# 5G00DM03-3003 Basics of Web Development, Exercise 6 (Max 24 XP)

**Let us keep practicing using HTML/CSS/JavaScript.**

> **Create a subdirectory with name `ex6` in your local Git working directory, and operate within it. Create files `index.html`, `functionality.js`, and `styling.css`, and implement the task features for the (single) web page resulting as a combination of these files. A simple, ugly barebone example of the page that might be a result of implementing Tasks 1–4 is presented in Figure 1. You should style your implementation and make it look better, though!**

## Task 1 (max 6 XP)

Add a * * element to `index.html`, and within it, list the first 20 Fibonacci numbers (0, 1, 1, 2, 3, 5, …). The numbers should be calculated by your JavaScript implementation based on the definition. (The first value is zero, the second one is 1, and after that, a value is always the sum of two previous values.)

## Task 2 (max 6 XP)

Add a * * element to `index.html`, and within it, create a date countdown timer which will calculate your remaining time as a student. There should be a text "I will graduate from TAMK in XXX days." XXX should be replaced by the proper numeric (integer) value calculated by comparing the current date with your expected graduation date.

## Task 3 (max 6 XP)

Add a * * element to `index.html`, and within it, create a body mass index (BMI) calculator that computes a BMI value based on the input height (cm) and input mass (kg). (Example: https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmi-m.htm demonstrates the basic idea, but you can style your implementation as you like. BMI is defined as $m / h^2$, in which $m$ is the mass in kilograms and $h$ is the height in metres.) BMI should be expressed with the precision of two decimals.

## Task 4 (max 6 XP)

Add a * * element to `index.html`, and within it, let the user input two integer numbers. (At least the numbers in [0, 1000] should be supported.) There should also be a button (featuring, e.g., the text “Values set”). Clicking the button should make your implementation to loop through the interval starting from the lower input value, ending to the larger one (inclusive), and having the step size of one (i.e., go through every integer within the interval using the increasing order).

For each value thus considered, your implementation should produce a line of text to be presented on your HTML page. The text should be as follows: “hip” for the values divisible by 3, “hop” for the values divisible by 7, “hiphop” for values divisible both by 3 and 7, and the numeric value itself otherwise. (Every time the button is clicked, the old lines should be removed before presenting the lines resulting from the new evaluation possibly using different number interval.)

0
1
1
2
3
5
8
13
21
34
55
89
144
233
377
610
987
1597
2584
4181

---

I will graduate from TAMK in 1233 days.

---

Mass (kg): 52 Height (cm): 160 Calculate BMI BMI = 20.31 kg/m$^2$

---

Input 1: 30 Input 2: 7 Values set
hop
8
hip
10
11
hip
13
hop
hip
16
17
hip
19
20
hiphop
22
23
hip
25
26
hip
hop
29
hip

Figure 1: A barebone implementation. In order to get the full XP, you should style your page (each part) and make it look better than this.

## Submission

Commit the files with commit message “Submit Exercise 6”. Push into the remote repository. Then, get the address to this commit of yours by right clicking the name of you commit in GitLab and selecting “Copy Link Location” (or “Copy Link Address” or something like that). Paste this address as your answer to Moodle (Session 6 homework submission area), and submit. **N.B.: you should submit a single address only pointing to the commit, not several addresses pointing to, e.g., individual files**.