

Topic: Dom forms

Form Handling

1. Accessing Form Elements:

```
<form id="myForm">
  <input type="text" id="username">
  <input type="email" id="email">
  <button type="submit">Submit</button>
</form>

<script>
  const form = document.getElementById('myForm');
  const usernameInput = document.getElementById('username');
  const emailInput = document.getElementById('email');
</script>
```

2. Setting Input Values:

You can set input values using the value property:

```
usernameInput.value = "John Doe";
emailInput.value = "john@example.com";
```

3. Getting Form Data:

You can get form data when the form is submitted:

```
form.addEventListener('submit', function(event) {
  event.preventDefault(); // Prevent form submission
  const formData = new FormData(form);
  // Access form data
  const username = formData.get('username');
  const email = formData.get('email');
  // Do something with the data
});
```

4. Changing Input Field Values

You can change the value of input fields dynamically based on user actions or other events:

```
<input type="text" id="myInput">
<button onclick="changeInputValue()">Change Value</button>

<script>
  function changeInputValue() {
    const input = document.getElementById('myInput');
    input.value = 'New Value';
  }
</script>
```

5. Accessing through values

```
document.forms[0].addEventListener('submit', function(event){
  event.preventDefault(); // Prevent form submission
  console.log(event); // stores the lot of form info including child tags of form
  console.log(event.target[0].value); // prints the value of first child in the first form
})
```

In above program document.forms[0] get the first form,
e.preventDefault prevents the form default submission

console.log(event) prints a lot of form data and event.target gets the childrens of the form in collection format.
Examples:

https://github.com/Abhinavsai-12/10kCoders_JavaScript/tree/main/Day-13%20DOM%20part-4/practice

Accessing the Forms:-

Ex:- `<form action=" " >`

```
    <input type="text" id="username" placeholder="Enter username" value="John" >
    <input type="submit" value="submit" >
</form>
```

```
var form = document.querySelector("form");
console.log(form);
```

Example-2:-

```
var form = document.forms[0]; // field name
```

```
var username = document.querySelector("input");
```

```
console.log(username.value); // value of input
```

Example:- Form submitting

```
var form = document.forms[0];
form.addEventListener("submit", function() {
    console.log("form submitted");
});
```

* → the output will not display in the console to overcome this we use `event.preventDefault()`; method in function parameter should be event.

Example:-

```
var form = document.forms[0];
form.addEventListener("submit", function(event) {
    event.preventDefault();
    console.log("form submitted");
});
```

Example:- Save i/p which is given by User

```
<input type="text" placeholder="Enter Username" id="usrn">  
var form = document.forms[0];
```

```
form.addEventListener("submit", function(event){  
    var inp = document.querySelector("input");  
    event.preventDefault();  
    console.log(inp.value); } this will not submit the value.  
})
```

Example:- Form validation -

```
var form = document.forms[0];  
form.addEventListener("submit", function(event){  
    var hp = document.querySelector("input");  
    if(inp.value == ""){  
        alert("User name is required");  
    }  
    else{  
        alert("Form submitted");  
    }  
})
```

Example:- Password strength checker.

```
var form = document.forms[0];  
form.addEventListener("submit", function(event){  
    event.preventDefault();  
    var inp = document.querySelector("input");
```

```

if (inp.value.length > 10) {
    console.log("Password is strong");
}
else if (inp.value.length <= 10 && inp.value.length > 5) {
    console.log("Password is Medium");
}
else {
    console.log("Password is weak");
}
}
)

```

Example:- Password Matched

```

<input type="password" placeholder="Enter Pass" id="ip1">
<input type="password" placeholder="Confirm Pass" id="ip2">
<script>
    var form = document.forms[0];
    form.addEventListener("submit", function(event) {
        event.preventDefault();
        var ip1 = document.querySelector("input");
        var ip2 = document.getElementById("ip2");
        if (ip1.value == ip2.value) {
            console.log("both are Matched");
        }
        else {
            console.log("both are not Matched");
        }
    });
}
)

```


Example:- display msg if password not matched

```
<input type=password>  
<input type=password>  
<span> password not match </span>  
<submit> click here </submit>
```

<script>

```
var form = document.forms[0];  
form.addEventListener("submit", function(event){  
    event.preventDefault();  
    var inp1 = document.querySelector("input");  
    var inp2 = document.querySelectorAll("input")[1];  
    if (inp1.value == inp2.value){  
        console.log("both are not matched");  
    }  
    else {  
        console.log("both are not matched");  
        var span = document.querySelector("span");  
        span.style.display = "block";  
    }  
}
```

css:-

```
span {  
    color: red;  
    display: none;  
}
```

Example:- if text field is empty display It is empty text

```
span {  
    display: none;  
    color: red;  
}
```

```

<form action="">
  <input type="text" placeholder="Enter your Name">
  <submit> Submit </submit>
  <span> Enter your name </span>
</form>

```

```

<script>

```

```

var form = document.forms[0];
form.addEventListener("submit", function(event){
  event.preventDefault();

```

```

  var ip = document.querySelector("input");
  (or)
  var ip = form[0].value;
  if (ip.value == "") {

```

```

    console.log("display Enter your Name");

```

```

    var span = document.querySelector("span");
    span.style.display = "block";
  }

```

```

  else {var span = document.querySelector("span");
    console.log("Name is Submitted");
    span.style.display = "none";
  }

```

Event.target :-

```

var form = document.forms[0];
form.addEventListener("submit", function(event){
  event.preventDefault();
  console.log(event.target[1]); // consoles the 1st
                                // element in forms
}

```

=> for value :-

```

event.preventDefault();
console.log(event.target[0].value);
console.log(event); // consoles the forms and forms elements.

