- **Selenium Test:**

```
package com.example.tests;

import java.util.regex.Pattern;
import java.util.concurrent.TimeUnit;
import org.junit.*;
import static org.junit.Assert.*;
import static org.hamcrest.CoreMatchers.*;
import org.openqa.selenium.*;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.support.ui.Select;

public class NPUTest {
  private WebDriver driver;
  private String baseUrl;
  private boolean acceptNextAlert = true;
  private StringBuffer verificationErrors = new StringBuffer();

  @Before
  public void setUp() throws Exception {
    driver = new FirefoxDriver();
    baseUrl = "https://www.google.com/";
    driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
  }

  @Test
  public void testNPU() throws Exception {
    driver.get(baseUrl + "/search?q=npu+&ie=utf-8&oe=utf-8");
    driver.findElement(By.cssSelector("h3.LC20lb")).click();
    driver.findElement(By.cssSelector("h3.LC20lb")).click();
    driver.findElement(By.xpath("//button[@type='button']")).click();
    driver.findElement(By.xpath("//button[@type='button']")).click();
    driver.findElement(By.linkText("MyNPU")).click();
    driver.findElement(By.linkText("MyNPU")).click();
    driver.findElement(By.xpath("//button[@type='button']")).click();
    driver.findElement(By.xpath("//button[@type='button']")).click();
    driver.findElement(By.linkText("Student Log-In")).click();
    driver.findElement(By.linkText("Student Log-In")).click();
    driver.findElement(By.id("UserName")).clear();
    driver.findElement(By.id("UserName")).sendKeys("19524pm");
    driver.findElement(By.id("UserName")).clear();
    driver.findElement(By.id("UserName")).sendKeys("19524pm");
    driver.findElement(By.id("Password")).clear();
    driver.findElement(By.id("Password")).sendKeys("mitmit@2");
    driver.findElement(By.id("Password")).clear();
    driver.findElement(By.id("Password")).sendKeys("mitmit@2");

driver.findElement(By.cssSelector("input[type=\"submit\"]")).click();

