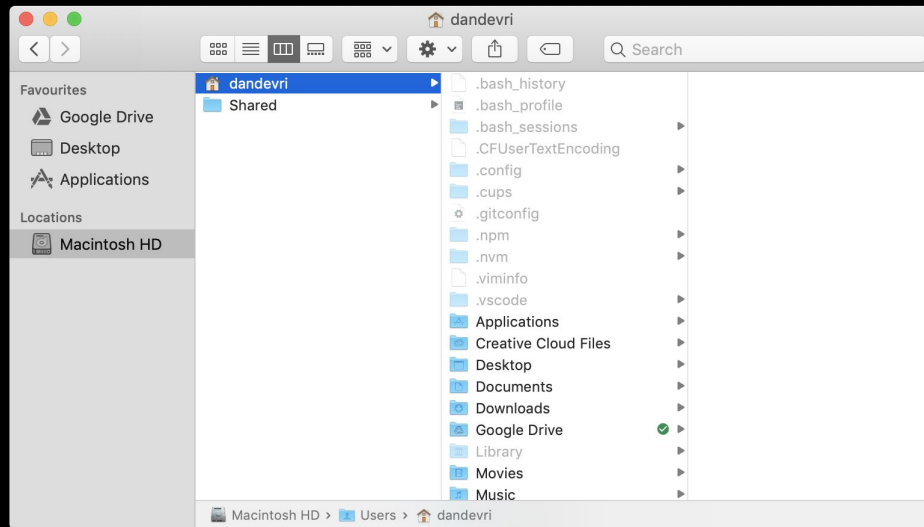
[theonejonahgold/dotfiles](https://github.com/theonejonahgold/dotfiles)

```

1. tristanjacobs@192: ~/Documents/Git Repo's/dotfiles/dotfiles (zsh)
Last login: Mon Feb 12 23:36:28 on ttys000
=====
-->> Welcome Tristan :) <--
=====
===== JS > PHP =====
→ ~ git:(master) ✗ z
4      /Users/tristanjacobs/Movies
36     /Users/tristanjacobs/homestead/Homestead
52     /
→ ~ git:(master) ✗ 4
cd: no such entry in dir stack
→ ~ git:(master) ✗ z 4
→ ~ git:(master) ✗ ls
Applications      Library          STDERR
Creative Cloud Files Movies          VirtualBox VMs
Desktop           Music           homestead
Documents         Pictures        sudo
Downloads         Public
Dropbox          README.md
→ ~ git:(master) ✗ cd Documents/Git\ Repo's
→ Git Repo's git:(master) ✗ git init
Initialized empty Git repository in /Users/tristanjacobs/Documents/Git Repo's/.git/
→ Git Repo's git:(master) ✗ git clone https://github.com/SadisticSun/dotfiles.git

```

[SadisticSun/dotfiles](https://github.com/SadisticSun/dotfiles)



Note: files starting with a `.` are hidden by default
`ls -a` shows them.

On macOS, Finder creates **.DS_Stores**: ignore them.

On macOS in finder, `cmd+Shift+.` to show then

JOB STORIES

V/VI

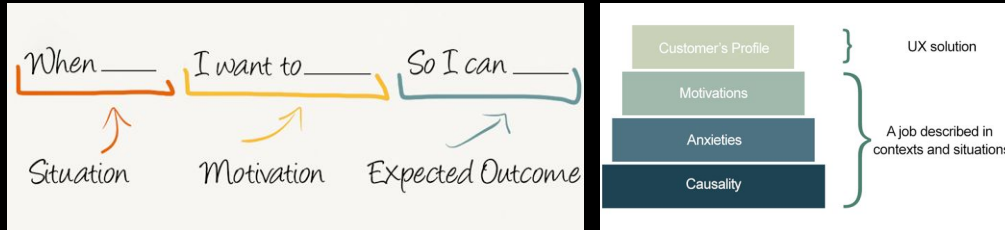
III JOB STORIES

METHODS

Job Stories

When in teamwork you'll need to be able to cooperate in an efficient way. One aspect of efficiency is **clarity** for all members of the team. Job Stories provide an excellent way of dividing tasks within teams in an efficient focused way.

