SOFTWARE ENGINEERING

TESTING DOCUMENTATION

TESTING RADNIKBA WEBSITE

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1. Introduction

1.1. About the project testing

The testing was done as part of the project for the IT 309 Software Engineering course at International Burch University.

1.2. Project Functionalities and Screenshots

We tested the radnikba page that we created as part of a project for the IT 309 Software Engineering course at Burch International University.

Radnikba is an online platform for advertising construction workers. Aware of the lack of construction workers in our country, we believe that a platform is needed so that insight into all workers are more easily accessible. Users of the platform will be able to see all the basic information about workers.

Dobrodošli na Radnikba

Email adresa

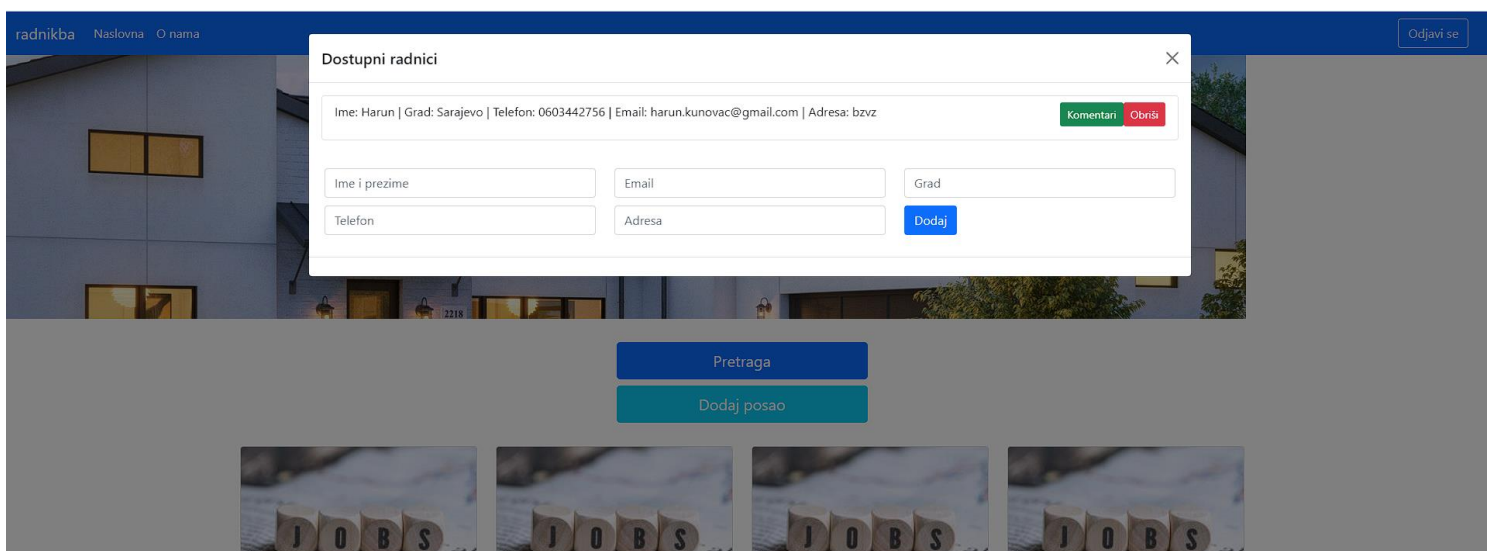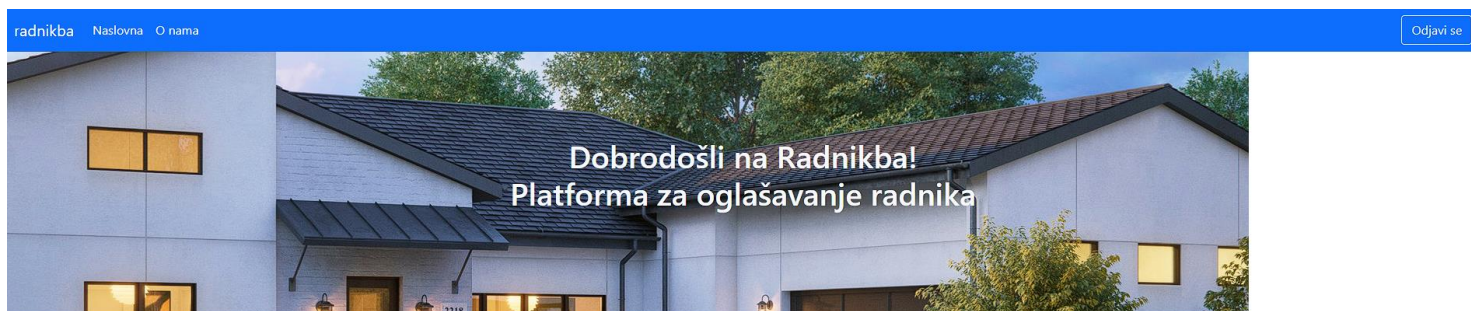harunkunovac@gmail.com

