

1DA1611:A

Advanced Internet Programming

Project nr. 1 Report: 2023-02-23

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Plan:

- Define an HTML table, add the form and its elements with respective attributes
- Add a JavaScript section for handling submitted data and showing it on screen
- Testing

Given task:

Task

Please create a table containing the following elements

- Name (Text field)
- Surname (Text field)
- Age (from a drop down Menu)
- Sex (Radio button)
- Hobby (CheckBox)
- A OK button
- A Cancel button

First Name	First name:
Last Name	<input type="text"/>
	Last name:
	<input type="text"/>
Age	
Sex	
Hobby	
<input type="button" value="OK"/>	<input type="button" value="Cancel"/>

Please display the table data in a pop-up window after clicking the OK button (hint – this can be done using JavaScript)

1. Defining an HTML table along with the form inside of it:

Code is commented for readability

```
<!DOCTYPE html>
<html>
  <!-- CSS for the table to match the task-->
  <style>
    table, th, td {
      border:1px solid black;
      border-collapse: collapse;
```

```

    }
</style>
<head>
<title>Lab 1: Form</title>
</head>
<body>
<!-- Table along with the form content-->
<table>
  <form id="myForm">
    <!-- Name -->
    <tr><td>First name:</td><td><label for="fname">First name:</label><br>
    <input type="text" id="fname" name="fname"></td></tr>
    <tr><td>Last name:</td><td><label for="lname">Last name:</label><br>
    <input type="text" id="lname" name="lname"></td></tr>
    <!-- Age ranges as a drop-down list-->
    <tr><td>Age:</td><td><input list="agelist" id="age" name="age">
    <datalist id="agelist">
    <option value="0-18">
    <option value="18-21">
    <option value="21-30">
    <option value="30-50">
    <option value="50+">
    </datalist>
    </td>
    </tr>
    <tr>
    <!-- Sex as radio buttons in the same category (name)-->
    <td>Sex:</td>
    <td>
    <input type="radio" id="male" name="sex" value="Male"><label
for="male">Male</label>
    <input type="radio" id="female" name="sex" value="Female"><label
for="female">Female</label>
    </td>
    </tr>
    <tr>
    <!-- Hobbies as checkboxes-->
    <td>Hobby:</td>
    <td>
    <input type="checkbox" id="art" name="hobby" value="Art">
    <label for="art">Art</label>
    <input type="checkbox" id="sports" name="hobby" value="Sports">
    <label for="sports">Sports</label>
    <input type="checkbox" id="music" name="hobby" value="Music">
    <label for="music">Music</label>
    <input type="checkbox" id="eng" name="hobby" value="Engineering">
    <label for="eng">Engineering</label>
    </td>
    </tr>
    <tr>
    <!-- Submit and cancel buttons at the bottom to call the JS function or reset the form-->
    <td><input type="submit" onclick="showpopup()" value="OK"></td>
    <td><input type="reset" value="Cancel"></td>
    </tr>
  </form>
</table>
</body>
</html>

```

The table as shown inside the web browser:

