

Web design – Computer lab 6

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- Lab 6 – section JavaScript and jQuery
- Lecture 9 – JavaScript and jQuery
- MDN – JavaScript Guide
- W3Schools – JavaScript Tutorial
- jQuery API Documentation
- jQuery Learning Center
- Google JavaScript Style Guide

- 1 Start from the document you have created in the previous lab (lab 5).
- 2 Find lab 6 on the labs [website](#).
- 3 Adjust the document to display well on devices with different resolutions.
- 4 Consider the following device classes:
 - **extra small (XS)** $< 576 \text{ px}$
 - displays the hamburger menu
 - **small (SM)** $\geq 576 \text{ px}$ – **mobile phone**
 - **medium (MD)** $\geq 768 \text{ px}$ – **tablet**
 - show icons without description,
 - on hover action show description (see below).
 - **large (LG)** $\geq 992 \text{ px}$ – **laptop**
 - **extra large (XL)** $\geq 1200 \text{ px}$ – **desktop**
 - displays standard menu with description without title (see below).
 - **extra extra large (XXL)** $\geq 1400 \text{ px}$ – **widescreen**
 - displays standard menu with description without title.

- **Icons**
 - Explore [Font Awesome](#) and choose the appropriate free icons for your menu.
 - Used icons: home, info-circle, tv, grin-beam-sweat, hammer, envelope, code-branch, bars.
- **Hamburger menu** – in the case of very low resolution (xs), there will be a button to display the pull-down menu – [menu-opened.png](#)
- **Sticky menu** – when scrolling the page, the menu will be fixed at the top – [menu-sticky.png](#)
- **Dynamic title for icons**
 - If the navigation items do not have a displayed description (sm, md), a title containing the same content as the standard description will be available – [menu-hover.png](#)
 - If the description is available, the title will not be active – [menu-default.png](#)

- **Animated scrolling**
 - When the navigation item is clicked, an animated scrolling will be performed on the anchor (e.g., 1000 ms).
 - Make sure that the sticky menu is taken into account (appropriate position of the anchor; when switching to the sticky menu, the page does not jump; etc).
- For implementation, use JavaScript or jQuery; for sticky menu, don't use the CSS property position: sticky; for animations, use the library in jQuery.
- After completing the task, explore the [jQuery UI library](#) or available [Bootstrap library components](#).

- **Find elements with:**
 - selector_id_var = \$("#selector_id");
 - other_specific_scope_var = \$(nav);
- **Sticky menu** – When you scroll down, the code checks if the menu should “stick” to the top of the page:
 - If yes, it fixes the menu at the top.
 - Else (you’re at the top of the page) removes the “sticky” effect.
- **Smooth scrolling:**
 - When a menu item is selected, the page scrolls smoothly to the relevant section.
 - It also adjusts the position so the sticky menu does not obscure the section title.
- **Hamburger Menu** – On small screens, a button (hamburger icon) is available to open or close the menu. By clicking on the icon, the menu will be shown or hidden.
- **Hover Titles** – When a user moves the cursor over a menu item, the system will check if the description is visible. If that is not the case, a small pop-up containing the description will appear (referred to as a ‘title’).