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Prijavi se

Registruj se...

Login page

Registruj se na Radnikba

Ime

Prezime

Email adresa

Lozinka

Grad

Registruj se

Nazad na Login

Registration page

Main features

2. Test Plan

2.1. Scope

We made sure to cover all important parts of the website. Our focus was to confirm all functionalities of given website work as intended. We separated tests so each one of them covers one functionality.

2.2. Testing Environment and Tools

For IDE we used Eclipse with JUnit 5 and Selenium. All tests are written using Java programming language.

3. Test Execution

3.1. Login test

Test Name: loginTest()				
Description: User login test				
Pre-condition(s):				
Test Steps:	**Test Data:**	**Expected Result:**	**Actual Result:**	**Status:**
1. Enter email 2. Enter password 3. Click "Login" button	- Email, password of test user	- At the end of the test, the user should successfully log in	User successfully logged in	PASS

```java
/*  Login testing on the radnikba page
 *     */
@Test
@Order(1)
void loginTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(5000);

    WebElement email = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[1]/input"));
    email.clear();
    email.sendKeys("harun.kunovac@stu.ibu.edu.ba");
    Thread.sleep(2000);

    WebElement password = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[2]/input"));
    password.clear();
    password.sendKeys("1111");
    Thread.sleep(2000);

    WebElement prijaviSebutton = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/button"));
    prijaviSebutton.click();
    Thread.sleep(5000);

    }
```

3.2. Register test

Test Name: registerTest()				
Description: User registration test				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press "Registruj se" 2. Enter name 3. Enter surname 4. Enter email 5. Enter password 6. Enter city 7. Press register button	-Name and surname, email, password, city,	We expect the test user to register successfully	Registration successfully completed	PASS
Notes:				

```java
/*    Register testing on the radnikba page
 *     */
@Test
@Order(2)
void registerTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(3000);

    WebElement registrujSe = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[3]/a"));
    registrujSe.click();
    Thread.sleep(2000);

    WebElement ime = webDriver.findElement(By.xpath("/html/body/main/div/div[2]/div/div/div/div/form/div[1]/input"));
    ime.sendKeys("Test");
    Thread.sleep(2000);

    WebElement prezime = webDriver.findElement(By.xpath("/html/body/main/div/div[2]/div/div/div/div/form/div[2]/input"));
    prezime.sendKeys("Tester");
    Thread.sleep(2000);

    WebElement email = webDriver.findElement(By.xpath("/html/body/main/div/div[2]/div/div/div/div/form/div[3]/input"));
    email.sendKeys("test.tester2@gmail.com");
    Thread.sleep(2000);

    WebElement lozinka = webDriver.findElement(By.xpath("/html/body/main/div/div[2]/div/div/div/div/form/div[4]/input"));
    lozinka.sendKeys("123456");
    Thread.sleep(2000);

    WebElement scroll = webDriver.findElement(By.xpath("/html/body/main/div/div[2]/div/div/div/div/form/button"));
    scroll.sendKeys(Keys.PAGE_DOWN);
    Thread.sleep(2000);

    WebElement grad = webDriver.findElement(By.xpath("/html/body/main/div/div[2]/div/div/div/div/form/div[5]/input"));
    grad.sendKeys("Sarajevo");
    Thread.sleep(2000);

    WebElement registrujSebutton = webDriver.findElement(By.xpath("/html/body/main/div/div[2]/div/div/div/div/form/button"));
    registrujSebutton.click();
    Thread.sleep(7000);

    }
```

