Review comments:

1. Three classes HomePage.java,SignInPage.java and StartPage.java had a method “open()” with behavior, this is violating DRY principle. In one of the class, it is enough.

So removed “open()” method from SignInPage.java class and HomePage.java class.

1. All three classed had below String so removing it from SignInPage.java class and HomePage.java class as we removed open() method from above class.

**public** **static** **final** **String** GITHUB\_BASE\_URL = "http://www.github.com";

1. All the class had a comment stating “Created by Vitali\_Shulha on 22-Oct-15” it is not required as per clean code.

So removing all the comments.

1. In StartPage.java class, below method violating SRP(Single Response Principle)

**public** SignInPage invokeSignIn() { // This Method is overcoming SRP

butt0n.click(); // This line doing one operation

**return** **new** SignInPage(driver); // This line doing one operation

}

So changing code to below:

**public** void invokeSignIn() { // changing return type to void

button.click(); // Removing 3rd line code.

In Test1.java creating the SignInPage object passing Webdriver.

1. And in SignInPage.java class also below method is violating SRP

**public** HomePage signIn(String username, String password){

input1.sendKeys(username);

input2.sendKeys(password);

buttonSubmit.click(); // up to this line doing one operation

**return** **new** HomePage(mDriver); // This line doing one operation, returning HomePage Object

}

So changing code to below:

1. **public** void signIn () { // changing return type to void

input1.sendKeys(username);

input2.sendKeys(password);

buttonSubmit.click(); // Removing last line code.

1. If we remove last line code compiler will give error at method signIn() so changing the code of this method.

Before:

**public** HomePage signIn(User user){

**return** **this**.signIn(user.getUsername(), user.getPassword());

}

After:

**public** HomePage signIn(User user){

**this**.signIn(user.getUsername(), user.getPassword());

**return** **new** HomePage(mDriver);

}

1. In Test1.java creating the HomePage object passing Webdriver.
2. In SignInPage.java->SignIn() method first parameter name should be **userName** but not **username**

**public** HomePage signIn(String username, String password){

input1.sendKeys(username);

input2.sendKeys(password); // This Method is overcoming SRP

buttonSubmit.click();

**return** **new** HomePage(mDriver);

}

1. In User.java class getUsername() method name should be “getUserName()”

**public** String getUsername() {

**return** username;

}

Same is also for setUsername() method it should be setUserName().

1. In StartPage.java declared **WebElement butt0n**, in this instead of ‘o’ we used ‘0’ (zero). Compiler will accept it but as per clean code use clear English then it should be “**button**”.
2. In Test1.java written below code. Generally, we use UPPER\_CASE when we declare a variable as static final but below even it is not, static we used UPPER CASE. We can add static keyword or make then camal case

**public** **class** Test1 {

**private** **final** String USERNAME = "testautomationuser";

**private** **final** String PASSWORD = "Time4Death!";

1. In HomePage.java class hasUserLoggedIn() method code can changed to below.

Before:

**public** Integer hasUserLoggedIn(){

**if** (linkLoggedInUser.getText() != ""){// For this line

we had a method.

**return** 1;

}

**else**{

**return** -1;

}

}

After :

**public** Integer hasUserLoggedIn(){

**if** ((getLoggedInUserName) != ""){

**return** 1;

}

**else**{

**return** -1;

}

}

1. In Test1.java class changed the @test method to below.

Before:

**public** **void** testOneCanLoginGithub(){

WebDriver driver = **new** FirefoxDriver();

driver.manage().timeouts().implicitlyWait(30, TimeUnit.***SECONDS***);

StartPage startPage = **new** StartPage(driver);

startPage.open();

SignInPage signInPage = startPage.invokeSignIn();

HomePage homePage = signInPage.signIn(***USERNAME***, ***PASSWORD***);

String loggedInUserName = homePage.getLoggedInUserName();

Assert.*assertEquals*(***USERNAME***, loggedInUserName);

driver.quit();

}

After:

**public** **void** testOneCanLoginGithub(){

WebDriver driver = **new** FirefoxDriver();

driver.manage().timeouts().implicitlyWait(30, TimeUnit.***SECONDS***);

StartPage startPage = **new** StartPage(driver);

startPage.open();

startPage.invokeSignIn();

SignInPage signInPage = **new** SignInPage(driver);

signInPage.signIn(***USERNAME***, ***PASSWORD***);

HomePage homePage = **new** HomePage(driver);

String loggedInUserName = homePage.getLoggedInUserName();

Assert.*assertEquals*(***USERNAME***, loggedInUserName);

driver.quit();

}

Updated the code with above points please take a look into it.