levi nine
Technology Services

JAVASCRIPT & DOM MANIPULATION

MATF, Beograd, 10.10.2019

AGENDA

2

01

WEB BROWSER

WEB BROWSER

A web browser, or simply "browser," is an application used to access and view websites. Common web browsers include Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, and Apple Safari.

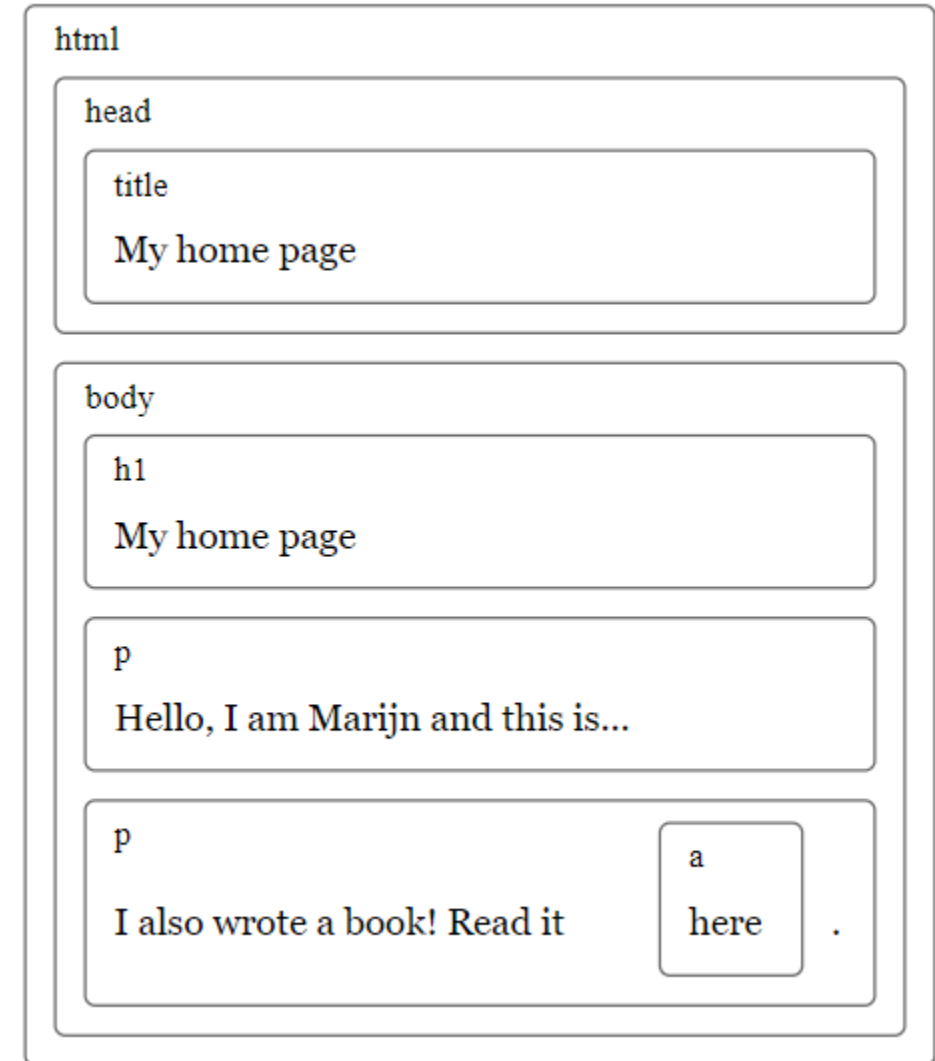The primary function of a web browser is to render HTML.

02
DOCUMENT OBJECT MODEL (DOM)

DOM

- The Document Object Model (DOM) is an application programming interface for valid HTML and well-formed XML documents

- It defines the logical structure of documents and the way a document is accessed and manipulated

- It defines a order and the way of loading additional assets

- The DOM maps out an entire page as document composed of a hierarchy of nodes.
- Each part of an HTML page is derivate of a node.

DOM

```
<html>
 <head>
  <title>My home page</title>
 </head>
 <body>
  <h1>My home page</h1>
  <p> Hello, I am Marijn ant this is… </p>
  <p>
   I also wrote a book! Read it
   <a href="">here</a>
  </p>
 </body>
</html>
```

DOM ELEMENT ATTRIBUTES

DOM Attributes

- nodeName
- nodeValue
- nodeType
- parentNode
- childNodes
- firstChild
- lastChild
- previousSibling
- nextSibling

Node Types

- 1 an html
- 2 an element attribute
- 3 text
- 8 comment
- 9 a document
- 10 a document type definition

03

DOM MANIPULATION

DOM MANIPULATION

- Dynamically creating and adding elements
  - document.createElement
    - Creates element
  - [node].appendChild(element)
  - Appends child node to [node]

DOM EVENTS

- Mouse
  - click, dblclick, mousedown, mouseup, mouseover, mouseout

- Keyboard
  - keypress, keydown, keyup

- Frame/Window
  - load, unload, abort, error, resize, scroll

- Form
  - select, change, submit, reset, focus, blur

EVENT HANDLERS

With event handler we can react on some event. Event Handler is a function assigned to corresponding event handler property.

```
//JavaScript event handling

const div = document.getElementById('div1');

div.onclick = function() {
  console.log('I was clicked');
};
//HTML code event handling

<div onclick="alert('I was clicked also')"><./div>
```

EVENT HANDLERS SAD STORY

IE version
var clickHandler = function() { alert('sad click'); }

var div = document.getElementByID('div');
div.attachEvent('onclick', clickHandler);
div.deatachEvent('onclick', clickHandler);

Mozilla/Opera

div.addEventListener('click', clickHandler, bubbling_flag);
div.removeEventListener('click', clickHandler);

04

PRACTICE

PRACTICE

Create html page and add one button in body section.
Attach onclick handler on button.
Button on click handler have to add new html
component p with innerText "hello"

Html page have to be added in your project on github,
so we can discuss about it on github.

Code have to be on branch first-page, and pull
request have to be created to master branch from it.

QUESTIONS

levi nine

Technology Services