```

Example:-

```
<input type="text" id="inp1" placeholder="enter a value">  
<input type="text" id="inp2" placeholder="enter a value">  
<div class="output"> = value </div>  
<button id="add"> add </button>
```

```
<script>
```

```
var btn = document.getElementById("add");
```

```
btn.addEventListener("click", function() {
```

```
var inp1 = document.getElementById("inp1");
```

```
var inp2 = document.getElementById("inp2");
```

```
var value = Number(inp1.value) + Number(inp2.value);
```

```
var div = document.getElementsByClassName("output")[0];
```

```
div.innerHTML += " = " + value;
```

```
inp1.value = '';
```

```
inp2.value = '';
```

```
})
```

TASKS:

1) Password Strength Checker:

Create an input field where a user types a password, and the script checks if the password is "Strong", "Medium", or "Weak" based on its length.

Code:

```
<style>
  body{
    font-family: Arial, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    background-color: #c6e9e36f;
  }
  .container {
    background-color: #6cd5c965;
    padding: 20px;
    border-radius: 12px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    width: 20%;
  }
  #fm{
    display: flex;
    flex-direction: column;
    justify-items:center;
    align-items: center;
  }
  input{
    width: 70%;
    padding: 5px;
    margin: 10px;
    border-radius:5px;
  }
  #sub{
    width: 20%;
    padding: 5px;
    margin: 10px;
    border-radius:10px;
  }
  span{
    font-size: 12px;
    font-weight:bold;
    display: none;
  }
</style>

</head>
<body>
  <div class="container">
    <form action="" id="fm">
      <h3>Password Strength Checker</h3>
      <input type="password" id="pass" placeholder="Enter password">
      <span></span>
      <input type="submit" id="sub" value="submit">
    </form>
  </div>

  <script>
```



```

var form=document.forms[0];
form.addEventListener("submit",function(event){
    event.preventDefault();
    var inp=document.getElementById("pass");
    var span=document.querySelector("span");
    var span=document.getElementsByTagName("span")[0];

    if(inp.value.length>10){
        span.innerHTML="password is strong";
        span.style.display="block";
        span.style.color="green";
    }
    else if(inp.value.length<=10 && inp.value.length>5){
        span.innerHTML="password is medium";
        span.style.display="block";
        span.style.color="orange";
    }
    else{
        span.innerHTML="password is week";
        span.style.display="block";
        span.style.color="red";
    }
    })
</script>

```

Output

Password Strength Checker

....

password is week

submit

Password Strength Checker

.....

password is medium

submit

Password Strength Checker

.....

password is strong

submit

2) password matcher

Code:

```
<style>
  body{
    font-family: Arial, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    background-color: #e3f1dd6f;
  }
  .container {
    background-color: #83d56c65;
    padding: 20px;
    border-radius: 12px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    width: 20%;
  }
  #fm{
    display: flex;
    flex-direction: column;
    justify-items:center;
    align-items: center;
  }
  input{
    width: 70%;
    padding: 5px;
    margin: 10px;
    border-radius:5px;
  }
  #sub{
    width: 20%;
    padding: 5px;
    margin: 10px;
    border-radius:10px;
  }
  span{
    color: red;
    font-weight:900;
    display: none;
  }
</style>
</head>
<body>
  <div class="container">
    <form action="" id="fm">
      <h3>Password Matcher</h3>
      <input type="password" id="pass1" placeholder="Enter password">
      <input type="password" id="pass2" placeholder="Confirm password">
      <span>password not matched</span>
      <input type="submit" id="sub" value="submit">
    </form>
  </div>

  <script>
    var form=document.forms[0];
    form.addEventListener("submit",function(event){
      event.preventDefault();
      var pass1=document.getElementById("pass1");
      var pass2=document.getElementById("pass2");

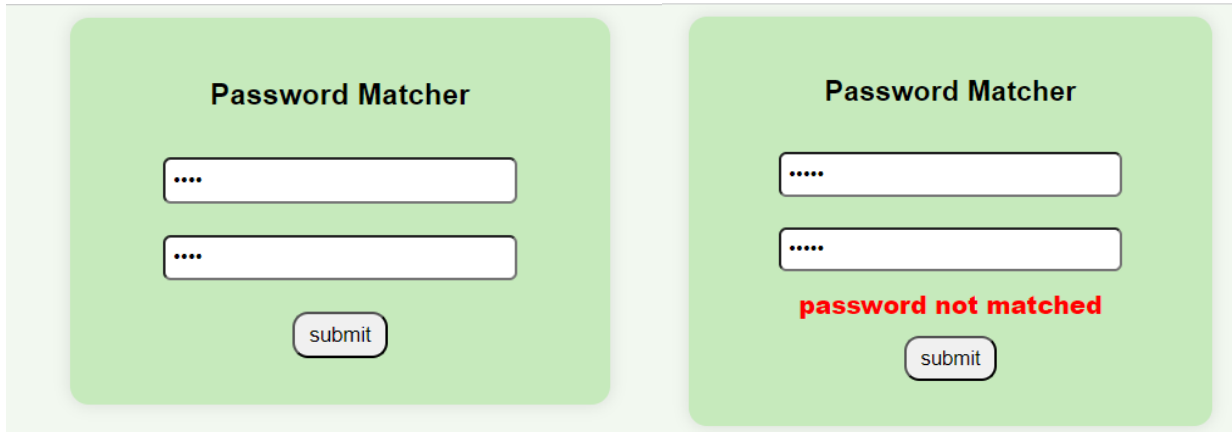
      if(pass1.value==pass2.value){
        console.log("password is matched");
      }
      else{
```

```

        var span=document.getElementsByTagName("span")[0];
        span.style.display="block";
        console.log("password not matched");
    }
    })
</script>
</body>

```

Output



3) simple calculator

```

<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/font-awesome@6.0.0-beta3/css/all.min.css">
<style>
  h1{
    text-align: center;
  }
  .container{
    width: 27%;
    height: 500px;
    margin: auto;
    border: 2px solid black;
    display: grid;
    grid-template-columns: auto auto auto auto;
    grid-template-rows: 70px;
    gap: 10px;
    padding: 10px;
    background-color: rgba(144, 215, 238, 0.571);
  }
  #result{
    grid-column: 1/4;
    height: 55px;
    text-align: right;
    padding-top: 10px;
    font-size: 24px;
    font-weight: 800;
    resize: none;
    scrollbar-width: none;
    background-color: rgb(180, 245, 248);
  }
  .button{
    font-size: 24px;
    font-weight: 500;
    background-color: rgba(4, 214, 251, 0.951);
  }
  .op{
    background-color: rgb(92, 131, 240);
  }
  .history{
    grid-column: 1/3;
    background-color: rgba(255, 0, 0, 0.682);
  }
  .clear{
    grid-column: 3/5;
    background-color: rgba(255, 0, 0, 0.682);
  }
</style>
</head>
<body>
<h1>Calculator</h1>
<div class="container">

```

```

<textarea id="result"></textarea>
<button onclick="back()" class="button backspace" ><i class="fa-solid fa-delete-left"></i></button>

<input type="button" onclick="dis('7')" value="7" class="button">
<input type="button" onclick="dis('8')" value="8" class="button">
<input type="button" onclick="dis('9')" value="9" class="button">
<input type="button" onclick="dis('/')" value="/" class="button op">

<input type="button" onclick="dis('4')" value="4" class="button">
<input type="button" onclick="dis('5')" value="5" class="button">
<input type="button" onclick="dis('6')" value="6" class="button">
<input type="button" onclick="dis('*')" value="*" class="button op">

<input type="button" onclick="dis('1')" value="1" class="button">
<input type="button" onclick="dis('2')" value="2" class="button">
<input type="button" onclick="dis('3')" value="3" class="button">
<input type="button" onclick="dis('+)" value="+" class="button op">

<input type="button" onclick="dis('.')" value="." class="button op">
<input type="button" onclick="dis('0')" value="0" class="button">
<input type="button" onclick="solve()" value="=" class="button op">
<input type="button" onclick="dis('-)" value="-" class="button op">

<input type="button" onclick="hist()" value="History" class="button history">
<input type="button" onclick="clr()" value="Clear" class="button clear">
</div>

<script>
var his="";
function dis(a){
    document.getElementById("result").value +=a;
    return a;
}
function back(){
    let x=document.getElementById("result").value;
    let y="";
    for(i=0;i<x.length-1;i++){
        y+=x[i];
    }
    document.getElementById("result").value=y;
}
function clr(){
    document.getElementById("result").value="";
}
function solve(){
    let x=document.getElementById("result").value;
    his += "->" + x + "\n";
    let y=eval(x);
    his += "=" + y + "\n";
    document.getElementById("result").value=y;
    return y;
}
function hist(){
    document.getElementById("result").value=his;
}
</script>

```

127.0.0.1:5500/Day-13%20DOM%20part-4/simple_calculator.html

Calculator

| | | | |
|---------|---|-------|---|
| | | | ✕ |
| 7 | 8 | 9 | / |
| 4 | 5 | 6 | * |
| 1 | 2 | 3 | + |
| . | 0 | = | - |
| History | | Clear | |