In order to define good job stories you'll need to know a bit more about the context of product use and look at the user's motivations. Together with a causality argument, they define how a product specifically needs to perform in a specific context. So a job story defines the job to be done, by focusing on **context**, **causality** and **motivations**.



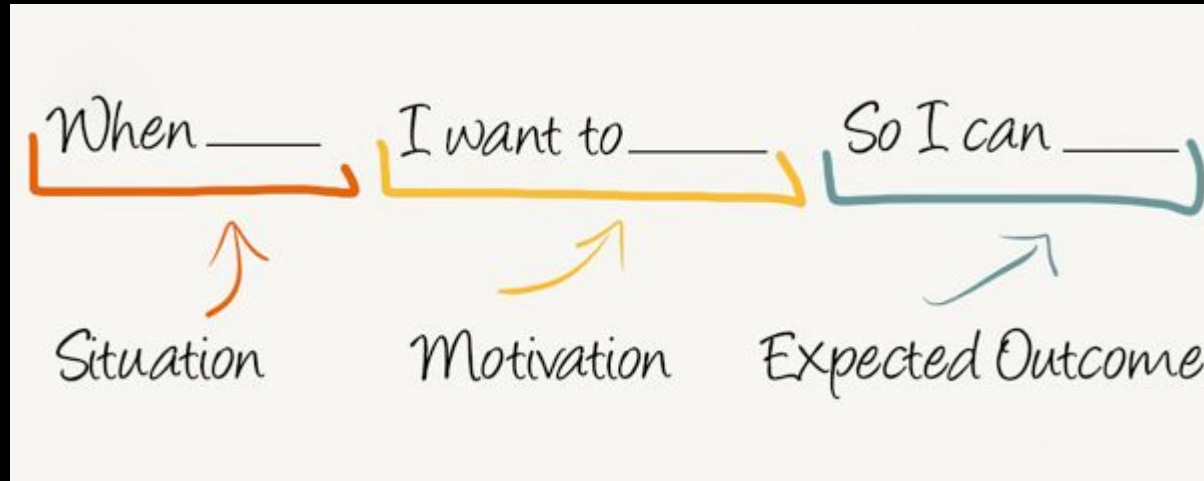
Inspiring article: <https://www.intercom.com/blog/using-job-stories-design-features-ui-ux/>

III JOB STORIES

METHODS

Job Stories

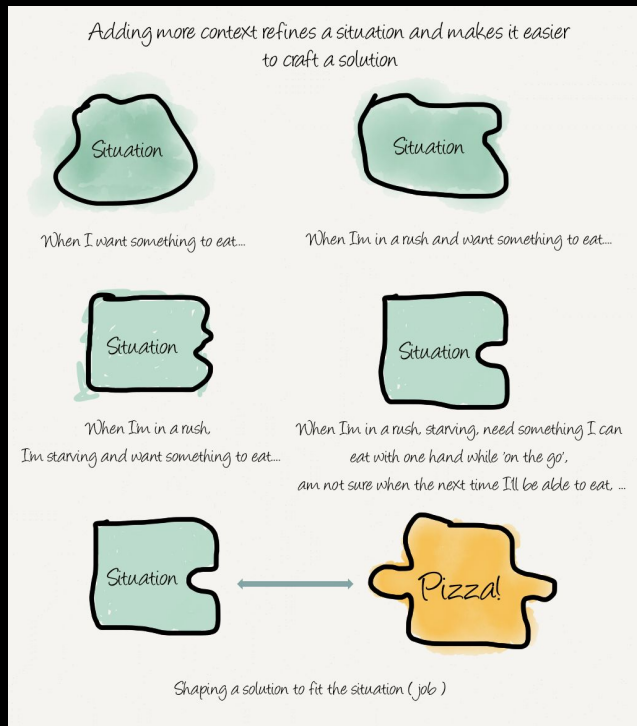
Defining the job to be done, by focusing on context, causality and motivations.



Inspiring article: <https://www.intercom.com/blog/using-job-stories-design-features-ui-ux/>

III JOB STORIES

METHODS



Job Stories tip #1: Refine A Situation By Adding Contextual Information

When I want something to **eat**...

When I'm in a **rush** and want something to eat...

When I'm in a rush, I'm **starving** and want something to eat...

