

HTML 5 & DEVELOPMENT TOOLS

This worksheet aims to explain (among other topics) the structure of an HTML 5 web page and the different tools available in Google's Chrome Browser.

1. SYSTEM SETUP

Create the folders "CAD/Worksheets/01-HTML5" to place the code of this worksheet. It is important to follow this structure to later use GIT.

For this worksheet you must have a web server installed. If you are not sure how to do this you can install one available with Node.js. First, install Node.js in order to use an app called "http-server" to serve the static content. Go to <http://nodejs.org> and follow the instructions.

After installing Node.js just open a terminal and install globally the package "http-server".

```
npm install -g http-server
```

To run the Node.js server, change the directory to "CAD/Worksheets/01-HTML5" and use the command "http-server". Other servers (Apache, nginx, IIS) may require different configurations. There is no page at this folder, so you can only test the configuration after creating the first HTML page.

2. FIRST HTML PAGE

Inside the folder "CAD/Worksheets/01-HTML5" create a web page called "index.html" with the following content:

Raw content	Appearance
Home Sweet Home Kitchen Temperature 21.6 °C 5 minutes ago Lights Off 10 minutes ago West Window Open 15 minutes ago North Window Open 15 minutes ago Living Room Temperature 22.6 °C 5 minutes ago Ceiling Lights Off 7 minutes ago Ambient Lights On 7 minutes ago Ambient Music On 17 minutes ago Clock Time 22:30 Date 2018-09-18 Sunrise / Sunset above horizon	Home Sweet Home Kitchen Temperature 21.6 °C 5 minutes ago Lights Off 10 minutes ago West Window Open 15 minutes ago North Window Open 15 minutes ago Living Room Temperature 22.6 °C 5 minutes ago Ceiling Lights Off 7 minutes ago Ambient Lights On 7 minutes ago Ambient Music On 17 minutes ago Clock Time 22:30 Date 2018-09-18 Sunrise / Sunset above horizon

Notes: each zone should be defined by a section.

1. VALIDATION

Install the HTML Validator chrome plugin to check if your solution is HTML compliant.

<http://queury.com/mozilla/download.html>

2. CONTROL VERSION SYSTEM USING GIT

Create a github account to store all the worksheets from this course (<https://github.com>).
If using windows, download Git for windows

(<https://git-scm.com/download/win>)

From the root node of the worksheets code (folder CAD/Worksheets), create a new local git repository:

```
git init
```

Add all files to the staging area and commit the changes

```
git add .  
git commit -m 'Initial commit'
```

At the github account create a new repository called cad-worksheets. Link your local repository with the github repository following github instructions (hint: use command "git remote add origin ...")

- Ask help from the teacher to setup the Personal Access Token or a password less workflow using a SSH key *
- Push your initial commit to the remote repository

* Useful links:

<https://docs.github.com/en/github/authenticating-to-github/keeping-your-account-and-data-secure/creating-a-personal-access-token>

<https://docs.github.com/en/github/authenticating-to-github/connecting-to-github-with-ssh>

3. SECOND HTML PAGE

Add to the folder "CAD/Worksheets/01-HTML5" an HTML file called "history.html" with the following content:

Raw Content	Appearance
Category State Last Changed Kitchen lights Off 23:40 2018-09-16 Kitchen lights On 20:30 2018-09-16 Weather Sunset 20:35 2018-09-16 Bell Ring 19:30 2018-09-16	Category State Last Changed Kitchen lights Off 23:40 2018-09-16 Kitchen lights On 20:30 2018-09-16 Weather Sunset 20:35 2018-09-16 Bell Ring 19:30 2018-09-16

Notes: use a table to represent the information and check if your solution is HTML compliant.

- Check if your solution is HTML compliant
- Commit and push the changes to your remote repository

4. PAGES MENU

Using an unordered list add a menu to the two previous pages that allows a user to jump between the two pages. Expected appearance:

Home Sweet Home

- [Dashboard](#)
- [History](#)

Check if your solution is HTML compliant and if not fix it.

Commit and push the changes to your remote repository.

5. EXTRA CLASS

Using font-awesome icon set (<https://fontawesome.com/icons?d=gallery&q=ligh&m=free>)

add some icons to the dashboard:

Home Sweet Home

- [Dashboard](#)
- [History](#)

Kitchen

- 🌡 Temperature 21.6 °C 5 minutes ago
- 💡 Lights Off 10 minutes ago
- 👁 West Window Open 15 minutes ago
- 👁 North Window Open 15 minutes ago

Living Room

- 🌡 Temperature 22.6 °C 5 minutes ago
- 💡 Ceiling Lights Off 7 minutes ago
- 💡 Ambient Lights On 7 minutes ago
- 🎵 Ambient Music On 17 minutes ago

Clock

- 🕒 Time 22:30
- 📅 Date 2018-09-18
- ⚙ Sunrise / Sunset above horizon