Lab: AJAX & jQuery AJAX

Problems for in-class lab for the "JavaScript Applications" course @ SoftUni. Submit your solutions in the SoftUni judge system at https://judge.softuni.bg/Contests/Compete/Index/357.

1. XHR (XmlHttpRequest)

Your task is to **write** a JS function that **loads** a github repository **asynchronously with AJAX**. You should **create** an instance of **XmlHttpRequest** an attach an **onreadystatechange** event to it. (An EventHandler that is called whenever the readyState attribute changes). In your event handler when the **readyState** attribute reaches a value of **4** (it is ready), replcae the text content of a **div** element with **id "res"** with the value of the **responseText** property of the request. **Do not format** the response in any way. Submit your **loadRepos** function.

 More on XmlHttpRequest.open()

Skeleton

xmlhttprequest-example.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>XmlHttpRequest Example</title>
    <script src="scripts/1.xhr.js"></script>
</head>
<body>
<button onclick="loadRepos()">Load Repos</button>
<div id="res"></div>
<script>
    function loadRepos() {
        // TODO
    }
</script>
</body>
</html>
```

Examples

2. AJAX Load

Use **jQuery** to **write** a JS function that loads an online resource into a div with **id "text".** Make a request to "**text.html**" and replace the target div's content with the returned **HTML**. Create the files **ajax-load.html** and **text.html** and place them in the same folder, so that your script can find the latter.

Submit your **loadTitle** function.

Skeleton

ajax-load.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>AJAX Load Example</title>
    <script src="https://code.jquery.com/jquery-3.1.1.min.js"></script>
</head>
<body>
<div id="text">
    <h1>AJAX jQuery.load()</h1>
    <button onclick="loadTitle()">Load Title</button>
</div>
</body>
</html>
```

text.html

```
<h1>Voilla!</h1>
<p>I am a text loaded with AJAX request</p>
```

ajax-load.js

```
function loadTitle() {
   // TODO
}
```

Examples

AJAX jQuery.load()

Load Title

Voilla!

I am a text loaded with AJAX request

3. Github Repos

Your task is to **write** a JS function that **executes** an **AJAX** request with **jQuery** and loads all user **github repositories** by a given username (taken from input field with **id "username"**) into a **list** (each repository as a **list-item**) with **id "repos"**. Use the properties `full_name` and `html_url` of the returned objects to create a link to each repo's GitHub page. If an **error** occurs (like 404 "Not Found"), **append** to the list a list-item with **text** "Error" instead. Clear the contents of the list before any new content is appended. See the **highlighted lines** of the skeleton for formatting details of each list item. Submit your `loadRepos` function.

Skeleton

github-repos.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>GitHub Repos</title>
    <script src="https://code.jquery.com/jquery-3.1.1.min.js"></script>
</head>
<body>
GitHub username:
<input type="text" id="username" value="k1r1L" />
<button onclick="loadRepos()">Load Repos</button>
<ul id="repos">
  <li>
    <a href="{repo.html_url}">
      {repo.full_name}
    </a>
  </li>
</ul>
<script>
    function loadRepos() {
        // AJAX call …
    }
</script>
</body>
</html>
```

Examples

GitHub username: k1r1L   [Load Repos]

- k1r1L/CSharp-Web-Development-Basics
- k1r1L/CSharp-Web-MVC-Frameworks-ASP.NET
- k1r1L/Databases-Advanced-Entity-Framework
- k1r1L/Databases-MS-SQL-Server-Exercises
- k1r1L/JavaScript-Advanced
- k1r1L/JavaScript-Fundamentals

4. Phonebook

Use **Firebase** and **jQuery** to create a simple phonebook app. The user should be able to see all contacts, **loaded** from the server, **create** a new contact and **delete** any of the contacts. Use the lecture presentation for detailed instructions on this task. Place your code in a file called "phonebook.js", as shown in the skeleton. This task is not evaluated by the Judge, it is for practice only.

Skeleton

github-repos.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Phonebook</title>
</head>
<body>
  <h1>Phonebook</h1>
  <ul id="phonebook"></ul>
  <button id="btnLoad">Load</button>
  <h2>Create Contact</h2>
  Person: <input type="text" id="person" />
  <br>
  Phone: <input type="text" id="phone" />
  <br>
  <button id="btnCreate">Create</button>
  <script src="phonebook.js"></script>
</body>
</html>
```

Examples

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