When I'm in a rush, need something I can eat with **one hand while 'on the go'**, am not sure when the next time I'll be able to eat...

<https://jtbd.info/5-tips-for-writing-a-job-story-7c9092911fc9>

III JOB STORIES

METHODS

Job Stories tip #2: Come From Real People Not Personas

Job Stories can only come from real customer interviews. Before designing a feature or new product, you must talk to real people and uncover all the anxieties and contexts which were in play when they used your or a competitor's product.

Good interview explanation:

<https://soundcloud.com/jobstobedone/mattress-interview-live-jtbd-interview-debrief-analysis-jasonfried>

III JOB STORIES

METHODS

Job Stories tip #4: Add Forces To Motivations

Situation: *When I'm using my tablet and encounter a problem...*

Motivation: *I want to get help right away...*

Force A: *I'm irritated because I was in the middle of something...*

Force B: *I get nervous asking for help...*

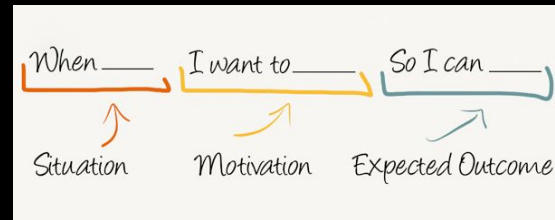
Force C: *Asking for help might make me look stupid...*

Expected Outcome: *So I can finish what I started.*

III JOB STORIES

METHODS

Job Stories: specific steps for creating job stories



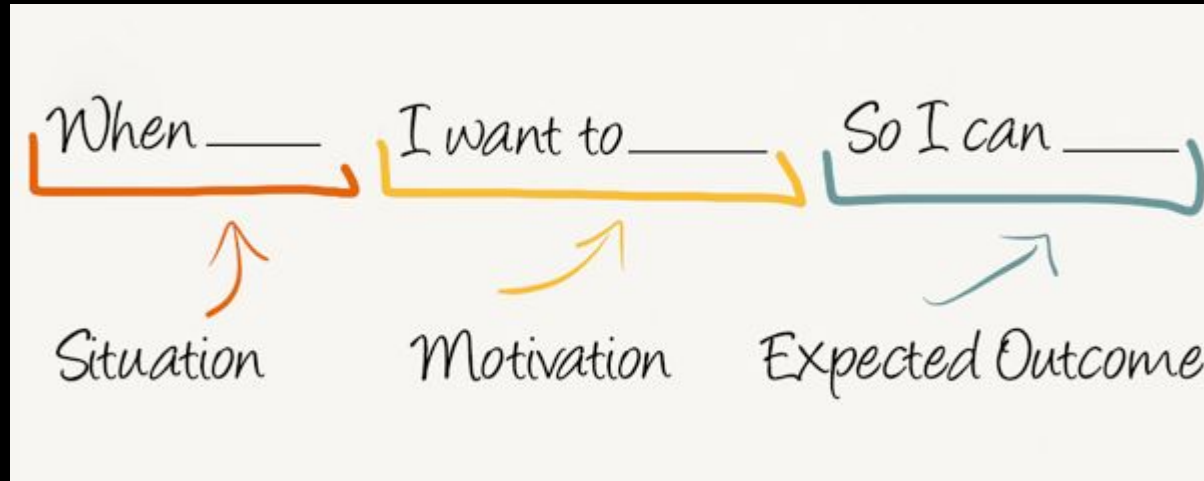
1. Start with the **high level** job.
2. Identify a **smaller** job or jobs which help *resolve* the higher level job.
3. Observe how people solve the problem **now** (i.e. which job do they currently use).
4. Come up with a **Job Story**, or Job Stories, that investigate the causality, anxieties, and motivations of what they do now. (If you are able, look at the *forces (the emotional state)* as well
5. Create a **solution** (usually in the form of a feature or UI change) which resolves that Job Story.

III JOB STORIES

METHODS

Job Stories

Defining the job to be done, by focusing on context, causality and motivations.



