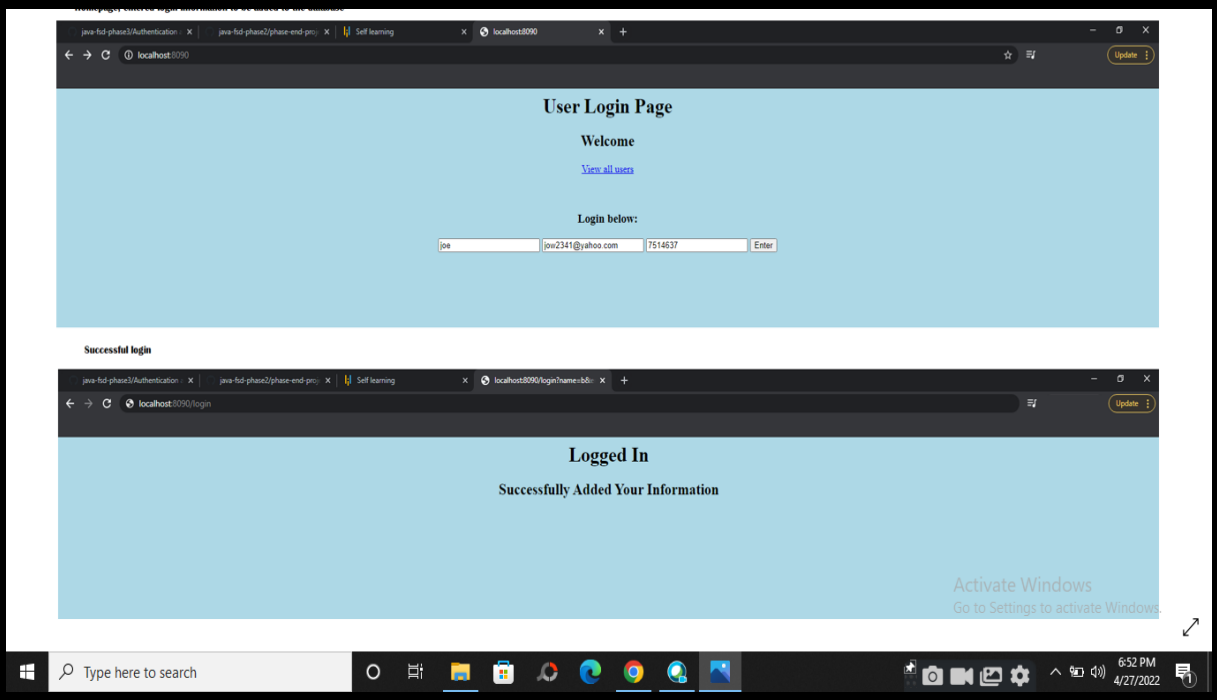
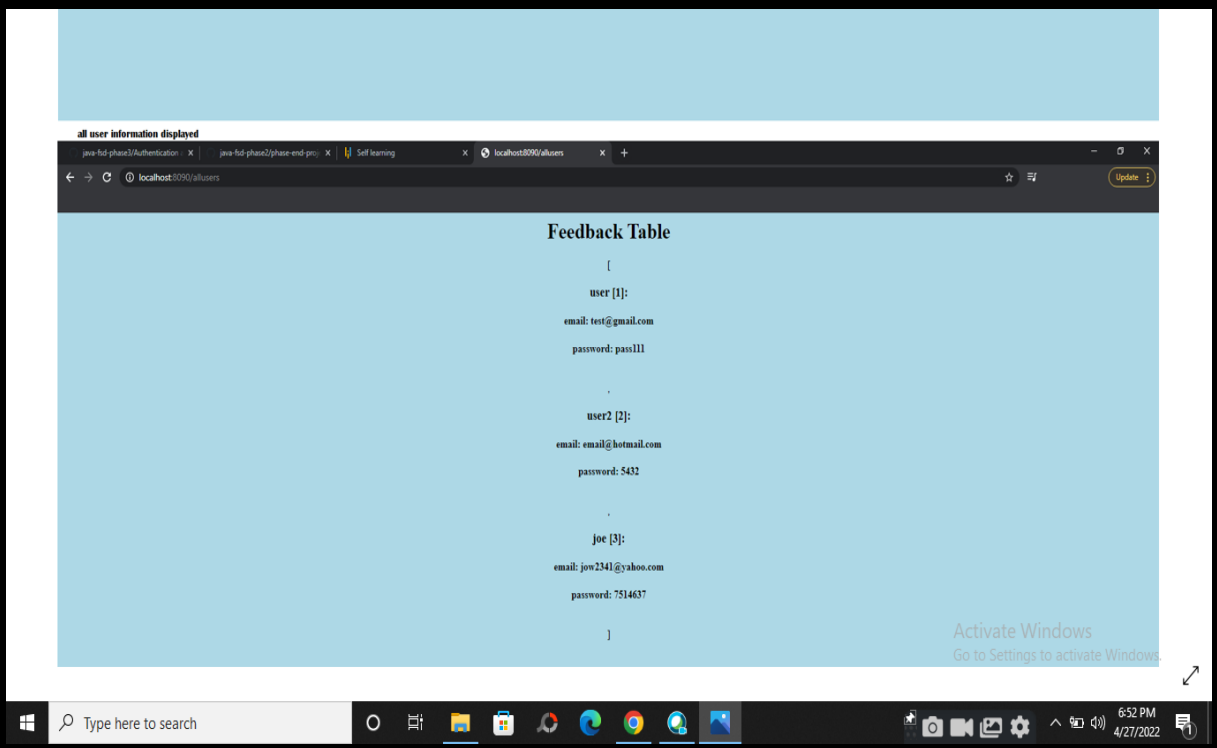
Project Output

Handling User Authentication.





SQL table showing all users

id	email	name	password
1	test@gmail.com	user	pass111
2	email@hotmail.com	user2	5432
3	jon2341@yahoo.com	joe	7514637
NULL	NULL	NULL	NULL

Tests:

```
@SpringBootTest
class AuthenticationApplicationTests {

    @Autowired
    private UserService userService;

    @Test
    void contextLoads() {
    }


    @Test
    void testServiceCall() {
        Iterable<User> users = userService.GetAllUsers();
        Integer count = 0;

        for(User u: users)
            count++;

        assertNotEquals(count, 0);
    }

    @Test
    void countUsers() {
        Iterable<User> users = userService.GetAllUsers();
        Integer count = 0;

        for(User u: users)
            count++;

        assertEquals(count, 4);
    }

    @Test
    void checkAllUsers() {
        Iterable<User> users = userService.GetAllUsers();

        for(User u: users)
            assertNotNull(u);
    }
}
```

Finished after 7.88 seconds

Runs: 4/4 Errors: 0 Failures: 0

AuthenticationApplicationTests [Runner: JUnit 5] (0.558 s)
- countUsers() (0.520 s)
- checkAllUsers() (0.016 s)
- contextLoads() (0.006 s)
- testServiceCall() (0.016 s)

Failure Trace

Authentication Tests

```
    @Autowired
    private UserRepository userRepository;


    @Test
    public void returnUserFromName() {
        User testUser = new User();
        testUser.setName("newTest");
        testUser.setEmail("test@email.com");
        testUser.setPassword("testpw");
        entityManager.persist(testUser);
        entityManager.flush();

        User found = userRepository.findByName(testUser.getName());

        assertEquals(found.getName(), testUser.getName());
    }

    @Test
    public void passwordNotNull() {

        Iterable<User> users = userRepository.findAll();
        for(User u: users)
            assertNotNull(u.getPassword());
    }

    @Test
    public void nameNotNull() {

        Iterable<User> users = userRepository.findAll();
        for(User u: users)
            assertNotNull(u.getName());
    }

    @Test
    public void emailNotNull() {

        Iterable<User> users = userRepository.findAll();
```

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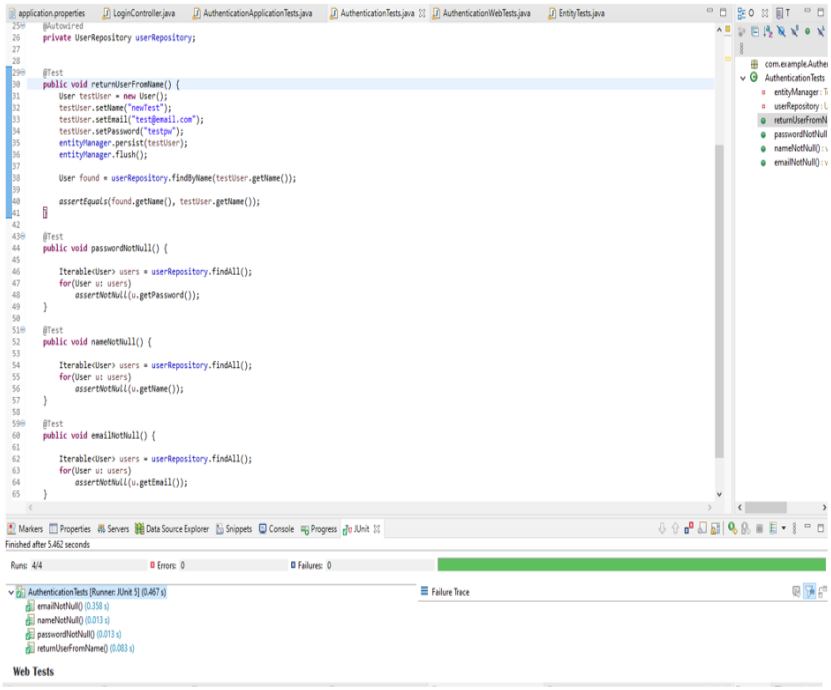
Authentication Tests



```
@Autowired
private UserRepository userRepository;


@Test
public void returnUserFromName() {
    User testUser = new User();
    testUser.setName("newTest");
    testUser.setEmail("test@email.com");
    testUser.setPassword("testpw");
    entityManager.persist(testUser);
    entityManager.flush();

    User found = userRepository.findByName(testUser.getName());

    assertEquals(found.getName(), testUser.getName());

}

@Test
public void passwordNotNull() {

    Iterable<User> users = userRepository.findAll();
    for(User u: users)
        assertNotNull(u.getPassword());
}

@Test
public void nameNotNull() {

    Iterable<User> users = userRepository.findAll();
    for(User u: users)
        assertNotNull(u.getName());
}

@Test
public void emailNotNull() {

    Iterable<User> users = userRepository.findAll();
    for(User u: users)
        assertNotNull(u.getEmail());
}
```

```
Finished after 5.462 seconds
Runs: 4/4   Errors: 0   Failures: 0
AuthenticationTests [Runner: JUnit 5] (0.467 s)
emailNotNull() (0.358 s)
nameNotNull() (0.013 s)
passwordNotNull() (0.013 s)
returnUseFromName() (0.083 s)
```

Web Tests

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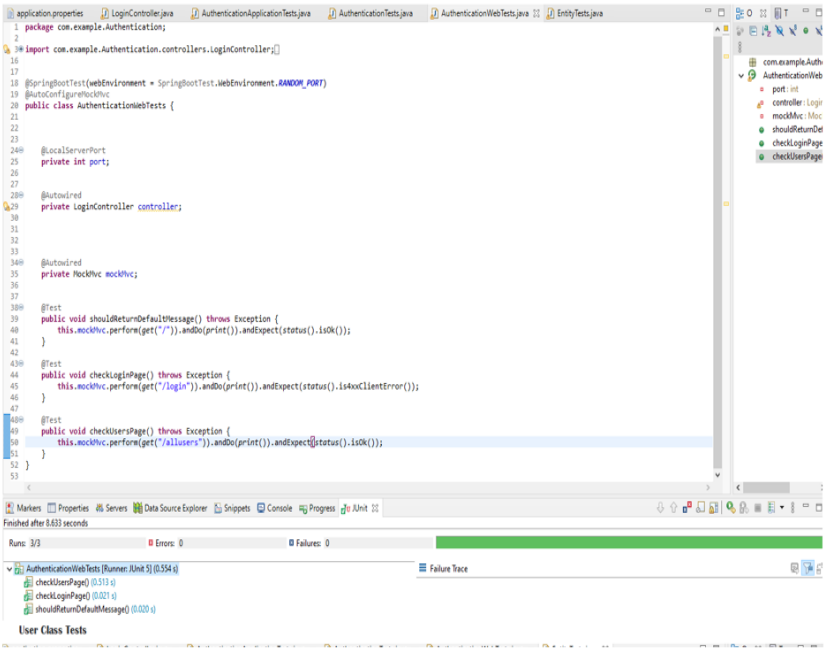
4/27/2022

```
passwordNotNull() (0.013 s)
returnUseFromName() (0.083 s)
```

Web Tests



```
package com.example.Authentication;

import com.example.Authentication.controllers.LoginController;


@SpringBootTest(webEnvironment = SpringBootTest.WebEnvironment.RANDOM_PORT)
@AutoConfigureMockMvc
public class AuthenticationWebTests {


    @LocalServerPort
    private int port;


    @Autowired
    private LoginController controller;



    @Autowired
    private MockMvc mockMvc;


    @Test
    public void shouldReturnDefaultMessage() throws Exception {
        this.mockMvc.perform(get("/")).andDo(print()).andExpect(status().isOk());
    }

    @Test
    public void checkLoginPage() throws Exception {
        this.mockMvc.perform(get("/login")).andDo(print()).andExpect(status().is4xxClientError());
    }

    @Test
    public void checkUsersPage() throws Exception {
        this.mockMvc.perform(get("/allusers")).andDo(print()).andExpect(status().isOk());
    }
}
```

```
Finished after 8.633 seconds
Runs: 3/3   Errors: 0   Failures: 0
AuthenticationWebTests [Runner: JUnit 5] (0.554 s)
checkUsersPage() (0.513 s)
checkLoginPage() (0.027 s)
shouldReturnDefaultMessage() (0.020 s)
```

User Class Tests

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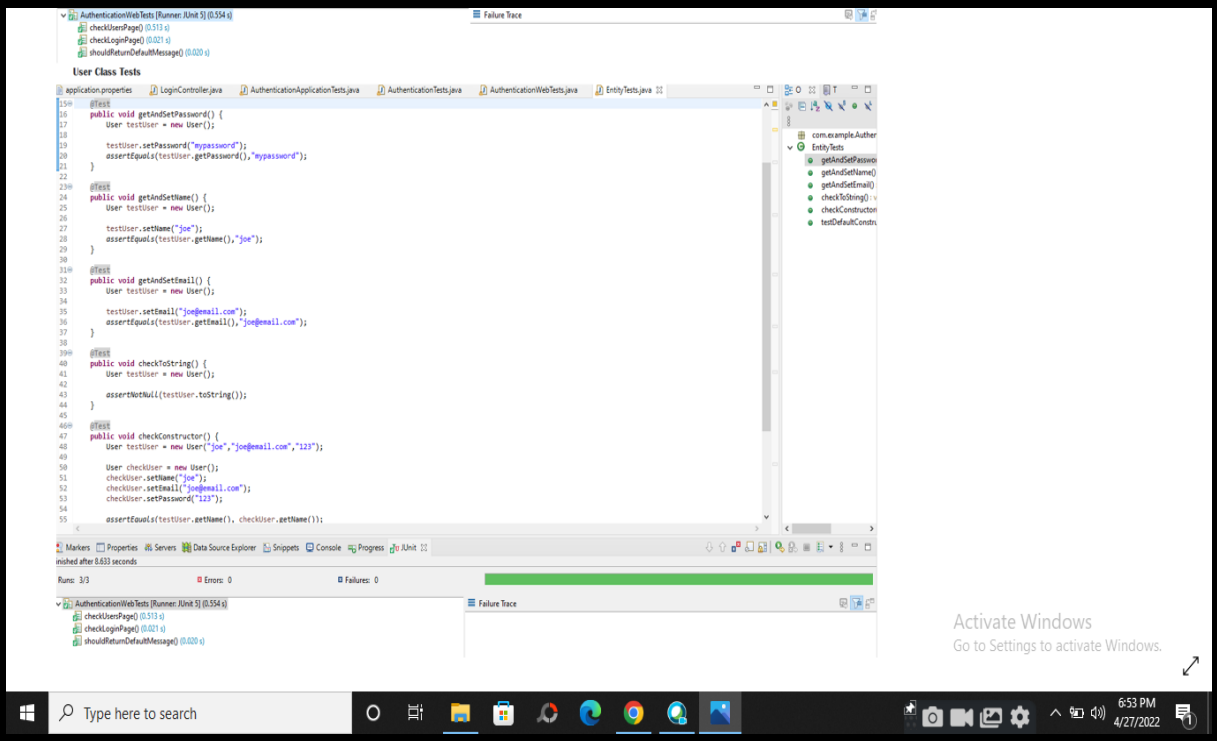
AuthenticationWebTests [Runner: JUnit 5] (0.554 s)
checkUsersPage() (0.513 s)
checkLoginPage() (0.021 s)
shouldReturnDefaultMessage() (0.020 s)
User Class Tests