3.3. Test on the review of workers and reviews

Test Name: reviewTest()				
Description: Test whether the user has insight into the workers and the option to add and delete reviews.				
Pre-condition(s):				
Test Steps:	**Test Data:**	**Expected Result:**	**Actual Result:**	**Status:**
1. Enter email 2. Enter password 3. Click "Login" button 4. Press "Svi radnici" button 5. Press "Komentari" 6. Choose a rating 7. Add comment text 8. Add comment 9. Delete comment	Email, password Comment text	The user should see the workers, add a review successfully (rating and comment), and then delete the comment he previously added.	Review successfully added and deleted	PASS
Notes:				

```java
    }

/*  Testing the option to see all workers, adding a comment to a worker, and deleting the comment we added
 *     */
@Test
@Order(3)
void reviewTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(5000);

    WebElement email = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[1]/input"));
    email.clear();
    email.sendKeys("harun.kunovac@stu.ibu.edu.ba");
    Thread.sleep(2000);

    WebElement password = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[2]/input"));
    password.clear();
    password.sendKeys("1111");
    Thread.sleep(2000);

    WebElement prijaviSebutton = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/button"));
    prijaviSebutton.click();
    Thread.sleep(2000);

    WebElement scroll = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[2]/div[2]/div/div/div/button[3]"));
    scroll.sendKeys(Keys.PAGE_DOWN);
    Thread.sleep(2000);

    WebElement sviRadnici = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[2]/div[2]/div/div/div/button[3]"));
    sviRadnici.click();
    Thread.sleep(2000);

    WebElement komentari = webDriver.findElement(By.xpath("/html/body/div[3]/div/div/div[2]/div/div/button[2]"));
    komentari.click();
    Thread.sleep(2000);

    WebElement ocjena = webDriver.findElement(By.xpath("/html/body/div[4]/div/div/div[3]/form/div/div[1]/select"));
    ocjena.click();
    Thread.sleep(2000);

    WebElement ocjena5 = webDriver.findElement(By.xpath("/html/body/div[4]/div/div/div[3]/form/div/div[1]/select/option[2]"));
    ocjena5.click();
    Thread.sleep(1000);

    WebElement komentar = webDriver.findElement(By.xpath("/html/body/div[4]/div/div/div[3]/form/div/div[2]/input"));
    komentar.sendKeys("Odlican radnik");
    Thread.sleep(2000);

     WebElement dodajButton = webDriver.findElement(By.xpath("/html/body/div[4]/div/div/div[3]/form/div/div[3]/button"));
     dodajButton.click();
     Thread.sleep(3000);

     WebElement obrisiButton = webDriver.findElement(By.xpath("/html/body/div[4]/div/div/div[2]/div/div[4]/button"));
     obrisiButton.click();
     Thread.sleep(3000);
}

}
```

