

LESSON 13

LIBRARIES & FRAMEWORKS

DEFINITION

Сборник классов и/или функций на языке JavaScript.

- ▶ Не определяет структуру приложения
- ▶ Не накладывает ограничений
- ▶ В одном проекте может быть подключено множество библиотек

POPULAR

- ▶ jQuery, jQuery-UI, plugins
- ▶ Bootstrap
- ▶ React, redux
- ▶ Moment.js
- ▶ Lodash, Ramda, Underscore
- ▶ Rx.js
- ▶ D3, Charts.js

IMPORTING

- ▶ Download as a file

```
<script defer src="jquery-3.5.1.min.js"></script>
```

- ▶ CDN

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
```

- ▶ NPM, Yarn, Bower

```
npm i jquery
```

NPM

- ▶ Download and install Node
- ▶ Install NPM
- ▶ <https://www.npmjs.com/>
- ▶ <https://nodejs.org/en/>

NPM INIT

- ▶ npm init
- ▶ package.json
- ▶ dependencies
- ▶ npm install jquery --save / npm i jquery -S
- ▶ npm_modules
- ▶ .gitignore

DEFINITION

- ▶ Complete tool set
 - routing
 - data storage
 - data binding
 - file structure
 - naming
 - SPA
 - One framework per project
 - ...

MOST POPULAR

- ▶ React + libraries / React-native
- ▶ AngularJS, Angular
- ▶ Vue.js
- ▶ Svelte

JQUERY

- ▶ \$, jQuery - main functions
- ▶ Elements wrapping
- ▶ As a function and an object
- ▶ Chaining
- ▶ Data processing utils
- ▶ Plugins

EXAMPLES

- ▶ `$("li").css("color", "green");`
- ▶ `$("p:contains('World')").css("color", "yellow");`
- ▶ `$("#cat,#dog,#rat").css("background-color","red");`
- ▶ `$("#clickMe").click(handler)`
- ▶ `$(selector).hover(inFunction, outFunction);`
- ▶ `$(".selector").animate(properties, duration, callbackFunction());`
- ▶ `$(".myclass").show().hide(800)`
- ▶ `$(".myclass").slideDown();`

EXAMPLES

```
$( document ).on("click", ".myCustomBtnClassInATable", function () {  
    var myTableCell = $(this).parent();  
    var myTableRow = myTableCell.parent();  
    var myTableBody = myTableRow.parent();  
    var myTable = myTableBody.parent();  
  
    //you can also chain these all together to get what you want in one line  
    var myTableBody = $(this).parent().parent().parent();  
});
```

EXAMPLES

```
$("#<button/>", {  
  id: "button",  
  href: "https://google.com.ua",  
  title: "Search engine",  
  text: "Google.com",  
  click: function (e) {  
    e.preventDefault();  
    alert("hello world!");  
  },  
}).appendTo("body");
```