

## 1st Exercise

Duration: 12/10 – 25/10  
8% of total grade  
Unit: **HTML5 – CSS3**

### Exercise 1. Personal homepage [45%]

Develop and design your homepage (or of another, even imaginary person :) ) using HTML5/CSS3. The web page should contain a short bio, information about various aspects like your studies/hobbies, and whatever else you think is important. This page should be a syntactically valid HTML5 page.

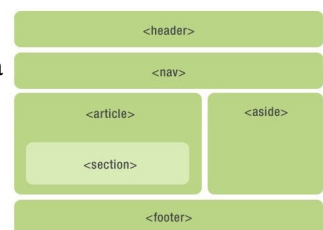
You can follow the following steps, where each step can be consider one commit in your **git** repository:

#### 1) Create an HTML5 page with a blank body – 3%

- In the head of your html page you should include any meta information, like description, keywords, creator, and encoding.

#### 2) Structure your page using structural elements– 6%

- `<header><nav><article><section><aside><footer><div>`
- An indicative design using those tags is shown in the Figure .  
[http://www.w3.org/wiki/HTML\\_structural\\_elements](http://www.w3.org/wiki/HTML_structural_elements)



#### 3) Add information in headers – 2%

- `<h1> ... <h6>`

#### 4) Add styling and tags to text – 4%

- Change the color, font and size of text using CSS3 (use element, id, class and grouping selectors)
- Try to use in a consistent way CSS3 in the whole page
- Also use the following tags `<mark><kbd><abbr><blockquote><dl>`

#### 5) Lists – 2%

- tags `<ol><ul><li>`
- e.g., for listing your interests/hobbies, etc.

#### 6) Tables – 3%

- tags `<table><th><tr><td>`
- to enumerate the courses that you have successfully passed, including your grade

#### 7) Links to other pages and internal anchors– 3%

- tag `<a>`
- use CSS3 to change the color of visited, unvisited, mouse over and selected links

#### 8) Figures– 3%

- tags `<fig><figcaption><img>`
- Use the alternative text attribute

#### 9) Audio Reproduction – 3%

- tag `<audio>`
- Play a small (**<1MB>**)! audio
- Use the appropriate controls to manage the reproduction of the audio file

#### 10) Video Reproduction – 3%

- tag `<video>`
- Play a small (**<1MB>**)! video file

- Use the preload attribute to load only the metadata of the video when the page loads

### 11) Responsive page – media queries – 7%

- Make your web page responsive, supporting the following 3 width resolutions:
  - 1024 (pc/laptop monitor, tablet in landscape)
  - 480 (mobile landscape)
  - 320 (mobile portrait)
- For each of the above resolutions, make sure that you use the appropriate media queries which will apply different CSS rules  
<https://developers.google.com/web/fundamentals/design-and-ui/responsive/?hl=en>
- Add the tag `homepage-responsive` to your git commit!

### 12) Bootstrap – 6%

- Try to improve your page using bootstrap <http://getbootstrap.com/>
- One tutorial <http://www.w3schools.com/bootstrap/>
- At least use the bootstrap grid system, tabs, buttons
- The best looking pages will get a bonus (max 5%)
- Add the tag `homepage-bootstrap` to your git commit!

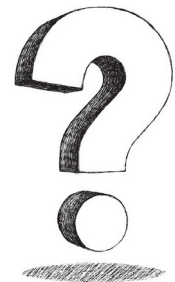
You can upload your page online **only after the deadline**. You can copy your homepage in your account in csd `~username/public_html/index.html`, which will make your page available under <http://www.csd.uoc.gr/~username> after one day!

## Exercise 2.

### Sign-up page in Social Platform– Front-end [40%]

#### *This is part of your work for the code sprint*

In this part you are going to implement the **front-end** part of the sign-up form in the social platform that you will develop. To check if the data submitted by a user are valid you will have to use the validation functionality that is offer from **HTML5 only** e.g., input patterns ([https://www.w3schools.com/tags/att\\_input\\_pattern.asp](https://www.w3schools.com/tags/att_input_pattern.asp)). The sign-up form should have the following fields (with \* the required ones):



- \***Username (3%)**: at least 8 characters (characters and number)
- \***e-mail (3%)**: should be a valid email.
- \***password (6%)**: 8 to 10 characters. The characters of the password should not be shown to the user (e.g., use \*). It should contain at least one character, one number and one symbol (e.g., '#', '\$', '%').
- \***password confirmation (1%)**: As previously. In the future we will check using *JavaScript code that the two passwords are the same*.
- \***Name (3%)**: 3-15 characters.
- \***Surname (3%)**: 3-15 characters.
- \***Birth Date (3%)**: Should contain the day, month, and year. Use the *date* type for the input
- Sex(3%)**: A radio button with values 'Male', 'Female' and 'N/A'.
- \***Country (3%)**: A drop-down menu with all countries based on ISO-3166-1, with Greece the default value
- \***Town (3%)**: 3-20 characters.
- \***Work (3%)**: 3-20 characters.
- Interests (3%)**: A text up to 100 characters.
- General information (3%)**: A text up to 500 characters.

At the end of the page there should be a button labeled 'Submit'.

The rest 15% of the grade will be based on the following 3 criteria:

- **valid XHTML, code quality – 5%**: your HTML should be valid XHTML (should successfully pass the <http://validator.w3.org>). Also it should be readable, well indented, formatted and structured. Try to have some comments in the CSS describing the classes that you are using.
- **page attractiveness – 5%**
- **git – 5%**: you should use git correctly (e.g., use well defined commits, with a nice description and keep your log clean)

## Notes:

Use <https://www.w3schools.com/tags/> for descriptions of various tags

Keep your CSS styles in external CSS files in a subfolder named **css**.

**CSS DOES NOT SUPPORT** one line comments `//` This is *\*not\** a valid CSS3 a comment

Regarding regular expressions you can check [https://en.wikipedia.org/wiki/Regular\\_expression](https://en.wikipedia.org/wiki/Regular_expression). Use <https://regexr.com/> to build and use your own.

### Submission

The submission will be done only through **git**, based on the instructions you have been given. Specifically, your repository in gitlab, should be a fork of the online <https://gitlab-csd.datacenter.uoc.gr/hy359-2020/hy359-2020-a1> and should be shared to the instructor and TA's. Add your code to the homepage folder and to the sn folder correspondingly for each exercise. **Make sure that all your changes and code have been correctly committed, and that they appear in your online repository. Also make sure that you have not committed any unneeded files. When everything is ok add the tag a1 to your repository, using the command "git tag a1" and upload the tag using the command "git push --tags".**

***Schedule things appropriately and avoid starting the exercise at the last moment!***

***As a last check, clone your online repository locally and check that everything works as expected. This is the same process that will be followed during the examination.***

At 00:00 on 26/10 a script will automatically pull all repositories that have been shared to hy359. These are the repositories that will be graded. Nothing will be accepted out of time.

### Unfair practices

In case of any kind of unfair practice, the work of all those involved will not be graded!

### And some words about meraki....

*Set as a goal to implement your work with passion and creativity, trying to highlight beautifully the time you spent working on this exercise! Do not leave things to chance and give something of yourself and your character to your work!*

Happy creative work!