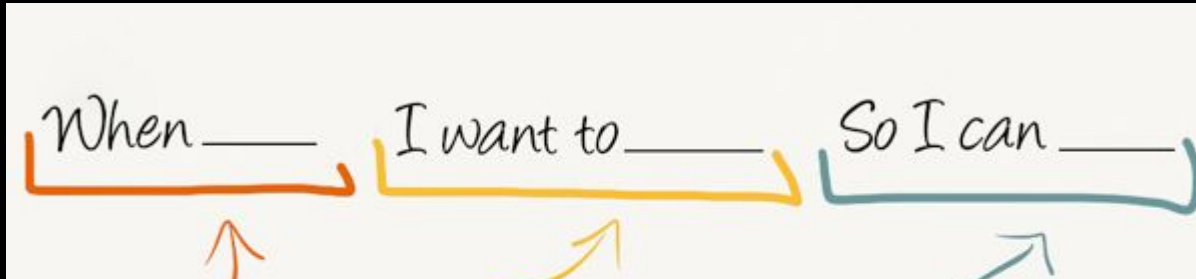
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III JOB STORIES

METHODS

Job Stories

Defining the job to be done, by focusing on context, causality and motivations.



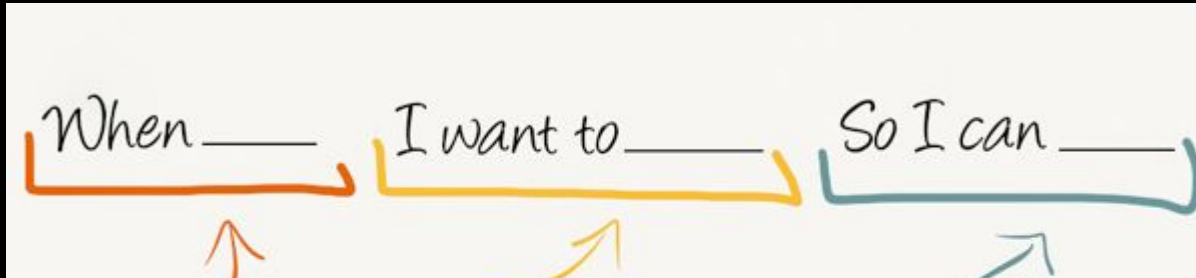
Note: These Job Stories are quite important for the other courses! It will determine which feature you are going to work on.

III JOB STORIES

METHODS

Job Stories

Defining the job to be done, by focusing on context, causality and motivations.



Note: Make sure you have 1 well-defined Job Story before next lecture.

STATIC SITE

VI / VI

IV STATIC SITE

STATIC PAGES

Create a sitemap of all the relevant pages of your feature. You can use google drawings or omnigraffle to create an overview

Sketch some wireframes (or wireflows) of the interface. These can be rough sketches or more hi-fi. Find a fidelity that suits you.

IV STATIC SITE

STATIC PAGES

Turn your wireflow into static HTML pages. Do a HTML breakdown of your wireframe to see which semantic HTML elements you need. Then create the HTML page for your feature.

IV STATIC SITE

STATIC PAGES

Add some presentational CSS. You've already created a style guide so you're already able to set-up some basic styles. Think about colors, fonts etc.

IV STATIC SITE

STATIC PAGES

- ❖ Create a sitemap
- ❖ Sketch some wireframes
- ❖ Make (semantic) static HTML pages
- ❖ Add presentational CSS
- ❖ If you feel comfortable enough, you can also choose to create your site using express and a template engine

HOMework

V/V

SCHEDULE PROJECT TECH

Wk 1: 20-24 Apr Kick-off + Lab 1

Free ~

Wk 2: 04-08 May Lab 2

Wk 3: 14-18 May Lab 3 - Present job story + static prototype (feedback)

Wk 4: 18-22 May Lab 4

Wk 5: 25-29 May Lab 5

Wk 6: 01-05 Jun Lab 6 - Present indiv. assignment (grade indiv.)

