
Animefest - Report

Ondrej Repa <433704@mail.muni.cz>

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Introduction

Our task was to create an information screen for the festival Animefest.cz. It had to include multiple features such as displaying the current program from XML data, fetching images from Instagram with a specified hashtag, fully operational administration interface and so on.

My role in the team was to develop front-end of the web application that is split into cycling scenes where each scene shows a different content. I designed program scene dynamically updating its content according to XML file retrieved from the server. This included parsing and visualizing XML data in form of auto generated HTML document. For this purpose I used JavaScript programming language.

Solution

JavaScript is a client-side scripting language running in every modern web browser. It implements a Document Object Model (DOM) which is a basic interface to process and access the tree representation of XML data. HTML DOM allows to dynamically generate HTML and CSS code from JavaScript and contains the browser environment. JavaScript also includes an Asynchronous JavaScript and XML (AJAX) which supports asynchronous communication with web servers using HTTP protocol. Using AJAX it is possible to send HTTP requests and receive responses. In JavaScript, AJAX is implemented by XMLHttpRequest object that can fetch XML data without refreshing a web browser. Combining HTML DOM and AJAX it is easy to create and update content of a HTML page.

Action flow of the program scene was to fetch XML file with information about all events at Animefest. After the server's response I parse the XML document and split events into two groups by time. The scene always displays which events are currently held in main halls and also events in other minor halls if there are any. For each hall I displayed its name, the current running event and the next event with its title and time. Every half an hour I refreshed the scene with data from XML document. If a refresh button on admin page is clicked, the flow is started all over again.

I cooperated with my teammates on a design of the scene and a handling admin refresh events. Beside the programming we collaborated on writing GitLab wiki pages and presentation slides.

Conclusion

The project was successfully launched on Animefest and we received many positive reactions. I was honored to be a part of team and participate on development of a useful product for Animefest guests which helped to easily orientate in a festival's program. I consider it as a great opportunity to improve my skills as a front-end web developer.