3.4 Search test

Test Name: searchTest()				
Description: Testing the search option				
Pre-condition(s):				
Test Steps:	**Test Data:**	**Expected Result:**	**Actual Result:**	**Status:**
1. Enter email 2. Enter password 3. Click "Login" button 4. Press "Pretraga" button 5. Enter the search 6. Press search	Email, password Search text	Search results should be printed on the entered search text	The test showed that the functionality works successfully	PASS
Notes:				

```java
/*  Testing the search on the radnikba page
 *     */
@Test
@Order(4)
void searchTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(5000);

    WebElement email = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[1]/input"));
    email.clear();
    email.sendKeys("harun.kunovac@stu.ibu.edu.ba");
    Thread.sleep(2000);

    WebElement password = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[2]/input"));
    password.clear();
    password.sendKeys("1111");
    Thread.sleep(2000);

    WebElement prijaviSebutton = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/button"));
    prijaviSebutton.click();
    Thread.sleep(2000);

    WebElement pretragaButton = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[1]/button[1]"));
    pretragaButton.click();
    Thread.sleep(3000);

    WebElement upisUpretragu = webDriver.findElement(By.xpath("/html/body/main/div[1]/form/input"));
    upisUpretragu.sendKeys("sarajevo");
    Thread.sleep(2000);

    WebElement pretraziButton = webDriver.findElement(By.xpath("/html/body/main/div[1]/form/button"));
    pretraziButton.click();
    Thread.sleep(3000);
```

3.5 Admin Test

Test Name: adminTest()				
Description: Admin login and testing adding, editing and deleting jobs				
Pre-condition(s):				
Test Steps:	**Test Data:**	**Expected Result:**	**Actual Result:**	**Status:**
1. Enter email 2. Enter password 3. Click "Login" button 4. Press "Dodaj posao" 5. Enter job name 6. Enter job description 7. Press "Potvrdi" 8. Press "Uredi" 9. Edit job name 10. Edit job description 11. Press "Sacuvaj promjene" 12. Press "Obrisi"	-Email, password, job name, job description	Successful login as admin, adding a job, editing a job (job name and job description) and deleting a job	Actions performed as expected	PASS

```java
@Order(5)
void adminTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(5000);

    WebElement email = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[1]/input"));
    email.clear();
    email.sendKeys("harun.kunovac@stu.ibu.edu.ba");
    Thread.sleep(2000);

    WebElement password = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[2]/input"));
    password.clear();
    password.sendKeys("1111");
    Thread.sleep(2000);

    WebElement prijaviSebutton = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/button"));
    prijaviSebutton.click();
    Thread.sleep(2000);

    WebElement dodajPosao = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[1]/button[2]"));
    dodajPosao.click();
    Thread.sleep(3000);

    WebElement imePosla = webDriver.findElement(By.xpath("/html/body/div[2]/div/div/form/div[2]/div[1]/input"));
    imePosla.sendKeys("Testni posao");
    Thread.sleep(2000);

    WebElement opisPosla = webDriver.findElement(By.xpath("/html/body/div[2]/div/div/form/div[2]/div[2]/input"));
    opisPosla.sendKeys("Testni posao");
    Thread.sleep(2000);

    WebElement potvrdi = webDriver.findElement(By.xpath("/html/body/div[2]/div/div/form/div[3]/button[2]"));
    potvrdi.click();
    Thread.sleep(3000);

    WebElement scroll = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[2]/div[5]/div/div/div/button[1]"));
    scroll.sendKeys(Keys.PAGE_DOWN);
    Thread.sleep(2000);

    WebElement urediPosao = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[2]/div[5]/div/div/div/button[1]"));
    urediPosao.click();
    Thread.sleep(3000);

    WebElement imePoslal = webDriver.findElement(By.xpath("/html/body/div[1]/div/div/div[2]/input[2]"));
    imePoslal.clear();
    imePoslal.sendKeys("Testni posao 1");
    Thread.sleep(2000);
    Thread.sleep(2000);

    WebElement opisPoslal = webDriver.findElement(By.xpath("/html/body/div[1]/div/div/div[2]/input[3]"));
    opisPoslal.clear();
    opisPoslal.sendKeys("Testni posao 1");
    Thread.sleep(2000);

    WebElement sacuvajPromjene = webDriver.findElement(By.xpath("/html/body/div[1]/div/div/div[3]/button[2]"));
    sacuvajPromjene.click();
    Thread.sleep(3000);

    WebElement scroll2 = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[2]/div[5]/div/div/div/button[2]"));
    scroll2.sendKeys(Keys.PAGE_DOWN);
    Thread.sleep(2000);

    WebElement obrisiPosao = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[2]/div[5]/div/div/div/button[2]"));
    obrisiPosao.click();
    Thread.sleep(3000);

}
```

