Contemporary Web Development
Lesson 2
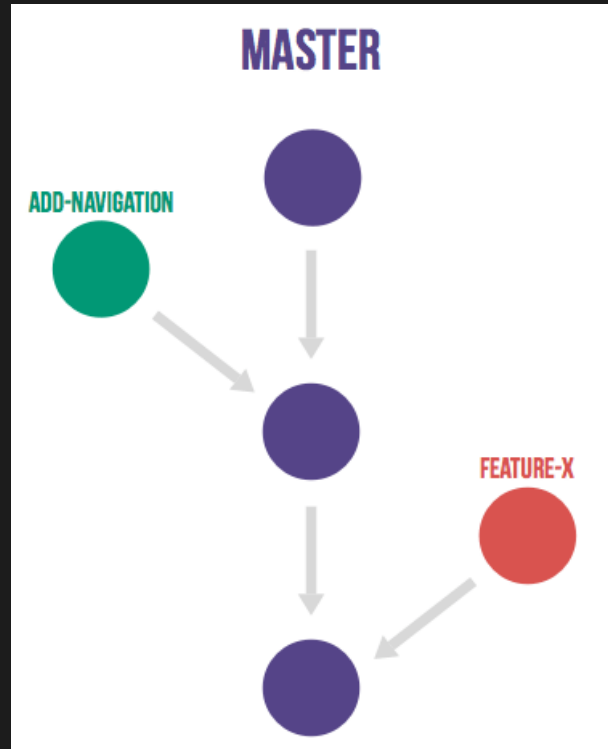
Solution to the stack/queue tracing exercise

Setting up the environment

Git

Feature Branches

First steps

1) Create a project at https://version.aalto.fi
2) Clone it from terminal using "git clone" and "cd" .
3) Get a .gitignore for Node JS
    a) wget "https://raw.githubusercontent.com/github/gitignore/master/Node.gitignore"
    b) mv Node.gitignore .gitignore
4) Push the change
    a) git add -A
    b) git commit -a
    c) git push

* If you don't want to be asked for your username all the time, change in .git/config to something like:
https://peleda1%40aalto.fi@version.aalto.fi/gitlab/peleda1/webdev.git
You can also save the password but that is insecure!
** For code reference you can clone my project at
https://version.aalto.fi/gitlab/peleda1/webdev

Node & NPM

Init the project

1) npm init (Accept defaults)

    A package.json is born

JSON?

npm install

1) npm install --save-dev @babel/core

   save-dev will make sure these packages are used only for development.

2) npm install --save-dev @babel/preset-env

   This preset of plugins allow us to choose which browsers we want to support.

3) More later…

Webpack

npm install

1) npm install --save-dev webpack

2) npm install --save-dev webpack-cli

3) npm install --save-dev webpack-dev-server

4) npm install --save-dev babel-loader

   Webpack loader for Babel!

Basic webpack.config.js

Download [here](#)

Npm start script

HTML is not handled by webpack so it does not auto refresh.
Here's how to do it with html.

ES6 Modules

```javascript
import {bakeCookie, COOKIE_STATES} from './oven'

bakeCookie({state: COOKIE_STATES.RAW});
```

```javascript
import * as Oven from './oven'

let cookie = {
    state: Oven.COOKIE_STATES.RAW
}
Oven.bakeCookie(cookie);
```

```javascript
import bakeCookie from './oven'

bakeCookie({state: "???"});
```

oven.js

```javascript
export const COOKIE_STATES = {
    BAKED: "BAKED",
    RAW: "RAW"
}


export let totalCookiesBaked = 0;

export default function
bakeCookie(cookie) {
    cookie.state =
COOKIE_STATES.BAKED;
    totalCookiesBaked += 1;
}
```

The Shape Maker

Link

HOT Module Replacement

🔥

Exercise – Add and demonstrate CSS HMR to your project

https://webpack.js.org/guides/hot-module-replacement/#hmr-with-stylesheets