How to make a password strength meter for your register form

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<http://www.codeassembly.com/how-to-make-a-password-strength-meter-for-your-register-form/>

*A small tutorial on how to build a password strength meter like the one on Google's new account form.*

I will start by telling you what makes a password strong.

* It has more than 6 characters. The longer the password is, the harder to crack it using brute force attack.
* It contains both small case and upper case characters. This doubles brute force attack time, because it needs to check both cases.
* It contains also numerical characters. This adds another 10 possibilities for each character in the password and thus increases cracking time.
* It contains special characters. This adds another 20 or more characters to the possibilities.
* It contains more than 12 characters. This increases cracking time even more.

My approach was to give one point for each of the conditions above.

And I give a point for each of the conditions, the voting scale is the following

* Very Weak
* Weak
* Better
* Medium
* Strong
* Strongest

Before showing you the code you can check the [password strength live example](http://www.codeassembly.com/examples/passwordstrength.php)

The html code

<form method="post" action="" id="user\_registration" name="user\_registration">  
  
                <p><h1>Password strength metter</h1></p>  
  
                <p>       
  
                <label for="user">Username</label><input type="text" name="user" id="user"/>  
  
                </p>  
  
                <p>       
  
                <label for="name">Name</label><input type="text" name="name" id="name"/>  
  
                </p>  
  
                <p>       
  
                <label for="surname">Surname</label><input type="text" name="surname" id="surname"/>  
  
                </p>  
  
                <p>       
  
                <label for="email">E-mail</label><input type="text" name="email" id="email"/>  
  
                </p>  
  
                <p>       
  
                        <label for="pass">Password</label><input type="password" name="pass" id="pass" onkeyup="passwordStrength(this.value)" />  
  
                           
  
                </p>  
  
                <p>       
  
                <label for="pass2">Confirm Password</label><input type="password" name="pass2" id="pass2"/>  
  
                </p>  
  
                <p>  
  
                        <label for="passwordStrength">Password strength</label>  
  
                        <div id="passwordDescription">Password not entered</div>  
  
                        <div id="passwordStrength" class="strength0"></div>  
  
                </p>  
  
                <p>       
  
                <input type="submit" name="submit" id="submit" value="Register">  
  
                </p>  
  
</form>

The csss code

#passwordStrength  
  
{  
  
        height:10px;  
  
        display:block;  
  
        float:left;  
  
}  
  
  
  
.strength0  
  
{  
  
        width:250px;  
  
        background:#cccccc;  
  
}  
  
  
  
.strength1  
  
{  
  
        width:50px;  
  
        background:#ff0000;  
  
}  
  
  
  
.strength2  
  
{  
  
        width:100px;      
  
        background:#ff5f5f;  
  
}  
  
  
  
.strength3  
  
{  
  
        width:150px;  
  
        background:#56e500;  
  
}  
  
  
  
.strength4  
  
{  
  
        background:#4dcd00;  
  
        width:200px;  
  
}  
  
  
  
.strength5  
  
{  
  
        background:#399800;  
  
        width:250px;  
  
}

And finally the javascript code

function passwordStrength(password)  
  
{  
  
        var desc = new Array();  
  
        desc[0] = "Very Weak";  
  
        desc[1] = "Weak";  
  
        desc[2] = "Better";  
  
        desc[3] = "Medium";  
  
        desc[4] = "Strong";  
  
        desc[5] = "Strongest";  
  
  
  
        var score   = 0;  
  
  
  
        //if password bigger than 6 give 1 point  
  
        if (password.length > 6) score++;  
  
  
  
        //if password has both lower and uppercase characters give 1 point        
  
        if ( ( password.match(/[a-z]/) ) && ( password.match(/[A-Z]/) ) ) score++;  
  
  
  
        //if password has at least one number give 1 point  
  
        if (password.match(/\d+/)) score++;  
  
  
  
        //if password has at least one special caracther give 1 point  
  
        if ( password.match(/.[!,@,#,$,%,^,&,\*,?,\_,~,-,(,)]/) ) score++;  
  
  
  
        //if password bigger than 12 give another 1 point  
  
        if (password.length > 12) score++;  
  
  
  
         document.getElementById("passwordDescription").innerHTML = desc[score];  
  
         document.getElementById("passwordStrength").className = "strength" + score;  
  
}

One small tip that I use when I choose my passwords is that I choose a normal phrase that I easily remember and then I replace all "i" with "1" all "g" with "6" all "r" with "5" all "a" with "@", in this way I don't forget my passwords and they are safer against brute force attacks.