# Solutions-Lab: Objects and JSON, DOM Events

## 1.Object Properties

document.getElementById("button").addEventListener("click", function(event){

event.preventDefault()

});

let obj = {};

function addProperty() {

let objKey = document.getElementById("key").value;

let objValue= document.getElementById("value").value;

obj[objKey] = objValue;

document.getElementById("result").value = JSON.stringify(obj);

//document.getElementById("result").innerHTML = JSON.stringify(obj);

}

## 2.Students Register

document.getElementById("button").addEventListener("click", function(event){

event.preventDefault()

});

function addStudents() {

//let students = document.getElementById("input").value.split("\n");

//let obj = students.filter(x => x != "").map(line => {

// let currentStudent = line.split(" ")

// return {

// firstName: currentStudent[0],

// secondName: currentStudent[1],

// grade: parseFloat(currentStudent[2])

// };

//});

let students = document.getElementById("input").value.split("\n");

let result =[];

for(let student of students){

let info = student.split(" ");

let obj = {};

obj["first name"] = info[0];

obj["second name"] = info[1];

obj["grade"] = Number(info[2]);

result.push(obj);

}

let resultStr = "";

resultStr += "Students are: ";

resultStr += result.map(x => x["first name"] + " " + x["second name"]).join(", ");

// resultStr += obj.map(x => `${x.firstName} ${x.secondName}).join(", ");

resultStr += "\n";

resultStr += "Average grade: " + (result.map(x => x["grade"]).reduce((a, b) => a + b) / result.length).toFixed(2);

// resultStr += "Average grade: " + (obj.map(x => x.grade).reduce((a, b) => a + b) / obj.length).toFixed(2);

document.getElementById("result").innerHTML = resultStr;

//document.getElementById("result").value = resultStr;

}

## 3.Rent

document.getElementById("button").addEventListener("click", function(event){

event.preventDefault()

});

function calculateRents() {

let families = document.getElementById("families ").value.split(", ");

let flats = document.getElementById("flats").value.split(", ");

let rents = document.getElementById("rents ").value.split(", ");

let result = families.map((familyName, index) => {

return {

family: familyName,

flat: flats[index],

rent: rents[index]

};

});

let resultElement = document.getElementById("result ");

Result.forEach(f => resultElement.value += `In the flat ${f.flat} family ${f.family} has to pay ${f.rent}\n`);

resultElement.value += "Total rent paid: " + rents.map(Number).reduce((a, b) => a + b);

}

## 4.JSON Parser

document.getElementById("button").addEventListener("click", function (event) {

event.preventDefault()

});

function extractInfo() {

let inputObj = JSON.parse(document.getElementById("input").value);

let command = document.getElementById("command").value.split(" ");

let resultElement = document.getElementById("result");

if (command[0] == "value") {

if (inputObj[command[2]]) {

resultElement.value = "Value: " + inputObj[command[2]];

} else {

resultElement.value = "No such item ";

}

} else if (command[0] == "typeof") {

if (inputObj[command[1]]) {

resultElement.value = "Type: " + typeof inputObj[command[1]];

} else {

resultElement.value = "No such item ";

}

} else {

resultElement.value = "Invalid command";

}

}

## 5.Buttons

{/\* <input type="submit" class="button" onclick="addProperty()" value="Add">

//<input type="submit" class="button" onclick=" getProperty()" value="Get Value">

//<input type="submit" class="button" onclick=" getObject() " value="Get Whole Object">

<input type="submit" class="button" onclick="" value="Get Value">

<input type="submit" class="button" onclick=" " value="Get Whole Object">

… \*/}

document.querySelectorAll(".button").forEach(element => {

element.addEventListener("click", function(event){

event.preventDefault()

});

});

let consoleElement = document.getElementById("result");

let getValueButton = Document.querySelector((".button[value=\"Get Value\"]");

getValueButton .onclick = getProperty;

let getWholeObjectButton = Document.querySelector((".button[value=\"Get Whole Object\"]");

getWholeObjectButton.addEventListener("click", getObject);

let obj = {};

function addProperty() {

// TODO: get key and value and add them to the object; display message

let key = document.getElementById("key").value;

let value = document.getElementById("value").value;

obj[key] = value;

consoleElement.value += "New property added!\n";

}

function getProperty() {

// TODO: get the value by the given key and display it

let key = document.getElementById("key").value;

consoleElement.value += obj[key] + "\n";

}

function getObject() {

// TODO: stringify the object and display it

consoleElement += JSON.stringify(obj) + "\n";

}