

# SC-T-213-VEFF - WEB PROGRAMMING I

## ASSIGNMENT 1 – HTML & CSS

Reykjavik University

Deadline: **3rd February 2022, 23:59**

The topic of this assignment is: **Writing HTML and CSS code.**

This is a **group assignment**, which you can solve alone or in groups of **up to 3 students**.

### 1 Building a web site based on a sketch

In the supplementary material of this assignment, you find five screenshots of a responsive web site (**page\_599px.jpg**, **page\_600px.jpg**, **page\_1000px.jpg**, **page\_button\_pressed.jpg**, and **page\_dropdown.jpg**). As the file names suggest, the first three show the web site at a width of 599 pixels, 600 pixels, and 1000 pixels. The remaining two screenshots show how buttons look like when clicked (**page\_button\_pressed.jpg**) and the content of the dropdown menu (**page\_dropdown.jpg**).

Your task will be to implement this website so that it resembles the screenshots as closely as possible. You will deliver the web site as a single HTML file and a single external CSS file. The used image files can be found in the supplementary material. To figure out the colours we used, you can use tools such as <https://imagecolorpicker.com/>.

Note that, for parts of the assignment, it might be required to investigate parts of HTML/CSS that have not (or not yet) been covered in the lectures.

The following requirements must be fulfilled in your solution. Note that violating some of these requirements can lead to severe point deduction. Therefore, make sure to follow them closely and check the accompanying rubric in Canvas before your submission!

1. The HTML document shall validate as an HTML 5 document without errors in the W3C validator (<https://validator.w3.org>), using automatic detection for the document type.
2. All dimensions (font sizes, paddings, margins) shall be approximately correct. This means that they do not have to be exact, but they shall not cause wrong layouting. Specifically, the piano buttons need to be aligned so that they look like an actual piano, without gaps or vertical mis-alignment.
3. All images and text shall be as in the screenshots.
4. All piano keys shall be buttons. No images or image maps are allowed for the keys.
5. All buttons shall look like the E4 key in **page\_button\_pressed.jpg** when pressed.
6. All images shall have an alt attribute, containing a sensible description of the picture.
7. The dropdown menu shall contain the three items shown in **page\_dropdown.jpg**.
8. The web site shall be responsive. That means that all boxes re-size automatically when the width of the screen (or browser window) changes. Re-sizing has to work even on devices with virtual viewports. The following sub-requirements apply:

- (a) When the screen is larger than 599px and smaller than 1001px in width, the piano and the controls above it shall be visible and resize relative to the screen width.
  - (b) When the screen is smaller than 599px, the error screen as shown in **page\_599px.jpg** shall be displayed. The piano and controls shall disappear.
- 9. All CSS code shall be placed in its own CSS file. No inline CSS is allowed.
  - 10. No external CSS files (e.g., Bootstrap) are allowed. The only exception is for including fonts.
  - 11. There shall be no use of JavaScript.
  - 12. There is no requirement on how the website shall look over 1000 pixels.
  - 13. The website will be assessed using Google Chrome and Mozilla Firefox, in responsive mode in both browsers.

## **Submission**

The lab is submitted via Canvas. Submit a zip file containing one HTML, one accompanying CSS file, and all the image files (so that the website works out of the box). No late hand-ins are accepted.