

Auditory exercises 6

Internet programming

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Task 1

- Make a web page which contains 3 text fields, a drop-down list, a button and one disabled text field. By entering the data and pressing the button, a message appears where the data should be confirmed. If is confirmed a text message is displayed in the bottom text field.

Contact form

Name

Surname

E-mail

Age

Contact form

Name

Surname

E-mail

Age

This page says:

Sir John Smith are you sure?

☐ Prevent this page from creating additional dialogs.

Yours data was successfully sent

Solution

```
<h1>Contact form</h1>

<div><label>Name</label><input id="name" type="text"></div>
<div><label>Surname</label><input id="surname" type="text"></div>
<div><label>E-mail</label><input id="email" type="text"></div>
<div><label>Age</label>
<select id="age">
    <option value="19">19</option>
    <option value="20">20</option>
    <option value="21">21</option>
    <option value="22">22</option>
    <option value="23">23</option>
</select>
</div>
<div>
<input type="button" id="btn" onclick="send();" value="Send">
</div>
<input type="text" disabled="disabled" id="message">
```

```
label {
    display: inline-block;
    width: 100px;
}
div {
    margin-bottom: 5px;
}
```

Solution (2)

```
function write(){
    let x=document.getElementById('name').value;
    let surname=document.getElementById('surname').value;
    let email=document.getElementById('email').value;
    let age=document.getElementById('age').value;
    if(x=="" || surname=="" || email=="" || age=="")
    {
        alert("All fields must be filled");
    }
    else
    {
        let str="Sir "+x+" "+surname+" are you sure?";
        if(confirm(str))
        {
            this.document.getElementById('message').value="Yours data was
successfully sent";
        }
        else
            alert("Yours data was not sent");
        }
    }
}
```

Task 2

- We need to make a web page for managing data about projects. In the text fields enter the name of the author, the project and the cost of the project. Upon clicking the add button, we need to check if all three fields are filled (otherwise a message appears) and, if they are a new entry is added to the table and the fields are reset.

Projects details

Author

Project

Cost

Add

Project list

Author	Project	Cost
John	Project 1	10000
Jane	Project 2	20000

Solution

```
<h2>Projects details</h2>
<div><label>Author</label><input id="author" type="text"></div>
<div><label>Project</label><input id="project" type="text"></div>
<div><label>Cost</label><input id="cost" type="text"></div>
<div><input type="button" name="add" value="Add" onclick="addRow();"></div>
```

```
<h2>Project list</h2>
```

```
<table id="projects">
  <thead><th>Author</th><th>Project</th><th>Cost</th></thead>
  <tbody>
  </tbody>
</table>
```

```
<style type="text/css">
label {
    width: 100px;
    display: inline-block;
}
input[type=button]{
    width: 265px;
}
div {
    margin-bottom: 10px;
}
table, td, th {
    border: 1px solid black;
    border-collapse: collapse;
}
</style>
```

Solution (2)

```
function addRow() {
    let tableRef = document.getElementById('projects').getElementsByTagName('tbody')[0];

    let project = document.getElementById('project');
    let author = document.getElementById('author');
    let cost = document.getElementById('cost');

    // Check if all values are there
    if(project.value == "" || author.value == "" || cost.value == "") {
        alert("All values are not entered.");
        return;
    }

    // Insert a row in the table at the last row
    let newRow = tableRef.insertRow(tableRef.rows.length);

    // Insert a cell in the row at index 0
    let newCell0 = newRow.insertCell(0);
    // Insert a cell in the row at index 1
    let newCell1 = newRow.insertCell(1);
    // Insert a cell in the row at index 2
    let newCell2 = newRow.insertCell(2);

    // Option 1: Append a text node to the cell
    // let newText = document.createTextNode('New row');
    // newCell0.appendChild(newText);
    // Option 2
    newCell0.innerHTML = author.value;
    newCell1.innerHTML = project.value;
    newCell2.innerHTML = cost.value;

    // reset fields
    author.value = "";
    project.value = "";
    cost.value = "";
}
```

Task 3

- We will extend the previous task by displaying the total cost of projects in the table and by adding a “Remove” button in each project (row). The total value of the projects should be updated any time we add or remove a project.

