

Web Page for Mathematical Calculations

AIM:

To design a static website with validation to perform mathematical calculations in client side.

DESIGN STEPS:

Step 1:

Requirement collection.

Step 2:

Creating the layout using HTML and CSS.

Step 3:

Write javascript to perform the calculations.

Step 4:

Include regexexpression based input validation.

Step 5:

Validate the layout in various browsers.

Step 6:

Validate the HTML code.

Step 6:

Publish the website in the given URL.

PROGRAM :

```
--include your code--
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Math Website</title>
<style>
*{
```

```

box-sizing: border-box;
font-family: Arial, Helvetica, sans-serif;
}
body{
background-color: black;
color:black;
}
.container{
width: 1080px;
margin-left: auto;
margin-right: auto;
background-color: black;
border:#540688;
}
.content{
display: block;
width: 100%;
background-color:green;
margin-top: 40px;
min-height: 400px;
}
.text{
text-align: center;
padding-top: 50px;
text-decoration: underline;
}
.formelement{
text-align: center;
font-family: Georgia, 'Times New Roman', Times, serif;
font-size: 25px;
margin-top: 5px;
margin-bottom: 5px;
}
.content2{
display: block;
width: 100%;
background-color:red;
margin-top: px;
min-height: 400px;
}
.by{
text-align: center;
color: rgb(245, 240, 240);
}
</style>
</head>
<body>
<div class="container">
<div class="content">
<h1 class="text"><B>Area of Rectangle:</B></h1>
<form>
<div class="formelement"><label for="aEdit">Length:</label>
<input type="number" id="aEdit" value="0"/>
<labe for="aedit">Meters</labe>
</div><br>
<div class="formelement">
<label for="bEdit">Breadth:</label>
<input type="number" id="bEdit" value="0"/>
<labe for="aedit">Meters</labe>
</div>
<div class="formelement">

```

```

<input type="button" value="Calculate" id="AddButton"/>
</div>
<div class="formelement">
<label for="cEdit">Area:</label>
<input type="text" id="cEdit" value="0" readonly />
<lable for="aedit">Meter<sup>2</sup></lable>
</div><br>
<div class="formelement">
Formula : Area = Length*Breadth
</div>
</form>
</div>

    <div class="content2">
        <h1 class="text">Volume of the Cone:</h1>
<form>
<div class="formelement"><label for="hEdit">Radius:</label>
<input type="number" id="hEdit" value="0"/>
<lable for="aedit">Meters</lable>
</div><br>
<div class="formelement">
<label for="rEdit">Height:</label>
<input type="number" id="rEdit" value="0"/>
<lable for="aedit">Meters</lable>
</div>
<div class="formelement">
<input type="button" value="Calculate" id="AddButton1"/>
</div>
<div class="formelement">
<label for="vEdit">Volume:</label>
<input type="number" id="vEdit" value="0" readonly />
<lable for="aedit">Meter<sup>3</sup></lable>
</div><br>
<div class="formelement">
Formula : Volume= $\pi$ *Radius<sup>2</sup>*Height/3
</div><br>
</form>
</div>
</div>
<script>
function validate(){
var user1=document.getElementById("aedit").value;
var user2=document.getElementById("bedit").value;
var user3=document.getElementById("redit").value;
var user4=document.getElementById("hedit").value;
var re = /^[0-9]+$/;
if (re.test(user1)){
return true;
}
else if (re.test(user2)){
return true;
}
else if (re.test(user3)){
return true;
}
else if (re.test(user4)){
return true;
}
else {
alert('Please input numeric characters only');
return false;
}
}

```

```

}
</script>
<script type="text/javascript">
var button,button1;
button = document.querySelector("#AddButton");
button.addEventListener("click",function(){
var aText,bText,cText;
var aVal,bVal,cVal;
aText=document.querySelector("#aEdit");
bText=document.querySelector("#bEdit");
cText=document.querySelector("#cEdit");
aVal = parseInt(aText.value);
bVal = parseInt(bText.value);
cVal = aVal*bVal;
cText.value = ""+cVal;
});
button1 = document.querySelector("#AddButton1");
button1.addEventListener("click",function(){
var aText,bText,cText;
var aVal,bVal,cVal;
hText=document.querySelector("#hEdit");
rText=document.querySelector("#rEdit");
vText=document.querySelector("#vEdit");
hVal = parseInt(hText.value);
rVal = parseInt(rText.value);
vVal = 3.14*rVal*rVal*hVal/3;
vText.value = ""+vVal;
});
</script>
<footer> <p class="by"><B>Developed by : Naveen kumar.S</B></p></footer>
</body>
</html>

```

OUTPUT:

Thus a website is designed to perform mathematical calculations in the client side.