driver.findElement(By.cssSelector("input[type=\"submit\"]")).click();
    driver.findElement(By.id("Password")).clear();
```

```java
      driver.findElement(By.id("Password")).sendKeys("Mitmit@2");
      driver.findElement(By.id("Password")).clear();
      driver.findElement(By.id("Password")).sendKeys("Mitmit@2");

driver.findElement(By.cssSelector("input[type=\"submit\"]")).click();

driver.findElement(By.cssSelector("input[type=\"submit\"]")).click();

driver.findElement(By.cssSelector("input[type=\"submit\"]")).click();

driver.findElement(By.cssSelector("input[type=\"submit\"]")).click();
      driver.findElement(By.linkText("Log Off")).click();
      driver.findElement(By.linkText("Log Off")).click();
  }

  @After
  public void tearDown() throws Exception {
    driver.quit();
    String verificationErrorString = verificationErrors.toString();
    if (!"".equals(verificationErrorString)) {
      fail(verificationErrorString);
    }
  }

  private boolean isElementPresent(By by) {
    try {
      driver.findElement(by);
      return true;
    } catch (NoSuchElementException e) {
      return false;
    }
  }

  private boolean isAlertPresent() {
    try {
      driver.switchTo().alert();
      return true;
    } catch (NoAlertPresentException e) {
      return false;
    }
  }

  private String closeAlertAndGetItsText() {
    try {
      Alert alert = driver.switchTo().alert();
      String alertText = alert.getText();
      if (acceptNextAlert) {
        alert.accept();
      } else {
        alert.dismiss();
      }
      return alertText;
```
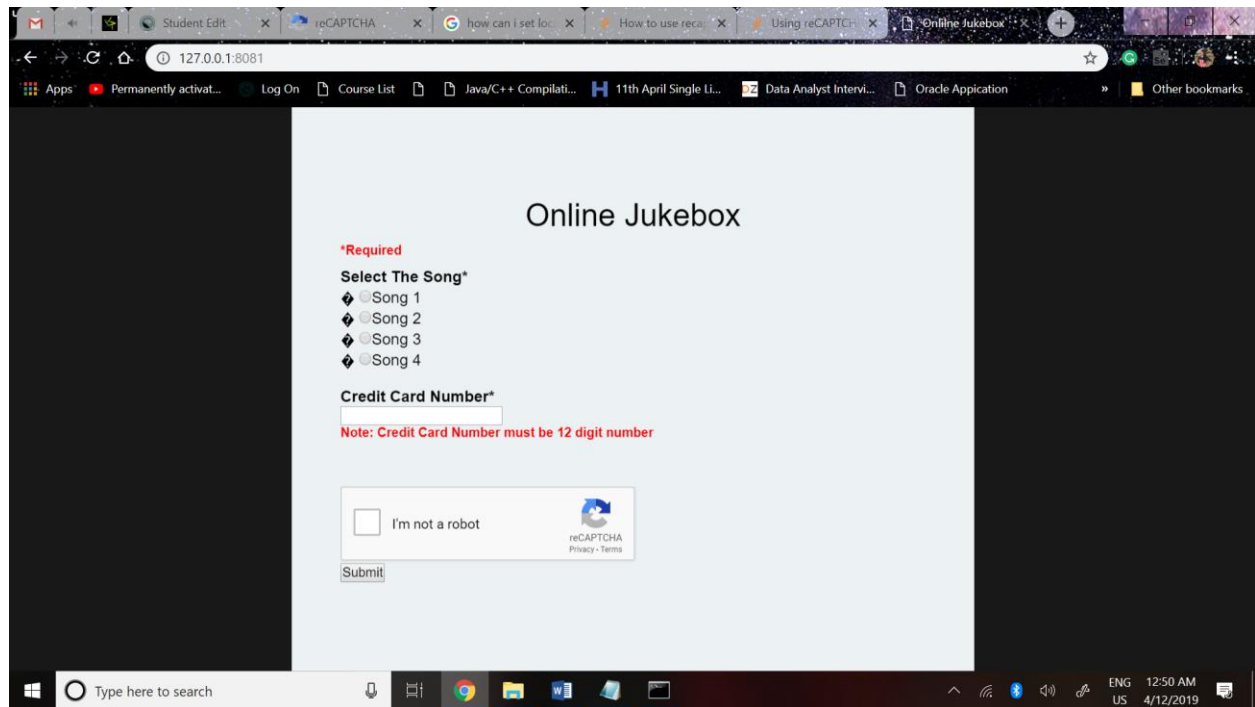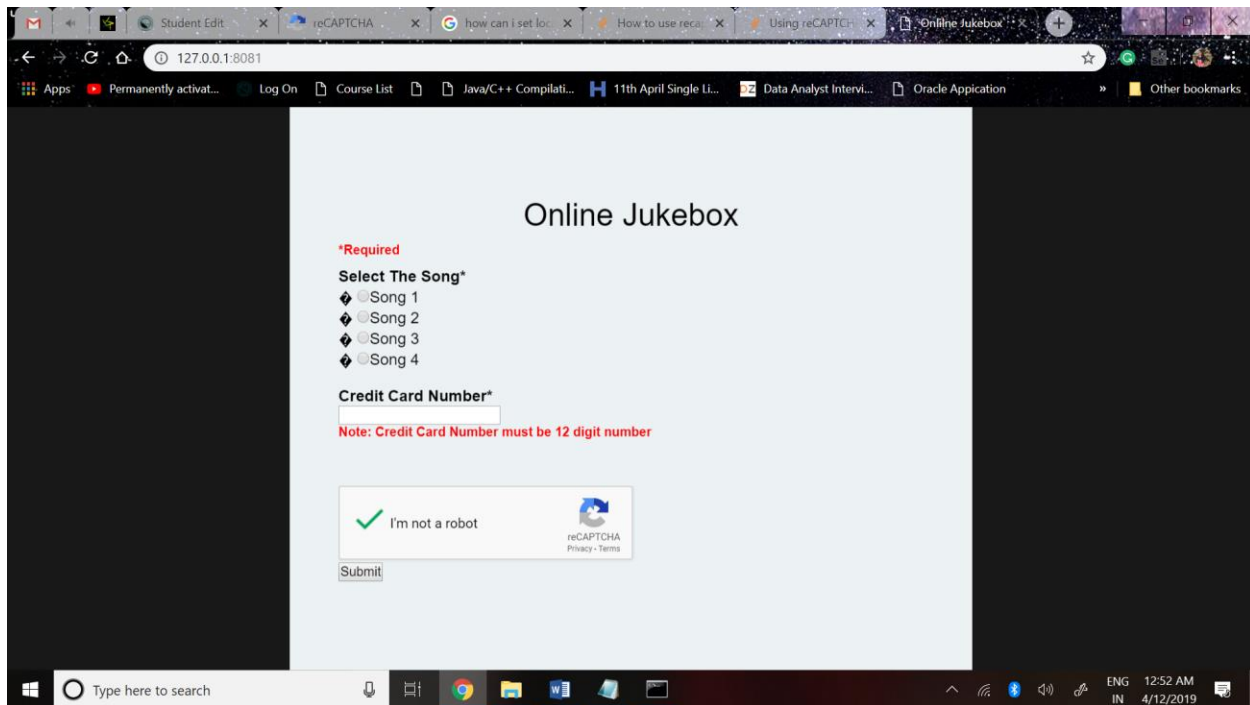
```
    } finally {
      acceptNextAlert = true;
    }
  }
}
```

- **reCAPTCHA v2**

Code:

```
<!DOCTYPE html>

<html>

        <script src="https://www.google.com/recaptcha/api.js" async defer></script>

  <head>

    <title>Onlilne Jukebox</title>

