JavaScript

Events

PHP web development 2020/2021

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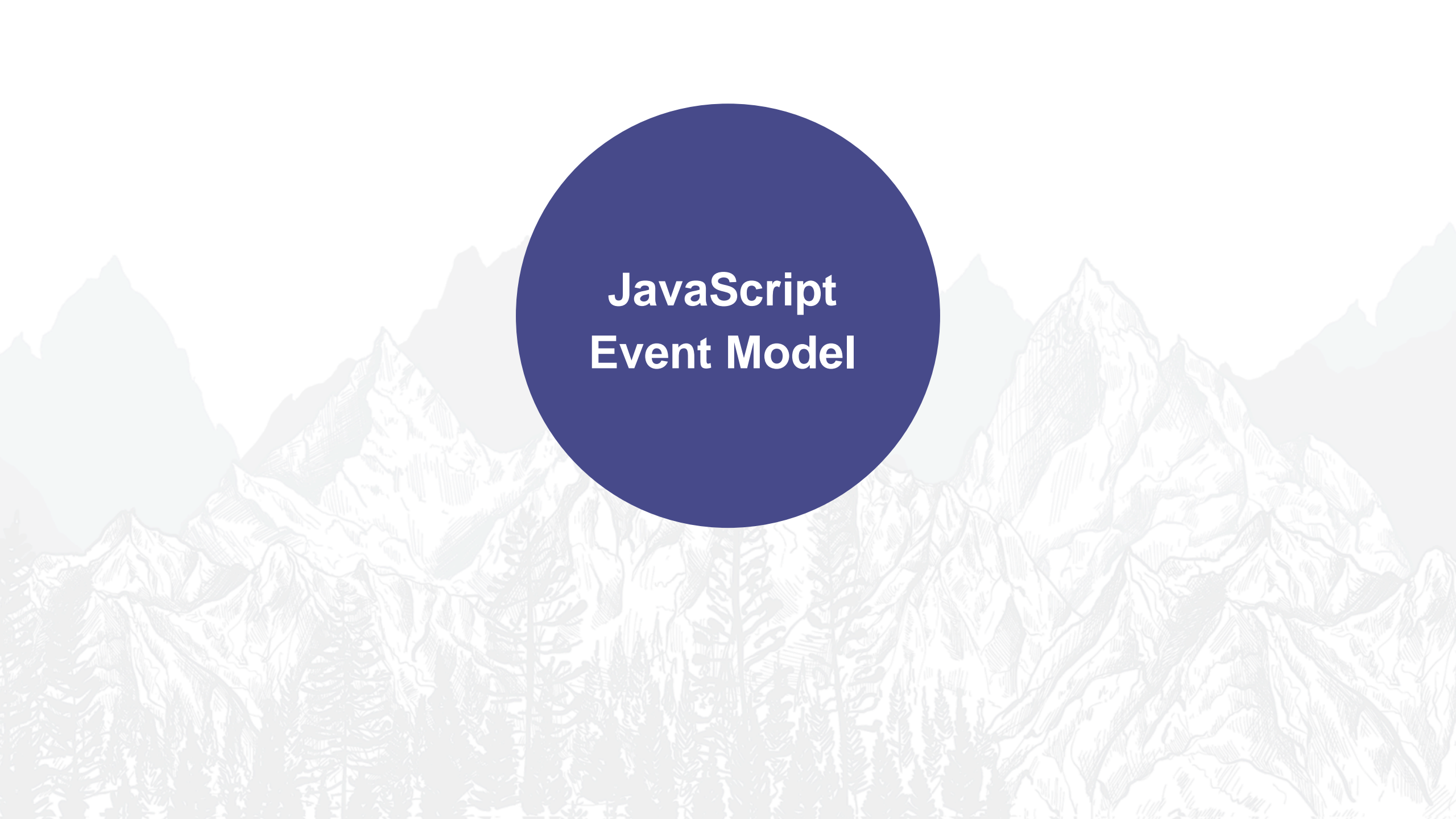https://vratsasoftware.com/

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JavaScript
Event Model

JavaScript Event Model

JS Event Model

- **DOM event model** - allows user-browser interaction

- Consists of event/events and event listener(s), attached to a DOM object

Event Types

Event types

event types

Event type groups

- **Mouse** events
- **Touch** events
- **Form** events
- **Keyboard** events
- **DOM** events
- **Custom** events
- Full event types list

Event Types

Mouse Events	Touch Events	Keyboard Events
click	tap	keypress
hover	touchstart	keydown
mouseup	touchend	keyup
mousedown	touchmove	
mouseover	touchcancel	
mouseout	touchenter	
	touchleave	

UI Events	Focus Events
load	blur
abort	focus
select	focusin
resize	focusout
change	
input	

Registering an Event

Event Handlers

Event Handler

- Registering an event through a **callback function** for a specific event type and for a specific DOM element/s

- We can register event as -
  - a HTML attribute
  - using a DOM property
  - using DOM event handler

HTML Attribute

in HTML

```
<button onclick="onButtonClick()">Click Me</button>
```

in JS

```
function onButtonClick() {
    console.log("You clicked the Button");
}
```

Напишете JS, с който при преминаване с мишката над картинката - от усмихната става сериозна и текста под картинката се променя от
I am serious на Just Kidding!

Register Event Handlers using a property of a DOM element

Register Event Handlers using a property of a DOM element

html

```
<button id="click-button">Click me</button>
```

JavaScript

```
var button = document.getElementById("click-button");
button.onclick = function onButtonClick() {
        console.log("You clicked the button");
}
```

- a JS is prepared /**the button with id=click-button/**
- it waits for an event - to be clicked /button.**onclick**/
- and will do what is set in the script /**console.log("You clicked the button")/**

Напишете JS код, който сменява настроението на Smiley след натискане на бутон.

Using DOM Event Listeners

```javascript
domElement.addEventListener(eventType, eventHandler, isCaptureEvent);
```

```javascript
var button = document.getElementById("click-button");
button.addEventListener("click", whenClickedFunc, false);
function whenClickedFunc() {
  console.log("You clicked me");
}
```

```javascript
var button = document.getElementById("click-button");
button.addEventListener("click", function () {
  console.log("You clicked me");
}, false);
```

Using DOM Event Listeners - TASK

Напишете JS код, който сменява настроението на Smiley след натискане на бутон. Използвайте слушател на събитие.

Event Object

Event Object

- When handling an event we/event handlers/ have access to the **event object.**
  It contains info for -
  - the event type
  - event target
  - the key /if keyboard event/ that has triggered the event
  - the mouse button /if mouse event/ that has been clicked and triggered the event
  - the mouse position on the screen

For debugging purposes

Event Object

to access the event target

```javascript
function onButtonClick(event) {
    console.log(event.target);
    console.log(event.type);
    console.log(event.clientX, event.clientY);
}


button.addEventListener("click", onButtonClick, false);
```

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