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# Web Engineering

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Exercise 2

**You are nearly there! However, you have now planned a couple of extensions, where the main goal is to improve even more your new menu making use of JavaScript and jQuery.**

This is the description of the second, and final, part of Exercise 2.

## Exercise 2.1

Please refer to the description provided last week for the details of the first part of Exercise 2.

## Exercise 2.2 *Animated Menu using JavaScript and jQuery*

As previous step you have created an additional menu following a mockup. It is now time to make use of JavaScript to improve your previous navigation. The menu should now be draggable in the page, it should be less visible when the mouse hovers it and it should also be responsive. Moreover, when the user leaves the menu this should move to the nearest side of the page unless the green *pin* icon wasn't clicked before.

More in detail the menu should have the following properties:

1. **Hover and open/close property** When the mouse is not over the menu its opacity should be increased, while when the mouse is on it the menu should be completely visible. When double-clicking on the hamburger icon the menu should close showing only the icon, double clicking it again will open the menu.
2. **Draggable Menu** The user should be able to drag and drop the menu anywhere in the page.
3. **Move to the nearest side logic** When the user drops the menu (and if the green *pin* icon is not clicked) and moves the mouse outside, the menu should move automatically to the nearest side of the page. While the menu is moving to the nearest side of the page the user can catch it by going again with the mouse over it, resulting in the menu to stop.
4. **Pin-un-pin Menu** If the user clicks on the green *pin* icon the menu should not move anymore to the nearest side but it should remain in the dropped position.
5. **Responsive Menu** The menu should adapt to a tablet-smartphone viewing conditions but it should still be possible to drag it. Moreover, even in smaller viewport if not pinned, the menu should move to the nearest side once dropped or blocked when the use puts again the mouse over it.

**Hint:** On our group web site it is available a video that shows a complete and working example solution. Please refer to that solution to develop your *Animated Menu*.

**Workmode and Grading. All exercises in the Web Engineering course are designed for teams of 3 students.** Every member has to contribute to the team solution, and the assistants may ask about the role of each member and who contributed what.

This is the first part of Exercise 2. **The final team solution for Exercise 2 will need to be presented during the exercise session on 26/03/2015 from 12:15 to 14:00. If you have any (real) problem to show your solution on the**

**26th, please send me an email before the 22nd. From all the teams that have requested to be assessed on Friday we will randomly pick 5 groups. These teams will show their solution in our lab (CNB E 108.2) from 15:15pm.**. You do not need to hand in the source code, but the assistants may ask questions about how you implemented some of the features when you demo it in the exercise session. **We will use the following grading scheme.**

**Grading Scheme** For each part of the graded exercises, we specify the amount of points your team can achieve and a set of requirements. These requirements represent the minimal set of goals you need to accomplish to get full points. If you fulfill the requirements only partially or fail to answer corresponding questions during the presentation, points will be deducted. No or wrong solutions get zero points. aaa The maximum number of points may differ between parts and thus reflect their respective weights. For Exercises 2.1, and 2.2 the set of requirements are specified as follows:

**Set of Requirements - Part 1 (Max. points: 3)**

- Fixed new menu layout and CSS3 animation (placed in one corner of index.html) see Figure **??**.
- HTML5 semantic tags in all pages (index.html, blog.html, contactme.html, portfolio.html).
- Responsive design of the pages (index.html, blog.html, contactme.html, portfolio.html) developed with Flexbox.

**Note:** To assess your usage of Flexbox, you will need again to prove the responsiveness of your implementation (this time developed using Flexbox). Therefore, if your implementation for Exercise 1 had any issues, you should make sure to solve them (if possible/necessary using Flexbox) before the assessment.

**Set of Requirements - Part 2 (Max. points: 4)**

- Fully working draggable, animated menu. This include the draggable logic, the change of visibility when the mouse hovers the menu and the possibility to open/close the menu by double clicking the hamburger icon.
- Automatic motion to the nearest side of the page when the menu is dropped and the possibility to pin it by clicking the corresponding icon. This also includes the possibility to catch the menu when the mouse hovers it while reaching the nearest side of the screen.
- Responsive/Fluid design for the menu when the browser is resized to smaller viewing conditions.

**Note:** JQuery plugins are not allowed. Your *Animated Menu* implementation should make use only of JavaScript/j-Query and CSS.