Source code:

```
package com.app.TDD.demo;
import org.testng.Assert;
import org.testng.annotations.Test;
public class TestUsernamefeature {
       // we want to develop a username field which will take valid input from user
       @Test
       public void UsernameTest()
               UsernameCode obj = new UsernameCode();
               String username = "adminuser";
               String username1 = "admin/user"; // a username should not have /
               String username2 = "admin#user"; // a username should not have #
               String username3 = "admin123";
               Assert.assertTrue(obj.isvalidUsername(username));
               Assert.assertFalse(obj.isvalidUsername(username1),"This is not valid user");
               Assert.assertFalse(obj.isvalidUsername(username2), "This is not valid user");
               Assert.assertTrue(obj.isvalidUsername(username3));
       }
Source code2:
import org. testng. annotations. Test;
       static org. testng. Assert. *;
import
```

```
public class UserRegistrationTest {
    @Test
    public void testUserRegistration() {
        // Implement user registration feature
        // Assert that registration is successful
        assertTrue(UserRegistration.registerUser("JohnDoe", "password123"));
}
```

UserTesting:

Conduct user testing to ensure that the application works as expected and meets user requirements.

Here's a simple example of a TestNG test class for a fictional E-learning application feature, such as user registration: