
ASSIGNMENT 1: BASIC RESPONSIVE WEB PAGE WITH BOOTSTRAP AND JQUERY

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SYNOPSIS

You are going to build a web page to introduce yourself. This page should be well-decorated and responsive. There are also a few special features in the page.

BASIC CONTENTS (10%)

(Done in Lab 1) The contents should be about yourself. You are not required to put in completely factual contents, but at least your name and department should be correct.

These HTML elements *must be* included
in your HTML5 file:

- ◆ Heading
- ◆ Paragraph
- ◆ List
- ◆ Table
- ◆ Image / Picture
- ◆ Flex / Grid

These HTML5 semantic elements *must be*
used appropriately:

- ◆ <header>
- ◆ <nav>
- ◆ <section>
- ◆ <footer>

HTML FILE VERSION A: (15%)

(Done in Lab 1) Using an *external CSS file*, at least these *must be* applied to your page:

- | | |
|--------------------------------|------------------------------|
| ◆ Header background image | ◆ Table with collapse border |
| ◆ Horizontal link items in nav | ◆ Web font |
| ◆ Hover changes for links | |

HTML FILE VERSION B: (25%)

(Done in Lab 2) Bootstrap *must be* used instead of the CSS styles in version A. Proper styling with Bootstrap on these elements are required:

- ◆ Sections with background color
- ◆ Table
- ◆ Navbar
- ◆ List

Float, flex and/or grid within sections should look *similar* with your version A. There should be at least one *visible* example using Bootstrap column layout. The column layout *must be* responsive, in addition to the requirements about “Responsive Web Features” below.

DYNAMIC CONTENTS (40%)

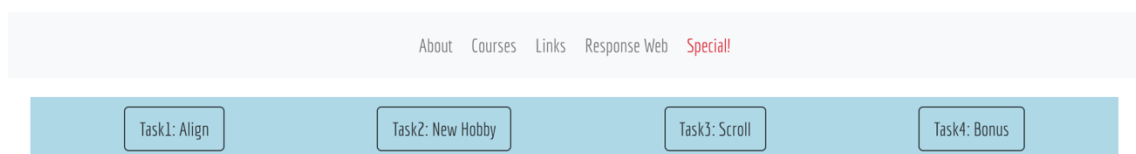
Implement these items using jQuery or plain JavaScript in one *external JS file* for version B.

1. *Fade in of page contents*

The complete web page contents should fade in from white after being loaded. The duration should be visually obvious.

2. “Special” link in navbar

Include an extra “Special” link to hide or show an extra bar of buttons for 4 Tasks, with their features described below. The extra bar should be hidden by default. There are no other style requirements for this bar. Here is *an example*:

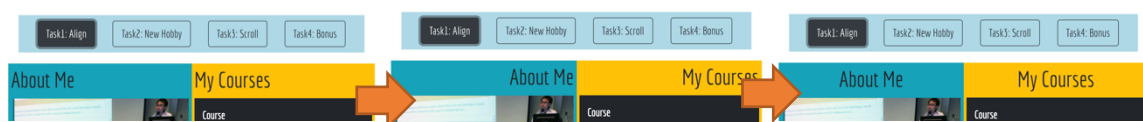


3. *Task 1: Align*

When this button is clicked, all the section headings should change the alignment in this sequence:

Left >> Right >> Center >> Left >> ...

For example,



4. Task 2: New Hobby

When this button is clicked, a dialog box (using **prompt()**) asks the user to enter a new hobby. If the user entered something, a new item should be added to the group of “hobbies” in your page. If nothing is entered, no new item should be created.

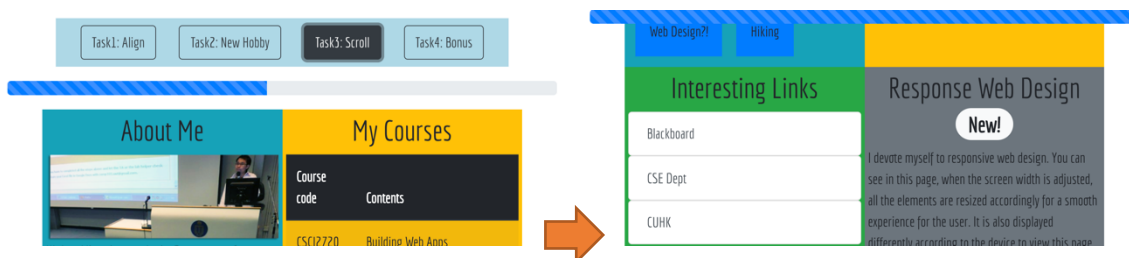
“Hobby” here is only an example. You can use this button to create items for any list/table/flex/... groups in your page. Please adjust the text appropriately.

5. Task 3: Scroll

When this button is clicked, a Bootstrap progress bar is shown or hidden below the button bar. If it is shown, when the user scrolls the page, the progress bar adjusts according to the scroll position, i.e. 0% at the top and 100% at the bottom. The progress bar should take a “sticky” position, so that it remains visible on the screen when the page is scrolled.

You may find these methods helpful: **\$(window).scrollTop()**,
\$(document).height(), **\$(window).height()**

Here is an example:



6. Task 4: Bonus (optional)

When this button is clicked, a dialog box (using **alert()**) shows a description of special trick to be performed (*around 50 words*). You can freely think of an appropriate feature for your own page.

This task is NOT a requirement of the assignment. But if you successfully do it, it contributes to a few bonus points for your course grade:

- ◆ *Similar level as Tasks 3 = 0.5 points*
- ◆ *Too simple but some efforts = 0.25 points*

You may choose to use Bootstrap classes or CSS styles for all styling tasks here.

RESPONSIVE WEB FEATURES (10%)

(Done in Lab 1) In both versions A and B, you need to incorporate *at least 3 design elements* which would change according to screen size. Visually different layouts must be applied for a mobile phone screen (*width < 500px*) and a large screen (*width >= 500px*). Describe what you have done in a separate section in the page with no less than 50 words.

FEATURES AND FRAMEWORKS

You are welcome to implement extra styles and features at your own ability. For the frameworks in version B, please use the current CDN versions instead of a local copy:

- ◆ Bootstrap (4.1.3 or later)
<https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css>
- ◆ jQuery (3.1.1 or later)
<https://code.jquery.com/jquery-3.3.1.min.js>

Do NOT use any extra plugins or frameworks other than these two.

SUBMISSION

We will only visit your web page submission using *Google Chrome* (almost-latest versions). Please utilize the *Developer Tools* for debugging of your code.

Please read this article carefully: <http://www.cuhk.edu.hk/policy/academichonesty>

Include your full name and student ID in *all code files* using comments. Zip all your files and submit it on the course site on Blackboard. *Only these files should be included:*

- ◆ 2 .html files (e.g. versionA.html and versionB.html)
- ◆ 1 .css file (for version A only)
- ◆ 1 .js file (for version B only)
- ◆ Image files

REFERENCE POINTS

Bootstrap: <https://getbootstrap.com/docs/4.1>

jQuery: <https://learn.jquery.com>