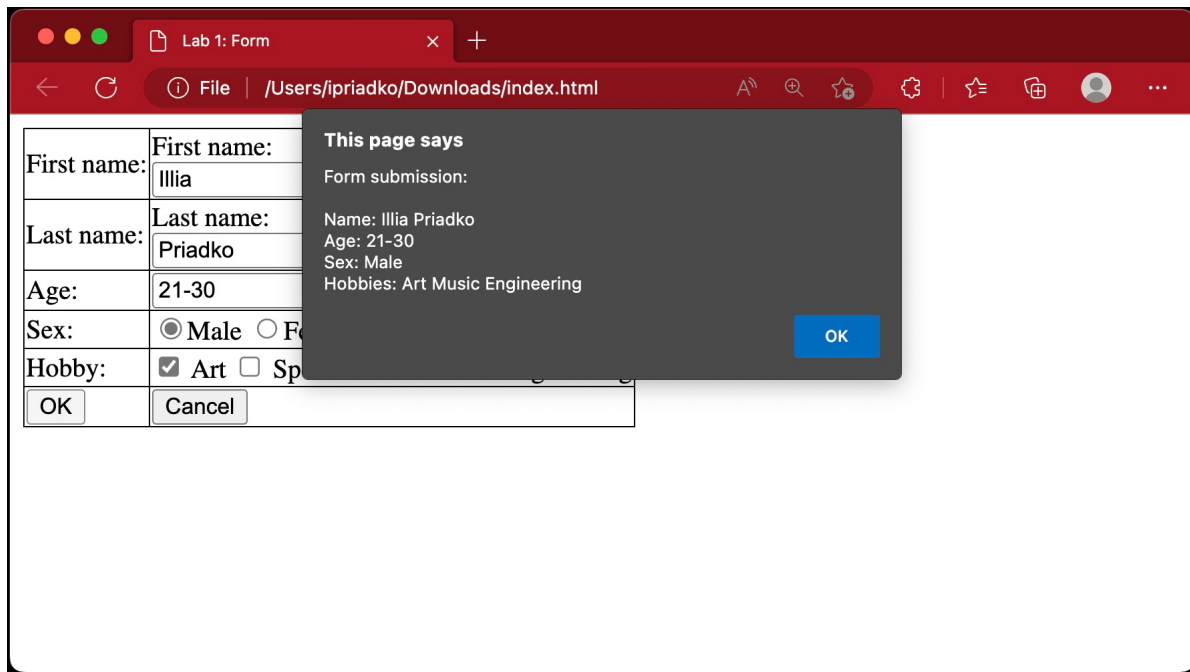
First name:	First name: <input type="text" value="Illia"/>
Last name:	Last name: <input type="text" value="Priadko"/>
Age:	<input type="text" value="21-30"/>
Sex:	<input checked="" type="radio"/> Male <input type="radio"/> Female
Hobby:	<input checked="" type="checkbox"/> Art <input type="checkbox"/> Sports <input checked="" type="checkbox"/> Music <input checked="" type="checkbox"/> Engineering
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

2. JavaScript code for scraping data and passing it on to the popup

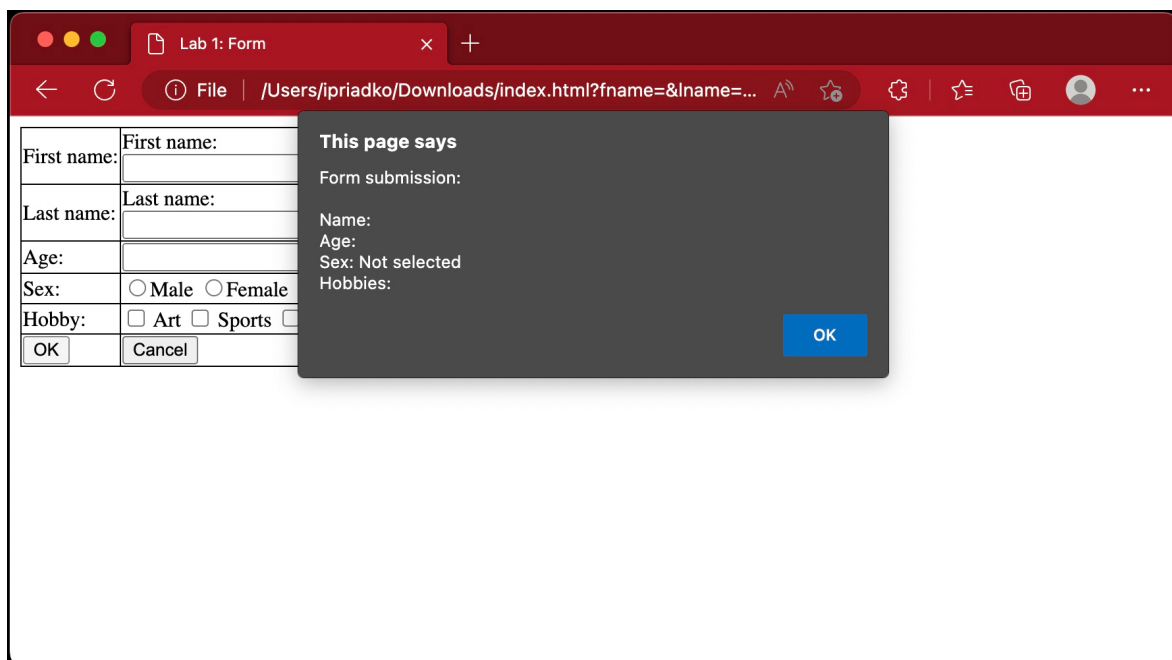
The script was appended to the HTML file for convenience, inside the <script> section.

```
<script>
function showpopup() {
    // Define the form to be referred to in the future loop
    var myForm = document.getElementById("myForm");
    // Initialise and get values from user input of the form to store in variables
    var fname = document.getElementById('fname').value;
    var lname = document.getElementById('lname').value;
    var age = document.getElementById('age').value;
    // Initialise variable and provide if-statements to populate it with either or neither
    value
    var sex = "Not selected";
    if (document.getElementById("male").checked == true) {
        sex = document.getElementById("male").value;
    }
    if (document.getElementById("female").checked == true) {
        sex = document.getElementById("female").value;
    }
    // Initialise variable and provide a for-loop to look for checked checkboxes
    var hobbies = "";
    var i;
    for (i=0; i < myForm.hobby.length; i++){
        if(myForm.hobby[i].checked == true){
            // Concatenate found checkbox to the string of "hobbies"
            hobbies+=myForm.hobby[i].value + " ";
        }
    }
    // Show popup with gathered info
    alert('Form submission:\n\nName: ${fname} ${lname}\nAge: ${age}\nSex: ${sex}\nHobbies:
    ${hobbies}');
}
</script>
```

