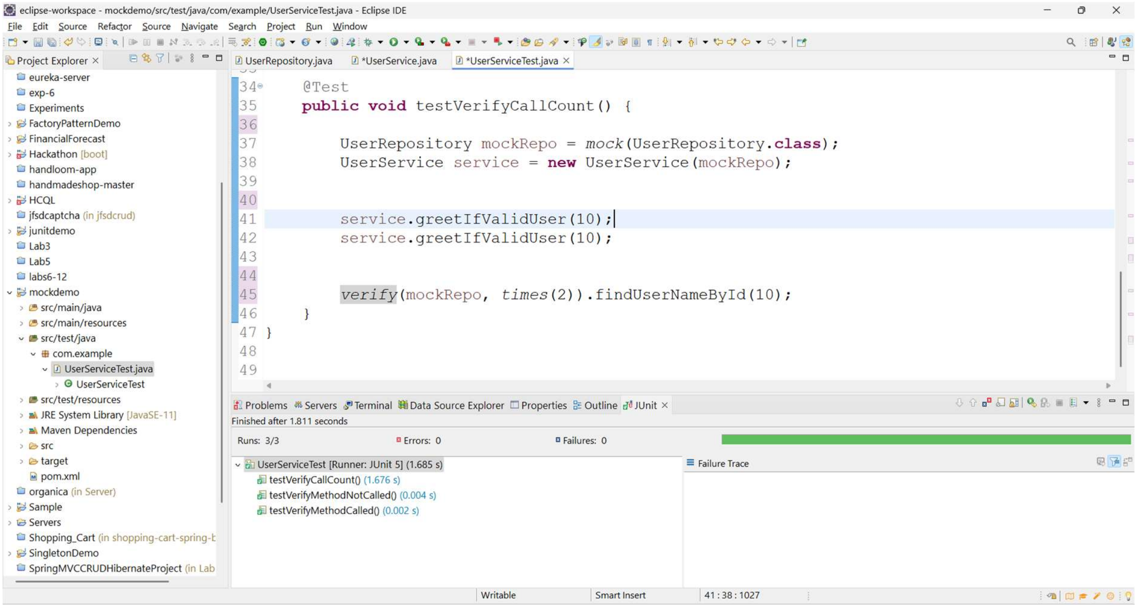
Exercise 2: Verifying Interactions

```
package com.example;

public class UserService {
  private UserRepository userRepository;

  public UserService(UserRepository userRepository) {
    this.userRepository = userRepository;
  }

  public String getWelcomeMessage(int userId) {
    String name = userRepository.findUserNameById(userId);
    return "Welcome, " + name;
  }

  public void greetIfValidUser(int userId) {
    if (userId > 0) {
      userRepository.findUserNameById(userId);
    }
  }
}
```

```
package com.example;

import org.junit.jupiter.api.Test;
import static org.mockito.Mockito.*;
```

```
public class UserServiceTest {

  @Test
  public void testVerifyMethodCalled() {

    UserRepository mockRepo = mock(UserRepository.class);
    UserService service = new UserService(mockRepo);


    service.greetIfValidUser(100);


    verify(mockRepo).findUserNameById(100); // ✅ Check interaction happened
  }

  @Test
  public void testVerifyMethodNotCalled() {

    UserRepository mockRepo = mock(UserRepository.class);
    UserService service = new UserService(mockRepo);


    service.greetIfValidUser(0);


    verify(mockRepo, never()).findUserNameById(anyInt());
  }
  @Test
  public void testVerifyCallCount() {

    UserRepository mockRepo = mock(UserRepository.class);
    UserService service = new UserService(mockRepo);



    service.greetIfValidUser(10);
    service.greetIfValidUser(10);



    verify(mockRepo, times(2)).findUserNameById(10);
  }
}
```

OUTPUT:



```
    @Test
    public void testVerifyCallCount() {

        UserRepository mockRepo = mock(UserRepository.class);
        UserService service = new UserService(mockRepo);


        service.greetIfValidUser(10);
        service.greetIfValidUser(10);


        verify(mockRepo, times(2)).findUserNameById(10);
    }
}
```

```
Finished after 1.811 seconds

Runs: 3/3          Errors: 0          Failures: 0

UserServiceTest [Runner: JUnit 5] (1.685 s)
    testVerifyCallCount() (1.676 s)
    testVerifyMethodNotCalled() (0.004 s)
    testVerifyMethodCalled() (0.002 s)
```