# Solutions-Lab: AJAX & jQuery AJAX

## 1.XHR (XmlHttpRequest)

function loadRepos(){

let request = new XMLHttpRequest();

request.onreadystatechange = function(){

if (this.readyState == 4 && this.status == 200){

document.getElementById('res').textContent = this.responseText;

}

};

request.open('GET', 'https://api.github.com/users/testnakov/repos', true);

request.send();

}

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>XmlHttpRequest Example</title>

<script src="01XmlHttpRequest.js"></script>

<style>

@import url(https://fonts.googleapis.com/css?family=Open+Sans);

body {

font-family: "Open Sans", serif;

}

button {

background-color: #4caf50;

color: white;

padding: 14px 20px;

margin: 8px 0;

border: none;

border-radius: 4px;

cursor: pointer;

}

button:hover {

background-color: #45a049;

}

</style>

</head>

<body>

<button onclick="loadRepos()">Load Repos</button>

<div id="res"></div>

</body>

</html>

## 2.AJAX Load

function loadTitle(){

$('#text').load('text.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>

<script src="02AJAXLoad.js"></script>

<style>

@import url(https://fonts.googleapis.com/css?family=Open+Sans);

body {

font-family: "Open Sans", serif;

}

button {

background-color: #4caf50;

color: white;

padding: 14px 20px;

margin: 8px 0;

border: none;

border-radius: 4px;

cursor: pointer;

}

button:hover {

background-color: #45a049;

}

</style>

</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>

## 3.Github Repos

function loadRepos() {

$('#repos').empty();

let url = 'https://api.github.com/users/' + $('#username').val() + '/repos';

$.ajax({ url, success: displayRepos, error: displayError });

function displayRepos(repos) {

for (let repo of repos) {

let $link = $('<a>');

$link.text(repo.full\_name);

$link.attr('href', repo.html\_url);

let $li = $('<li>');

$li.append($link);

$('#repos').append($li);

// $('#repos').append($('<li>').append($link));

}

}

function displayError(error) {

let $li = $('<li>');

$li.text('Error');

$('#repos').append($li);

//$('#repos').append($('<li>Error</li>'));

}

}

<!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>

<script src="03GitHubRepos.js"></script>

<style>

@import url(https://fonts.googleapis.com/css?family=Open+Sans);

body {

font-family: "Open Sans", serif;

}

button {

background-color: #4caf50;

color: white;

padding: 14px 20px;

margin: 8px 0;

border: none;

border-radius: 4px;

cursor: pointer;

}

input[type=text] {

padding: 12px 20px;

margin: 8px 0;

display: inline-block;

border: 1px solid #ccc;

border-radius: 4px;

}

</style>

</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>

</body>

</html>

## 4.Phonebook

$(function(){

$('#btnLoad').click(loadContacts);

$('#btnCreate').click(createContact);

let baseServiceUrl = 'https://phonebook-nakov-c90d5.firebaseio.com/phonebook';

function loadContacts(){

$('#phonebook').empty();

$.get(baseServiceUrl + '.json').then(displayContacts).catch(displayError);

}

function displayContacts(contacts){

for(let key in contacts){

let person = contacts[key]['person'];

let phone = contacts[key]['phone'];

let $li = $('<li>');

$li.text(person + ': ' + phone + ' ');

$('#phonebook').append($li);

$li.append($('<button>Delete</button>').click(deleteContact.bind(this, key)));

}

}

function displayError(e){

$('#phonebook').append($('<li>Error</li>'));

}

function createContact(){

let newContactJSON = JSON.stringify({

person: $('#person').val(),

phone: $('#phone').val()

});

$.post(baseServiceUrl + '.json', newContactJSON).then(loadContacts).catch(displayError);

$('#person').val('');

$('#phone').val('');

}

function deleteContact(key){

let request = {

method: 'DELETE',

url: baseServiceUrl + '/' + key + '.json'

};

$.ajax(request).then(loadContacts).catch(displayError);

}

});