3.6 Test for adding and deleting workers

Test Name: adminTest2()				
Description: Adding and deleting workers as admin				
Pre-condition(s):				
Test Steps:	**Test Data:**	**Expected Result:**	**Actual Result:**	**Status:**
1. Enter email 2. Enter password 3. Click "Login" button 4. Press "Svi radnici" 5. Enter name and surname 6. Enter email 7. Enter city 8. Enter phone 9. Enter address 10. Press "Dodaj" 11. Press "Obrisi" for deleting worker	-Email, password, Name, surname, email, city, phone, address	Successfully adding and deleting a worker	Actions performed as expected	PASS

```java
@Test
@Order(6)
void adminTest2() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(5000);

    WebElement email = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[1]/input"));
    email.clear();
    email.sendKeys("harun.kunovac@stu.ibu.edu.ba");
    Thread.sleep(2000);

    WebElement password = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/div[2]/input"));
    password.clear();
    password.sendKeys("1111");
    Thread.sleep(2000);

    WebElement prijaviSebutton = webDriver.findElement(By.xpath("/html/body/main/div/div[1]/div/div/div/div/form/button"));
    prijaviSebutton.click();
    Thread.sleep(2000);

    WebElement scroll = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[2]/div[3]/div/div/div/button[3]"));
    scroll.sendKeys(Keys.PAGE_DOWN);
    Thread.sleep(2000);

    WebElement sviRadnici = webDriver.findElement(By.xpath("/html/body/main/div[2]/div[2]/div[3]/div/div/div/button[3]"));
    sviRadnici.click();
    Thread.sleep(3000);

    WebElement imeIprezime = webDriver.findElement(By.xpath("/html/body/div[3]/div/div/div[3]/form/div/div[1]/input"));
    imeIprezime.sendKeys("Test Tester");
    Thread.sleep(2000);

    WebElement email2= webDriver.findElement(By.xpath("/html/body/div[3]/div/div/div[3]/form/div/div[2]/input"));
    email2.sendKeys("test.tester@gmail.com");
    Thread.sleep(2000);

    WebElement grad= webDriver.findElement(By.xpath("/html/body/div[3]/div/div/div[3]/form/div/div[3]/input"));
    grad.sendKeys("Testni grad");
    Thread.sleep(2000);

    WebElement telefon= webDriver.findElement(By.xpath("/html/body/div[3]/div/div/div[3]/form/div/div[4]/input"));
    telefon.sendKeys("061111212");
    Thread.sleep(2000);

    WebElement adresa= webDriver.findElement(By.xpath("/html/body/div[3]/div/div/div[3]/form/div/div[5]/input"));
    adresa.sendKeys("Testna adresa");
    Thread.sleep(2000);

        WebElement dodaj = webDriver.findElement(By.xpath("/html/body/div[3]/div/div/div[3]/form/div/div[6]/button"));
        dodaj.click();
        Thread.sleep(3000);

        WebElement obrisi = webDriver.findElement(By.xpath("/html/body/div[3]/div/div/div[2]/div/div/button[1]"));
        obrisi.click();
        Thread.sleep(3000);

}
```

Line: 309

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Conclusion

3.7 Testing Summary

Testing Tool	Total Tests	Passed Tests	Failed Tests
Selenium, Junit and Eclipse with Java programming language	6	6	0

3.8 Final Thoughts

Every test was successfully passed, and we are very satisfied with the work done. Also, we are glad that we were able to successfully test the site that we created. We would like to thank the professor and assistants for the opportunity for such a project.