```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <title>ITW | P6 Ex1 | Calculadora</title>
    <!--BOOTTRAP-->
    <link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css"
integrity="sha384-MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkF0JwJ8ERdknLPM0"
crossorigin="anonymous">
    <!--JAVASCRIPT-->
    <script src="p6_ex1_calculadora.js"></script>
    <stvle>
        .card {width: 50%;}
        .btn {width: 25%;}
    </style>
</head>
<body>
    <br/>
    <div class="container">
        <div class="card mx-auto">
            <div class="card-header">
                <input type="text" name="resultado" id="resultado" value=""</pre>
placeholder="Resultado"/>
            </div>
            <div class="card-body">
                <div class="row">
                     <input type="button" class="btn btn-outline-primary" value="1"</pre>
onclick="add(this)"/>
                     <input type="button" class="btn btn-outline-primary" value="2"</pre>
onclick="add(this)"/>
                     <input type="button" class="btn btn-outline-primary" value="3"</pre>
onclick="add(this)"/>
                     <input type="button" class="btn btn-outline-primary" value="+"</pre>
onclick="add(this)"/>
                 <div class="row">
                     <input type="button" class="btn btn-outline-primary" value="4"</pre>
onclick="add(this)"/>
                     <input type="button" class="btn btn-outline-primary" value="5"</pre>
onclick="add(this)"/>
                     <input type="button" class="btn btn-outline-primary" value="6"</pre>
onclick="add(this)"/>
```

```
<input type="button" class="btn btn-outline-primary" value="-"</pre>
onclick="add(this)"/>
                 </div>
                 <div class="row">
                     <input type="button" class="btn btn-outline-primary" value="7"</pre>
onclick="add(this)"/>
                     <input type="button" class="btn btn-outline-primary" value="8"</pre>
onclick="add(this)"/>
                     <input type="button" class="btn btn-outline-primary" value="9"</pre>
onclick="add(this)"/>
                     <input type="button" class="btn btn-outline-primary" value="*"</pre>
onclick="add(this)"/>
                 </div>
                 <div class="row">
                     <input type="button" class="btn btn-outline-primary" value="C"</pre>
onclick="reset()"/>
                     <input type="button" class="btn btn-outline-primary" value="0"</pre>
onclick="add(this)"/>
                     <input type="button" class="btn btn-outline-primary" value="="</pre>
onclick="calculadora()"/>
                     <input type="button" class="btn btn-outline-primary" value="/"</pre>
onclick="add(this)"/>
                 </div>
                 <div class="card-footer">&copy; Gonçalo Matos 2018</div>
                 <script>
                     window.onload = document.getElementById("resultado").disabled=true;
                 </script>
            </div>
        </div>
    </div>
</body>
</html>
```

```
function boasvindas() {
    alert("Sê bem-vindo à calculadora!");
}
function add(x) {
    var visor = document.getElementById("resultado");
    visor.value=visor.value+x.value;
}
function reset() {
    document.getElementById("resultado").value=""
}
function calculadora() {
    var visor = document.getElementById("resultado");
    if (visor.value.includes("+")) {
        var operacao = visor.value.split("+");
        visor.value=Number(operacao[\emptyset])+Number(operacao[1]);\\
    } else if (visor.value.includes ("*")) {
        var operacao = visor.value.split("*");
        visor.value=Number(operacao[0])*Number(operacao[1]);
    } else if (visor.value.includes ("/")) {
        var operacao = visor.value.split("/");
        if (operacao[1]==0) {
            alert("Não se fazem divisões por zero!");
            visor.value=Number(operacao[0])/Number(operacao[1]);
        }
    } else if (visor.value.includes("-")) {
        var operacao = visor.value.split("-");
        visor.value=Number(operacao[0])-Number(operacao[1]);
    }
}
window.onload=boasvindas();
```

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <title>ITW | P6 Ex2 | Validação de formulários</title>
    <!--BOOTTRAP-->
    <link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css"
integrity="sha384-MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkF0JwJ8ERdknLPM0"
crossorigin="anonymous">
    <!--JAVASCRIPT-->
    <script src="p6_ex2_validacaoforms.js"></script>
    <!--FONTAWESOME-->
    <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.4.2/css/all.css"</pre>
integrity="sha384-/rXc/GQVaYpyDdyxK+ecHPVYJSN9bmVFBvjA/9e0B+pb3F2w2N6fc5qB9Ew5yIns"
crossorigin="anonymous">
    <style>
            margin-left:0px;
            margin-right: 0px;
        .no-error {display: none;}
        .error {display: inline-block;}
    </style>
</head>
<body>
    <form role="form" onsubmit="" method="post" action="http://192.168.160.36/FormEcho.aspx">
        <div class="form-group row">
            <label for="firstname">Fisrt Name</label>
            <div class="col-sm-10">
                <input type="text" class="form-control" id="firstname" name="firstname"</pre>
placeholder="Introduza o seu primeiro nome">
                <div id="firstname_error" class="no-error form-control-static bg-danger">
                    <br/><i class="fa fa-exclamation-triangle"></i>The firts name should have,
at least 3 characters!</div>
                </div>
            </div>
        </div>
        <div class="form-group row">
            <label for="lastname">Last Name</label>
            <div class="col-sm-10">
```

```
<input type="text" class="form-control" id="lastname" name="lastname"</pre>
placeholder="Introduza o seu último nome">
            </div>
        </div>
        <div class="form-group row">
            <label for="password">Password</label>
            <div class="col-sm-10">
                <input type="password" class="form-control" id="password" name="password"</pre>
placeholder="Password">
            </div>
        </div>
        <div class="form-group row">
            <label for="comments">Comments</label>
            <div class="col-sm-10">
                <textarea class="form-control" id="comments" name="comments" placeholder="Insira</pre>
os seus comentários"></textarea>
            </div>
        </div>
        <div class="form-group row form-check">
            <button type="reset" class="btn btn-default">Reset</button>
            <button type="submit" class="btn btn-primary" onclick="return</pre>
testFormValid()">Submit</button>
        </div>
    </form>
</body>
</html>
```

## **EXERCÍCIOS P6** Validação de formulários I JAVASCRIPT

```
function testFormValid() {
   var retVal=true;
   var fn = document.getElementById("firstname");
   var fn_error = document.getElementById("firstname_error");
   if (fn.value.trim().length < 3) {</pre>
        if (fn_error.classList.contains("no-error")) {
            fn_error.classList.remove("no-error");
        } else if (!(fn_error.classList.contains("error"))) {
            fn_error.classList.add("error");
        return false;
   } else {
       if (fn_error.classList.contains("error")) {
            fn_error.classList.remove("error");
        } else if (!(fn_error.classList.contains("no-error"))) {
            fn_error.classList.add("noerror");
       }
   }
   return retVal;
}
```