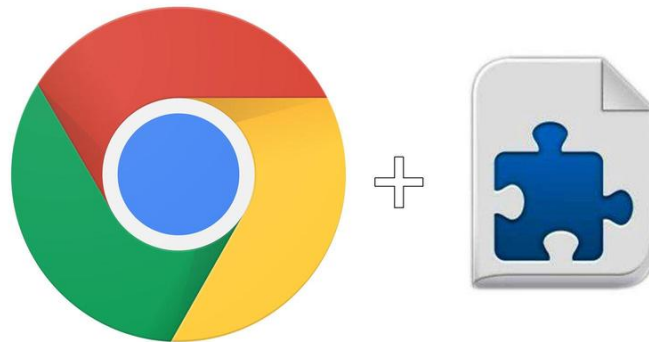# BO - HUB

B-INN-000

Pimp My Website

Introduction to chrome extensions

{EPITECH.}

Pimp My Website

binary name: —
repository name: Create your own and invite the assistant
language: javascript/HTML/CSS
compilation: —
build tool: —

- The totality of your source files, except all useless files (binary, temp files, obj files,...), must be included in your delivery.

- All the bonus files (including a potential specific Makefile) should be in a directory named *bonus*.

- Error messages have to be written on the error output, and the program should then exit with the 84 error code (0 if there is no error).
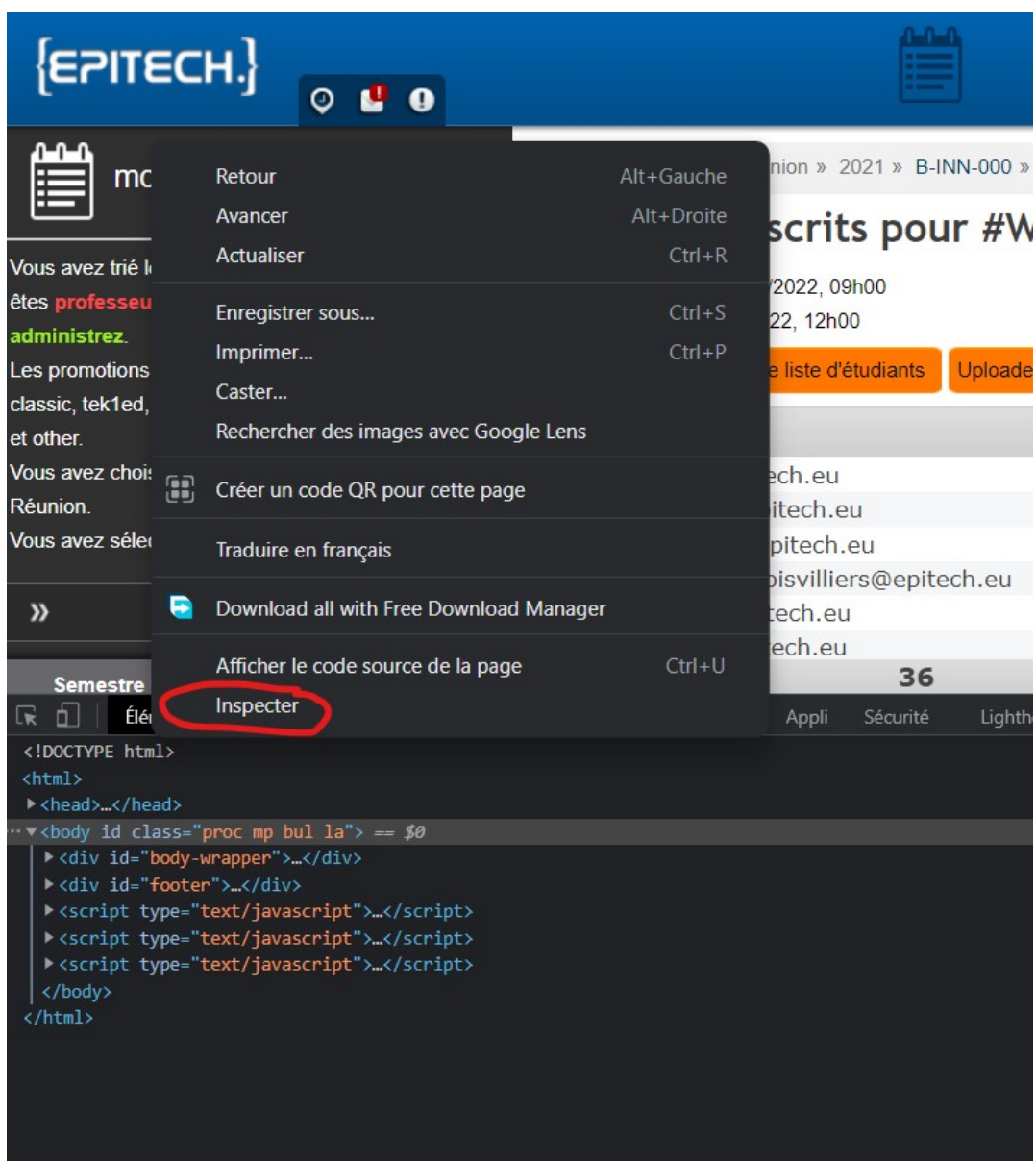
INTRODUCTION

Sometimes when you browse your favorite website, some things are not working as you want. It can bug or the webpage you are currently viewing is not at your convenience. The problem can be about the UI/UX, dark mode, features, accessibility, …

What you can do as a budding developer : modify the website for yourself

That's the point of this workshop

On modern browser you can live edit the web page as it is fully rendered as HTML/CSS et javascript

EDIT WEBSITE

You can edit website page with the inspect developer tools

To access the inspect tool : *rigth click on page, ctrl+shift+i, F12* for developer console