  </head>

  <style>

    *{margin: 0; padding: 0;}

    body{background: #171818; font-family: sans-serif;}

    .form-wrap{ width: 700px; background: #ecf1f4; padding: 100px 50px; box-sizing: border-box;
position: fixed; left: 50%; top: 50%; transform: translate(-50%, -50%);}

    h1{text-align: center; color: #000; font-weight: normal; margin-bottom: 10px;}

    h5{text-align: left; color: #f00; font-weight: normal; margin-bottom: 10px;}

        #submit {background-color: #bbb; padding: .5em; -moz-border-radius: 5px; -webkit-border-
radius: 5px; border-radius: 6px; color: #fff; font-family: 'Oswald'; font-size: 20px; text-decoration:
none;border: none;}
```

```html
        #submit:hover { border: none; background: orange; box-shadow: 0px 0px 1px #777;}

    ::placeholder{color: #fff;}

  </style>

  <body>

    <div class="form-wrap">

      <form action="cgi-bin/proc.py" method=get>

        <h1>Online Jukebox</h1>

                <p><strong><h5>*Required</h5></strong></p>

        <p><strong>Select The Song*</strong></p>

                <label><input type="radio" name="Song" value="Song1" required/>Song 1</label><br>

                <label><input type="radio" name="Song" value="Song2" />Song 2</label><br>

                <label><input type="radio" name="Song" value="Song3" />Song 3</label><br>

                <label><input type="radio" name="Song" value="Song4" />Song 4</label><br>

                <br>

                <p><strong>Credit Card Number*</strong></p>

                <input type="text" name="creditcard" pattern="[0-9]{12}" required><br>

                <p><strong><h5>Note: Credit Card Number must be 12 digit
number</h5></strong></p>

                <br>

                <br>

                <div class="g-recaptcha" data-
sitekey="6LdSyp0UAAAAAIjKjVOfcqg6CsaIgCWTIIq1dmYg"></div>

        <button type="submit" onclick="Sample()">Submit</button>

      </form>

    </div>

  </body>

</html>
```