



Assignment 6 (HF, major subject)

Due: Wed 07.12.2016; 20:00h (1 Week)

Goals

After doing these exercises, you know how to use **Vanilla JS** to...

- Access and modify the DOM
- Handle events
- Perform Ajax Requests

Do not use any library / framework for this assignment. [#UseThePlatform](#)

Task 1: Picture Slide Show

Difficulty: Easy

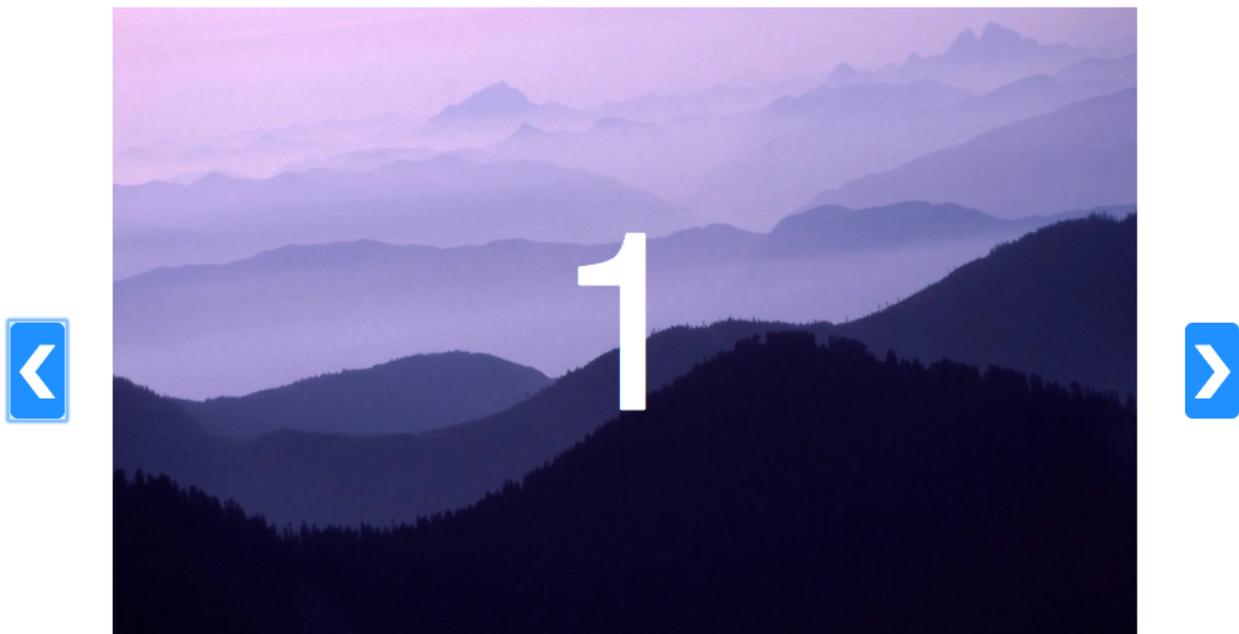


Figure 1 - Image Source: <https://app-layout-assets.appspot.com/assets/bg1.jpg>

Create a webpage from scratch. It should have a slide show / image carousel. The user can click two buttons (left/right) to browse through the available images one at a time. If the final slide is reached, you can either prevent going further, or start from the beginning (cycle). The number of the current slide should be displayed somewhere on the page (it doesn't have to be on top of the images). Watch a demo here: https://youtu.be/dr_JKOyXdFA

Include all code files in your submission in a folder "task01".