Failure Trace
application.properties
LoginController.java
AuthenticationApplicationTests.java
AuthenticationTests.java
AuthenticationWebTests.java
EntityTests.java
@Test
public void getAndSetPassword() {
User testUser = new User();
testUser.setPassword("mypassword");
assertEquals(testUser.getPassword(),"mypassword");
}
@Test
public void getAndSetName() {
User testUser = new User();
testUser.setName("joe");
assertEquals(testUser.getName(),"joe");
}
@Test
public void getAndSetEmail() {
User testUser = new User();
testUser.setEmail("joe@email.com");
assertEquals(testUser.getEmail(),"joe@email.com");
}
@Test
public void checkToString() {
User testUser = new User();
assertNotNull(testUser.toString());
}
@Test
public void checkConstructor() {
User testUser = new User("joe","joe@email.com","123");
User checkUser = new User();
checkUser.setName("joe");
checkUser.setEmail("joe@email.com");
checkUser.setPassword("123");
assertEquals(testUser.getName(), checkUser.getName());
com.example.Auther
EntityTests
getAndSetPasswo
getAndSetName()
getAndSetEmail()
checkToString()
checkConstructo
testDefaultConstru
Markers
Properties
Servers
Data Source Explorer
Snippets
Console
Progress
JUnit
inished after 8.633 seconds
Runs: 3/3
Errors: 0
Failures: 0
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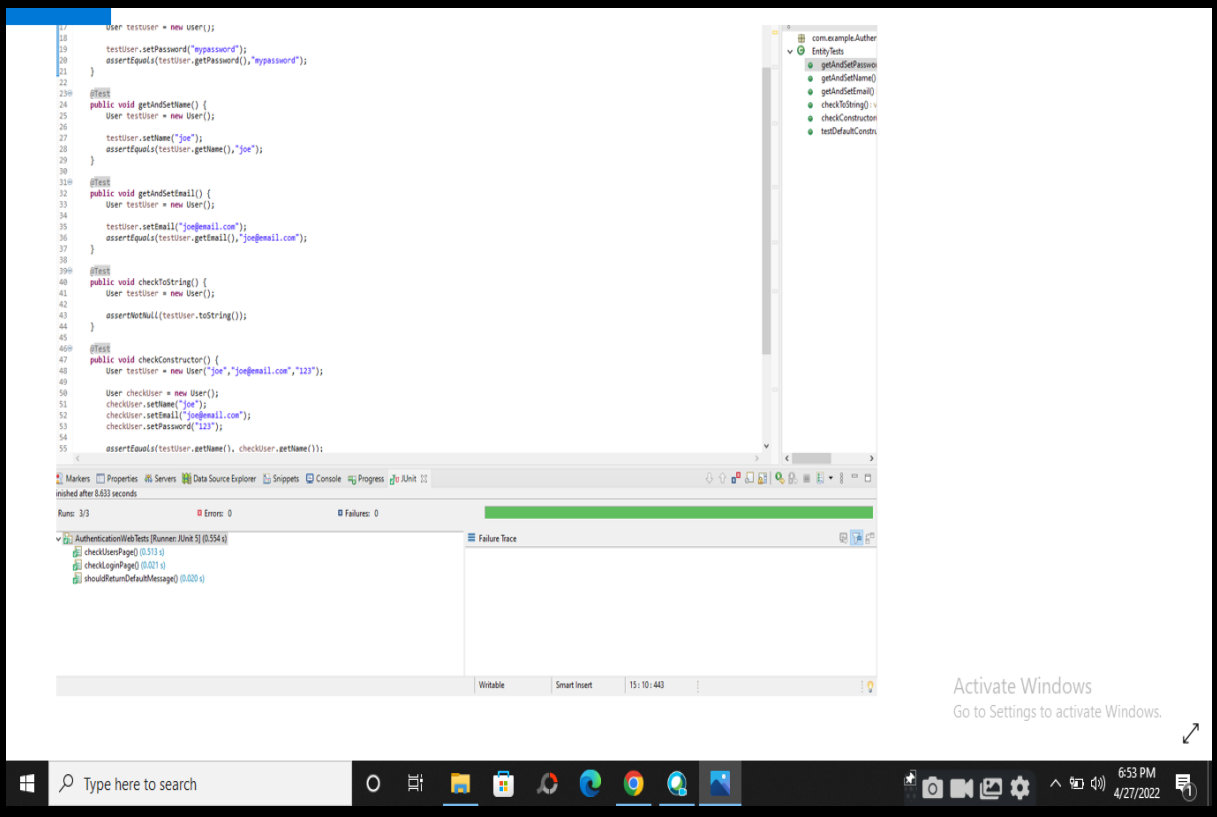
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