Verifying the Requirements

The following requirements can be checked by inspecting the code and running the application:

1. The username field accepts alpha-numeric values only.
2. The username length is no less than 5 characters.
3. The username is not already registered.
4. The password has a minimum length of 8 characters and contains at least 1 number, 1 uppercase, and 1 lowercase character.
5. The user gets feedback when the username and password doesn't meet the criteria.
6. Upon submission of a valid username and password they are persisted to a database.
7. The user gets feedback that he/she has been registered.

The source code implemented for items 1, 2, and 4 can be found by searching the solution for the following text: “//Validation code inserted here”

Two regular expressions were used to validate them:

//Validation code inserted here

[Required]

[RegularExpression(@"^[a-zA-Z0-9]{5,}$", ErrorMessage = "The {0} should have alpha-numeric values only, and at least 5 characters long")]

//Validation code inserted here

[Required]

[RegularExpression(@"^(?=.\*[A-Z])(?=.\*[a-z])(?=.\*[0-9]).{8,20}$", ErrorMessage = "The {0} must have at least 1 upper case, 1 lower case, one digit and at least 8 characters long.")]

Requirements 3, 5, 6, and 7 are implemented via the Microsoft.AspNet.Identity.EntityFramework namespace. This module manages password criteria, users, roles, and database persistence.

Database persistence can be checked by running the following statement in SQL Server:

USE Architech

SELECT TOP 10 [Id]

,[UserName]

,[PasswordHash]

,[SecurityStamp]

,[Discriminator]

FROM [Architech].[dbo].[AspNetUsers]

Database contains a table named AspNetUsers, which holds all users registered in the application.