The popup with the above input data would show the following:



Works as intended, handles empty input fields as well.

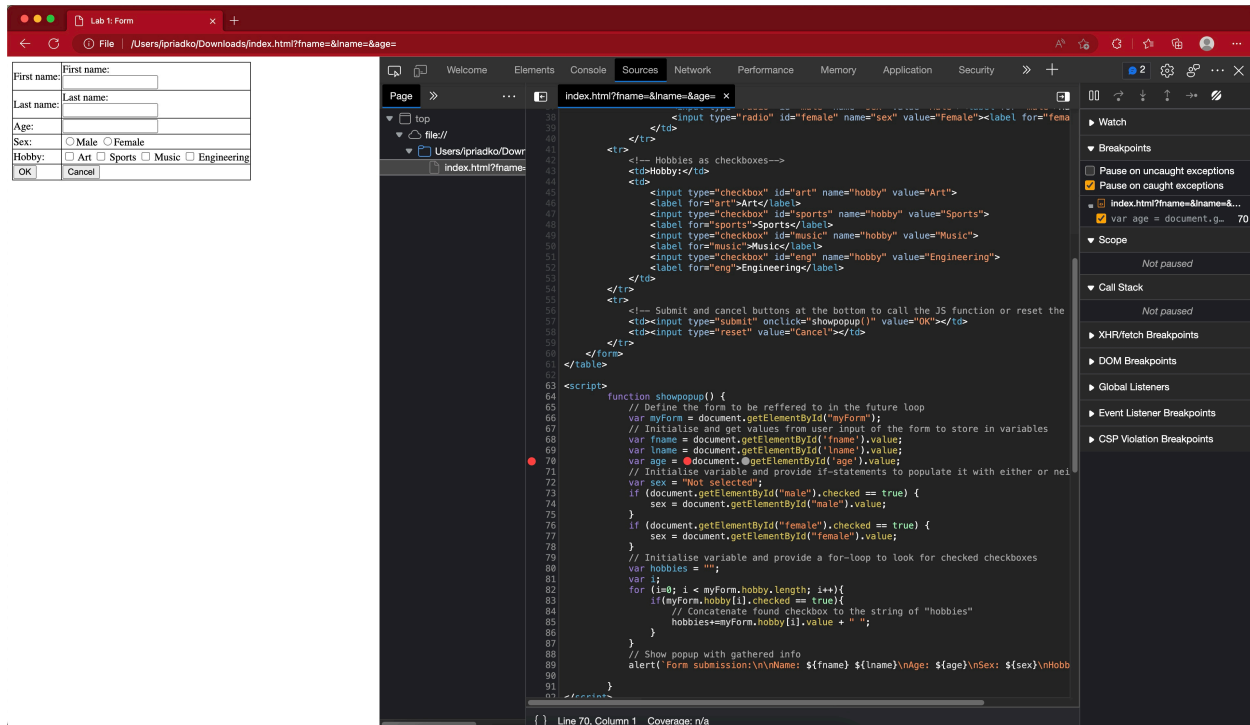


3. Testing

Testing was carried out inside of Chrome (or any Chromium-based browser for that matter, Edge is shown here).

Initially the popup did not show due to some syntax errors. In my case these were caused by me misusing `id=` and `name=` attributes in `<input>` elements.

As JavaScript errors are not verbosely shown on screen when something breaks, it is useful to use the developer tools and “Sources” section of it, where one can set breakpoints in script execution, do step-by-step execution, as well as see console input when debugging.



Conclusion:

After having completed this project, I got familiar with HTML forms, JavaScript basic syntax (variable declaration, if-statements and loops), was able to successfully use its functions for getting information from HTML elements, and gathering it in one string for output. I have also familiarised myself with development tools provided inside Chromium.