So you can access the source code and then :

- Edit CSS code
- Inspect and edit HTML code
- Edit, access, and run javascript code

Customize your intranet

For this workshop, you're going to customize your favorite website :
https://intra.epitech.eu

turn into dark mode

Customize the website according to your own preferences

EXTENSION CHROME

You should experiment that the change applied to the website was not saved after you refresh this one.
One way to make the change permanent is to make a chrome plugin.
The chrome plugin contains scripts that will be executed after the entire page was loaded each time you refresh

MAKE CHROME EXTENSION
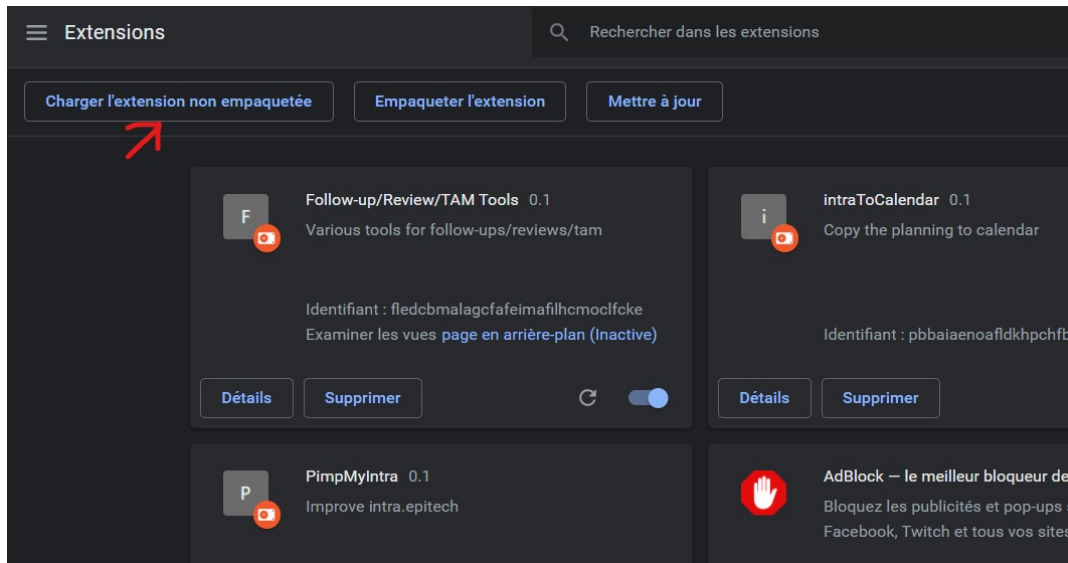
CREATE MANIFEST

Create a folder that will contain your project
To create an extension you need at least a manifest.json file to describe it

```
{
    "name": "your plugin name",
    "version": "1.0",
    "manifest_version": 2
}
```

LOAD THE EXTENSION TO CHROME

Goto url *chrome://extensions*

Do not forget to active it !

DO THE CSS TRICK

Create a css file to save your style properties and add it to the manifest

```
{
    "name": "your plugin name",
    "version": "0.1",
    "manifest_version": 2,
    "content_scripts": [
        {
            "matches": ["https://intra.epitech.eu/*"],
            "css": ["style.css"]
        }
    ],
    "permissions": ["activeTab"]
}
```

Read the documentation to complete your manifest as icon property and more...
https://developer.chrome.com/docs/extensions/mv3/manifest/

Each time you modify a file, you have to refresh the extension in the extension manager

Manipulate the DOM

The HTML DOM is a standard object model and programming interface for HTML
With the DOM you can use javascript to manipulate the HTML of the page
To easily manipulate the DOM you can use jQuery which is a very useful javascript library
For example to hide the breadcrumb, type in your console

```
$("#breadcrumb").hide()
```

You can use javascript vanilla *querySelector* instead

```
document.querySelector("#breadcrumb").style.display = 'none'
```

Download jQuery on officla website and add it to your manifest
Take a while to experiment jQuery or querySelector DOM manipulation in the developer console

Official jQuery documentation : https://api.jquery.com/
Cheatsheet : https://cheatography.com/mottie/cheat-sheets/jquery-selectors/

official vanilla documentation :
https://developer.mozilla.org/fr/docs/Web/API/Document/querySelector

Let's try something

Planning, autoselect semester

In a new javascript file write a function that allow you to enable or disable semesters to show on your planning
According to this array representing the semester

```
let arraySemester = [true, true, false, false, false, true, false];
arraySemester[0] = false; //disable the semester 0
showSemester(arraySemester);
```

Use javascript *setTimeOut* function to wait until the semester filter menu appears

this function should be executed each time you access http://intra.epitech.eu/planning/ only

Use window.location.href to be sure you are at the good endpoint

Do not forget to add the script in your manifest

use "run_at": "document_end" in your content_script

Other ideas to customize the website

Mark available

Create a script that show if you are registred to all sessions of an activity

Day 10 AM

Day 09 - registered

Day 08

Day 07 PM

Test it in the developer console before

Registred acivities

Create a script that show how many activity you are registered or not on the planning

registred activity : 16, not registred activity : 3

Test it in the developer console before

As the planning is generated by javascript after than page is loaded, you can not access it by the DOM just after the page loaded.
You should delay your script for a few seconds.

MUTATIONOBSERVER (ADVANCED)

SetTimeout is no a correct way to do it
You need to observe the planning html container to know when the activities are effectively loaded
As the planning is generated by javascript after than page is loaded, you can not access it by the DOM
Use MutationObserver to detect when the planning is ready

https://developer.mozilla.org/fr/docs/Web/API/MutationObserver

SWITCH THE TIME-ZONE CHALLENGE (BONUS)

Find a way to switch the timezone if and only if it is the wrong timezone