com.saucelabs.driverMgmt

```java
package com.saucelabs.driverMgmt;
import java.io.File;
import java.io.IOException;
import java.time.Duration;
import java.text.SimpleDateFormat;
import java.util.Date;
import org.apache.commons.io.FileUtils;

import org.openqa.selenium.OutputType;
import org.openqa.selenium.TakesScreenshot;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.edge.EdgeDriver;
import org.openqa.selenium.firefox.FirefoxDriver;

public class BaseTest {
        public WebDriver driver;

        public void setupDriver() {
                String browser = "chrome";
                if (browser.equalsIgnoreCase("chrome")) {
                        driver = new ChromeDriver();
                } else if (browser.equalsIgnoreCase("Firefox")) {
                        driver = new FirefoxDriver();
                } else {
                        driver = new EdgeDriver();
                }
                driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(30));
                driver.manage().window().maximize();
        }

        public void tearDown() throws IOException, InterruptedException {
                Thread.sleep(Duration.ofSeconds(5));
                capture();
                driver.quit();
        }

        public String capture(String name) throws IOException {
            // UUID uuid = UUID.randomUUID();
            if (driver == null)
                System.out.println("driver was null");
            TakesScreenshot ts = (TakesScreenshot) driver;
            File source = ts.getScreenshotAs(OutputType.FILE);
            String dest = System.getProperty("user.dir") + File.separator + "Screenshots" +
File.separator
                    + name + "_" + getDateAndTime() + ".png";
            File destination = new File(dest);
            FileUtils.copyFile(source, destination);
```

```java
            return dest;
        }


        public String capture() throws IOException {
            // UUID uuid = UUID.randomUUID();
            if (driver == null)
                    System.out.println("driver was null");
            TakesScreenshot ts = (TakesScreenshot) driver;
            File source = ts.getScreenshotAs(OutputType.FILE);
            String dest = System.getProperty("user.dir") + File.separator + "Screenshots" +
File.separator
                            + "TestProof_Screenshot_" + getDateAndTime() + ".png";
            File destination = new File(dest);
            FileUtils.copyFile(source, destination);

            return dest;
        }

        public String getDateAndTime() {
            Date dNow = new Date();
            SimpleDateFormat ft = new SimpleDateFormat("E_yyyy-MM-dd_hh_mm_ss_a_zzz");
            return ft.format(dNow).toString();
        }

        // Add a main method to execute the setup and teardown methods.
        public static void main(String[] args) throws IOException, InterruptedException {
            BaseTest test = new BaseTest();
            test.setupDriver();

            // Your test logic can go here.

            test.tearDown();
        }
}
```

com.saucelabs.testcases

```java
package com.saucelabs.testcases;

import java.io.IOException;

import org.openqa.selenium.By;

import com.saucelabs.driverMgmt.BaseTest;

public class LoginTest extends BaseTest {
        By username = By.id("user-name");
        By Password = By.id("password");
        By loginbutton = By.id("login-button");
        By HomePageHeader = By.xpath("//div[text()='Swag Labs']");

        public void testlogin() throws IOException, InterruptedException {
                setupDriver();
                driver.get("https://www.saucedemo.com/");
                driver.findElement(username).sendKeys("standard_user");
                driver.findElement(Password).sendKeys("secret_sauce");
                capture();
                driver.findElement(loginbutton).click();
                // Add a check to verify if the homepage header is displayed to consider the
                // test case as passed.
                boolean isHomePageDisplayed =
driver.findElement(HomePageHeader).isDisplayed();

                if (isHomePageDisplayed) {
                        System.out.println("LoginTest: Test case passed successfully.");
                } else {
                        System.out.println("LoginTest: Test case failed.");
                }
                capture();
                // You should always call tearDown() regardless of the test status.
                tearDown();
        }

        public static void main(String[] args) throws IOException {
                LoginTest loginTest = new LoginTest();
                try {
                        loginTest.testlogin();
                } catch (InterruptedException e) {
                        e.printStackTrace();
                }
        }
}
```

com.saucelabs.testcases

```java
package com.saucelabs.testcases;

import java.io.IOException;
import java.time.Duration;

import org.openqa.selenium.By;
import org.openqa.selenium.support.ui.Select;

import com.saucelabs.driverMgmt.BaseTest;

public class SignUpTest extends BaseTest {
        By firstname = By.name("first_name");
        By lastname = By.name("last_name");
        By gender = By.id("inlineRadioMale");
        By hobbies = By.id("exampleFormControlSelect2");
        By department = By.name("department");
        By username = By.name("user_name");
        By Password = By.name("user_password");
        By confirmPassword = By.name("confirm_password");
        By email = By.name("email");
        By contactno = By.name("contact_no");
        By additionalinfo = By.id("exampleFormControlTextarea1");
        By submitbutton = By.xpath("//button[@type='submit']");

        public void register() throws InterruptedException, IOException {
          setupDriver();
          driver.get("https://mytestingthoughts.com/Sample/home.html");
          driver.findElement(firstname).sendKeys("Nanda");
          driver.findElement(lastname).sendKeys("Kumar");
          driver.findElement(gender).click();
          Select hobbiesselect = new Select(driver.findElement(hobbies));
          hobbiesselect.selectByVisibleText("Reading");
          Select deptselect = new Select(driver.findElement(department));
          deptselect.selectByVisibleText("MPDC");
          driver.findElement(username).sendKeys("nanda");
          driver.findElement(Password).sendKeys("1234abcdef");
          driver.findElement(confirmPassword).sendKeys("1234abcdef");
          driver.findElement(email).sendKeys("nandakumar.ask@gmail.com");
          driver.findElement(contactno).sendKeys("636364645975");
          driver.findElement(additionalinfo).sendKeys(" ");
          Thread.sleep(Duration.ofSeconds(3));
          // Add a message indicating that the test case has passed.
          System.out.println("SignUpTest: Test case passed successfully.");
          capture("Signup_Filled_Form");

          driver.findElement(submitbutton).click();
```

```java
        // Wait for the confirmation page to load before capturing the screenshot.
        Thread.sleep(Duration.ofSeconds(5));
        capture("Signup_Successful");
        tearDown();
    }

    public static void main(String[] args) throws IOException, InterruptedException {
            SignUpTest signUpTest = new SignUpTest();
            signUpTest.register();

    }
}
```