Testing the Strength of a Password

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Overview

Passwords are required almost anywhere, so that lazy users tend to choose simple passwords which are easy to break. The **PasswordStrength** control in the ASP.NET AJAX Control Toolkit can check how good a password is.

Steps

The **PasswordStrength** control extends a text box and checks whether the password in it is "good enough". It offers a wealth of options via attributes; here are just some of them:

- **MinimumNumericCharacters**—minimum number of numeric characters required in the password
- **MinimumSymbolCharacters**—minimum number of symbol characters (not letters and digits) required in the password
- **PreferredPasswordLength**—minimum length of the password
- **RequiresUpperAndLowerCaseCharacters**—whether the password needs to use both uppercase and lowercase characters
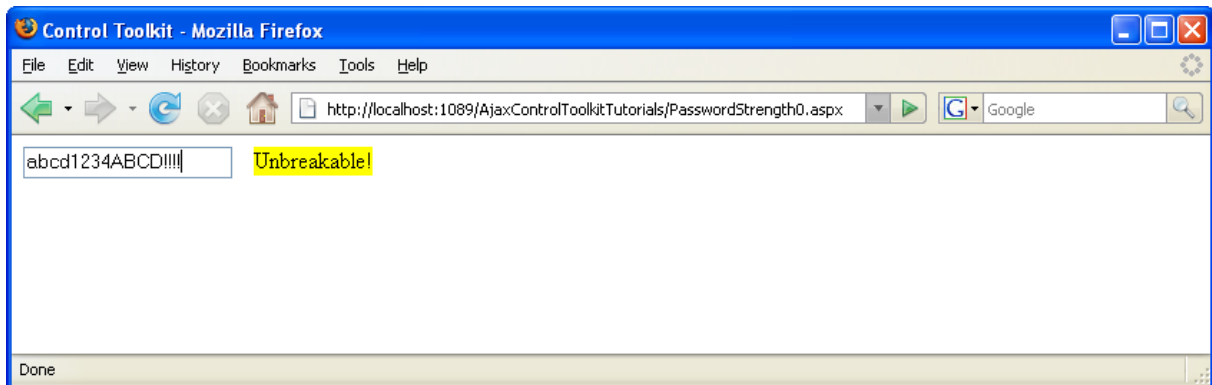
The **StrengthIndicatorType** provides the information how to present the strength of the password, as text (value **"Text"**) or as a kind of progress bar (value **"BarIndicator"**). In the **DisplayPosition** attribute, you configure where the information appears. Here is a complete example, including the ASP.NET AJAX **ScriptManager** control, the **PasswordStrength** control and of course a text box where the user may enter a password. For the sake of demonstration, the latter form field is a regular text field and not a password field so that you can see during development what you are typing.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Control Toolkit</title>
</head>
<body>
  <form id="form1" runat="server">
    <asp:ScriptManager ID="asm" runat="server" />
    <div>
      <asp:TextBox ID="Password" runat="server" />
      <ajaxToolkit:PasswordStrength ID="ps1" runat="server"
        TargetControlID="Password"
    RequiresUpperAndLowerCaseCharacters="true"
        MinimumNumericCharacters="1" MinimumSymbolCharacters="1"
    PreferredPasswordLength="8"
```

```
        DisplayPosition="RightSide" StrengthIndicatorType="Text"
    />
      </div>
    </form>
</body>
</html>
```

Run the page and type away: Only after you have entered lowercase letters, uppercase letters, digits and symbols, the password is deemed as "unbreakable".

Now the password is (quite) good