Wk 7: 08-12 Jun Lab 7

Wk 8: 15-19 Jun Lab 8

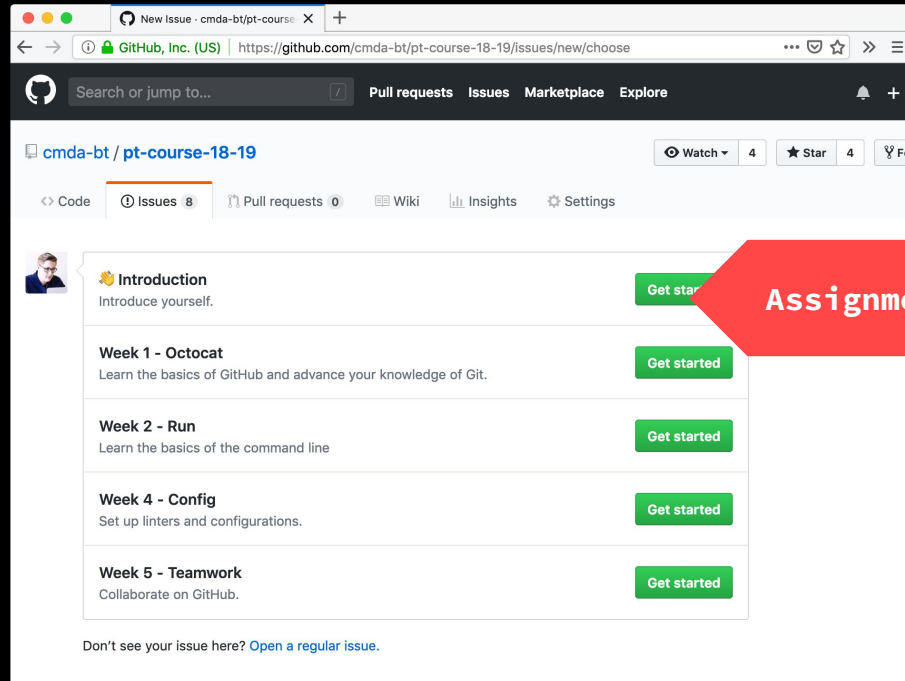
Wk 9: 22-26 Jun Final presentation (grade team)

... ..

Wk 10: 29-03 Jul Resit (herkansing)

HAND-IN

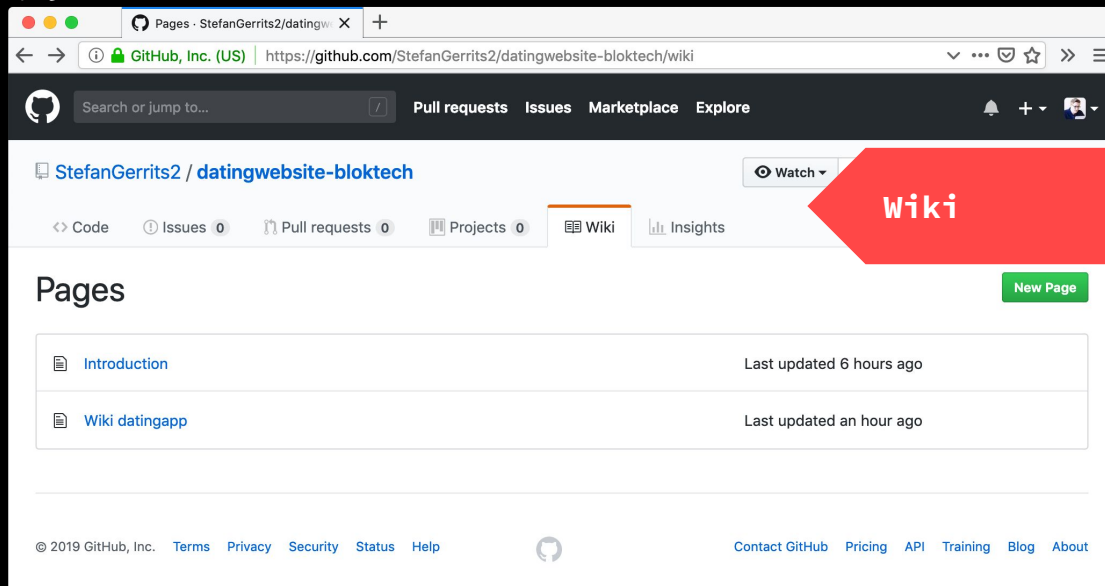
GITHUB



Hand in job story + static site
before next project lesson

HAND-IN

GITHUB



Update wiki!

TIME FOR WORKING ON NEW ASSIGNMENTS

...

ASKING QUESTIONS

...

EXIT;

SEE YOU IN LAB III/VI!