Projects details

Author

Project

Cost

Project list - Total cost: 30000

Author	Project	Cost	
John	Smith	10000	<input type="button" value="Remove"/>
Jane	Smith	20000	<input type="button" value="Remove"/>

Solution

```
<h2>Projects details</h2>
<div><label>Author</label><input id="author" type="text"></div>
<div><label>Project</label><input id="project" type="text"></div>
<div><label>Cost</label><input id="cost" type="text"></div>
<div><input type="button" name="add" value="Add" onclick="addRow();"></div>
```

```
<h2>Project list - Total cost: <span id="total">0</span></h2>
<table id="projects">
  <thead><th>Author</th><th>Project</th><th>
colspan="2">Cost</th></thead>
  <tbody>
  </tbody>
</table>
```

```
<style type="text/css">
label {
  width: 100px;
  display: inline-block;
}
input[type=button]{
  width: 265px;
}
div {
  margin-bottom: 10px;
}
table, td, th {
  border: 1px solid black;
  border-collapse: collapse;
}
</style>
```

Solution (2)

```
function addRow() {
    let tableRef = document.getElementById('projects').getElementsByTagName('tbody')[0];

    let project = document.getElementById('project');
    let author = document.getElementById('author');
    let cost = document.getElementById('cost');

    // Check if all the values are there
    if(project.value == "" || author.value == "" || cost.value == "") {
        alert("All values are not entered.");
        return;
    }

    // Insert a row in the table at the last row
    let newRow = tableRef.insertRow(tableRef.rows.length);

    // Insert a cell in the row at index 0
    let newCell0 = newRow.insertCell(0);
    // Insert a cell in the row at index 1
    let newCell1 = newRow.insertCell(1);
    // Insert a cell in the row at index 2
    let newCell2 = newRow.insertCell(2);
    // Insert a cell in the row at index 3
    let newCell3 = newRow.insertCell(3);

    // Option 1: Append a text node to the cell
    // let newText = document.createTextNode('New row');
    // newCell0.appendChild(newText);
    // Option 2
    newCell0.innerHTML = author.value;
    newCell1.innerHTML = project.value;
    newCell2.innerHTML = cost.value;
    newCell2.setAttribute('class', 'cost');

    // Create a <button> element
    let btn = document.createElement("BUTTON");
    // Create a text node
    let t = document.createTextNode("Remove");
    btn.appendChild(t); // Append the text to <button>
    btn.setAttribute('onclick', 'removeRow(this);');
    newCell3.appendChild(btn);
    // Alternatively
    // newCell3.innerHTML =
    // "<button onclick='removeRow(this);'>
    // Remove</button>"

    // reset fields
    author.value = "";
    project.value = "";
    cost.value = "";
    sumProjects()
}
```

Solution (3)

```
function removeRow(ref) {  
    // General idea: button->td->tr --> tbody.removeChild(tr)  
    tr = ref.parentNode.parentNode;  
    tr.parentNode.removeChild(tr);  
    sumProjects();  
}  
  
function sumProjects() {  
    let costCells = document.getElementsByClassName('cost');  
    let sum = 0;  
    for(let i=0; i<costCells.length; i++) {  
        sum += parseInt(costCells[i].innerHTML);  
    }  
    document.getElementById('total').innerHTML = sum;  
}
```

Task 4

- We need to make a web page for generating of checkbox/radio buttons. The number of elements that need to be generated is entered in a text field and type of element to generate is selected from a drop-down list.

Number of
elements:

Type:

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

Solution

```
<div>
    <label>Number of elements:</label>
    <input type="number" id="number">
</div>
<div>
    <label>Type:</label>
    <select id="type">
        <option value="Checkbox">Checkbox</option>
        <option value="Radio">Radio</option>
    </select>
</div>
<div>
    <input type="button" value="Add" id="generate"
onclick="generateForm();">
</div>

<div id="container">
</div>
```



Solution (2)

```
function generateForm() {  
    let number = parseInt(document.getElementById('number').value);  
    let kind = document.getElementById('type').value;  
  
    let container = document.getElementById('container');  
    container.innerHTML = "";  
  
    for(let i=0; i<number; i++) {  
        let element = document.createElement("input");  
        element.setAttribute('type', kind);  
        let text = document.createTextNode(i);  
        container.appendChild(element);  
        container.appendChild(text);  
    }  
}
```