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Phonebook</title>

<script src="https://code.jquery.com/jquery-3.1.1.min.js"></script>

<style>

@import url(https://fonts.googleapis.com/css?family=Open+Sans);

body {

font-family: "Open Sans", serif;

}

button {

background-color: #4caf50;

color: white;

padding: 14px 20px;

margin: 8px 0;

border: none;

border-radius: 4px;

cursor: pointer;

}

input[type=text] {

padding: 12px 20px;

margin: 8px 0;

display: inline-block;

border: 1px solid #ccc;

border-radius: 4px;

}

</style>

</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="04Phonebook.js"></script>

</body>

</html>

$(function () {

$('#btnLoad').click(loadContacts);

$('#btnCreate').click(createContact);

let baseServiceUrl =

'https://phonebook-nakov-c90d5.firebaseio.com/phonebook';

function loadContacts() {

$("#phonebook").empty();

$.get(baseServiceUrl + '.json')

.then(displayContacts)

.catch(displayError);

}

function displayContacts(contacts) {

for (let key in contacts) {

let person = contacts[key]['person'];

let phone = contacts[key]['phone'];

let li = $("<li>");

li.text(person + ': ' + phone + ' ');

$("#phonebook").append(li);

li.append($("<button>Delete</button>")

.click(deleteContact.bind(this, key)));

}

}

function displayError(err) {

$("#phonebook").append($("<li>Error</li>"));

}

function createContact() {

let newContactJSON = JSON.stringify({

person: $('#person').val(),

phone: $('#phone').val()

});

$.post(baseServiceUrl + '.json', newContactJSON)

.then(loadContacts)

.catch(displayError);

$('#person').val('');

$('#phone').val('');

}

function deleteContact(key) {

let request = {

method: 'DELETE',

url: baseServiceUrl + '/' + key + '.json'

};

$.ajax(request)

.then(loadContacts)

.catch(displayError);

}

});

|  |
| --- |
| <!DOCTYPE html> |
|  | <html lang="en"> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Phonebook in Firebase</title> |
|  | <script src="https://code.jquery.com/jquery-3.1.1.min.js"></script> |
|  | </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> |
|  | $(function () { |
|  | $('#btnLoad').click(loadContacts); |
|  | $('#btnCreate').click(createContact); |
|  |  |
|  | let baseServiceUrl = "https://phonebook-173c1.firebaseio.com/phonebook"; |
|  |  |
|  | function loadContacts() { |
|  | $('#phonebook').empty(); |
|  | $.get(baseServiceUrl + ".json") |
|  | .then(displayContacts) |
|  | .catch(displayError); |
|  | } |
|  |  |
|  | function displayContacts(contacts) { |
|  | for(let key in contacts){ |
|  | let person = contacts[key]['person']; |
|  | let phone = contacts[key]['phone']; |
|  |  |
|  | $('#phonebook') |
|  | .append($('<li>').text(person + ': ' + phone + ' ') |
|  | .append($('<a>').attr('href', '#').text('[Delete]').click(function () { |
|  | deleteContact(key) |
|  | }))); |
|  | } |
|  | } |
|  |  |
|  | function displayError(err) { |
|  | $('#phonebook').append($('<li>').text("Error")); |
|  | } |
|  |  |
|  | function createContact() { |
|  | let newContactJSON = JSON.stringify({ |
|  | person: $('#person').val(), |
|  | phone: $('#phone').val() |
|  | }); |
|  |  |
|  | $.post(baseServiceUrl + '.json', newContactJSON) |
|  | .then(loadContacts) |
|  | .catch(displayError); |
|  |  |
|  | $('#person').val(''); |
|  | $('#phone').val(''); |
|  | } |
|  |  |
|  | function deleteContact(key) { |
|  | let request = { |
|  | method: 'DELETE', |
|  | url: baseServiceUrl + '/' + key + '.json' |
|  | }; |
|  |  |
|  | $.ajax(request) |
|  | .then(loadContacts) |
|  | .catch(displayError); |
|  | } |
|  | }) |
|  | </script> |
|  | </body> |
|  | </html> |