Task 2: RSS Ticker Page

Difficulty: Medium

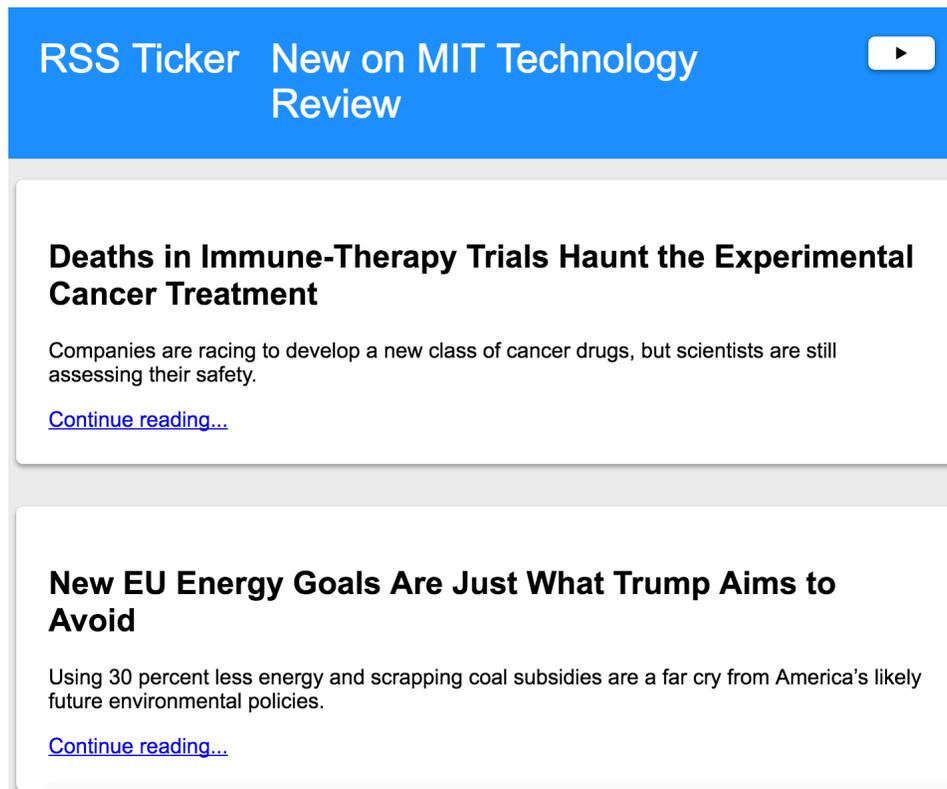


Figure 2 - Watch a demo here: <https://youtu.be/pQtRZYxk8CE>

Create a web-page that shows an RSS-Ticker from different sources. If the user clicks on a ► Button, the page is refreshed with new articles from a randomly selected RSS feed. The page content is refreshed every 60 seconds. Instead of actually refreshing the entire page, the content is loaded asynchronously with Ajax.

Loading RSS feeds, which are just XML files, with Ajax is not possible in a straightforward way, due to the **Same Origin Policy** (SOP) implemented in many browsers. To make this possible, you need a *proxy*. We provide a PHP script that acts as a proxy for URLs to XML files.

Set-up:

- Download the material for this assignment. You'll find it on the web page and in the GitHub assignments repository.
- Start your apache server (e.g. with xampp).
- Put the file `xml-proxy.php` into your web-server root folder, e.g.
C:\xampp\htdocs\ (Windows)
/Applications/XAMPP/htdocs/ (macOS)
/home/yourusername/public_html/php/
- Open a browser and go to
<http://localhost/xml-proxy.php>
respectively <http://php.cip.ifi.lmu.de/~yourusername/php/xml-proxy.php>



The proxy script allows passing a URL. What it does is to load the file from that URL, parse it and return it as a JSON, which we can easily use with JavaScript.

For example:

To load the How-To-Geek RSS Feed, we can use:

<http://localhost/xml-proxy.php?url=http://feeds.feedburner.com/HowToGeek>

Here is a list of RSS feeds, but you can add as many as you like

- <http://feeds.gawker.com/lifehacker/full>
- <https://www.technologyreview.com/stories.rss>
- <http://feeds.feedburner.com/Techcrunch/europe>
- <http://feeds.feedburner.com/HowToGeek>

Now that you are set up, you can implement the web page functionality in load-rss.html

- a) Randomly select a URL from which to load the feed.
- b) Assemble the URL for the proxy (see above) that you can use with Ajax
- c) Perform the Ajax request with an XMLHttpRequest
- d) Handle the response and show the articles.

Use the developer console to inspect elements and debug errors. If you have any questions, please ask them on Slack or during the CodeLabs.

Include all code files in your submission in a folder “task02”.



Submission

Please turn in your solution via UniWorX. You can form groups of up to three people.

We encourage you to sign up for Slack! All you need is a CIP account and an email address that ends in “@cip.ifi.lmu.de”. Ask us if you don’t know how to get them.

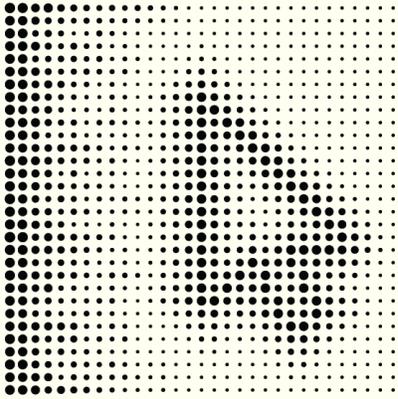
If you have questions or comments before the submission, please contact one of the tutors. They are on Slack [@tobi.seitz](#), [@peterjuras](#) and [@thomas-weber](#). Remember, that they also want to enjoy their weekends ☺

It also makes sense to ask the question in our [#mmn-ws1617](#) channel. Maybe fellow students can help or benefit from the answers, too!

CodeLabs

As always, everyone is invited to participate in the CodeLabs on Wednesday between 6 and 8 pm. We encourage you to go there if you struggle with installation or nasty bugs that just don’t seem to go away. The times are flexible, so you can join anytime during the CodeLab hours.

Open Lab Day



open lab day
05.12.2016 18:00-21:30 Amalienstraße 17
Die Arbeitsgruppen Medieninformatik und Mensch-Maschine-Interaktion präsentieren aktuelle Forschungsprojekte und Arbeiten von Studierenden.
www.medien.ifi.lmu.de/openlab



Am 05. Dezember von 18 bis 21:30 Uhr öffnet die Lehr- und Forschungseinheit Medieninformatik der LMU München ihre Pforten für Studierende, Familie, Freunde und Interessierte. Die Mitarbeiter zeigen ihre aktuellen Forschungsarbeiten und Studierende präsentieren die Ergebnisse ihrer Semesterprojekte. Viele neuartige Bedienkonzepte für den Computer laden die Besucher zum Experimentieren und Nachdenken ein.