**True Time Case Study**

**BaseClass.Java**

**package** TruTime;

**import** java.io.File;

**import** java.io.IOException;

**import** org.openqa.selenium.OutputType;

**import** org.openqa.selenium.TakesScreenshot;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.io.FileHandler;

**import** org.openqa.selenium.support.PageFactory;

**public** **class** BaseClass {

WebDriver driver;

**public** BaseClass(WebDriver driver)

{

**this**.driver = driver;

PageFactory.*initElements*(driver,**this**);

}

**public** **void** takeScreenshot(String screenshotName) **throws** IOException {

TakesScreenshot ts = (TakesScreenshot) driver;

File s = ts.getScreenshotAs(OutputType.***FILE***);

File trg = **new** File("C:\\Users\\2317287\\eclipse-workspace\\CASProject\\Screenshot" + screenshotName + ".png");

FileHandler.*copy*(s, trg);

}

}

**BeCognizant.Java**

**package** TruTime;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.WebElement;

**import** org.openqa.selenium.interactions.Actions;

**import** org.openqa.selenium.support.FindBy;

**public** **class** BeCognizant **extends** BaseClass {

BaseClass ba;

**public** BeCognizant(WebDriver driver) {

**super**(driver);

// **TODO** Auto-generated constructor stub

}

//locators

@FindBy(xpath="//button[@id='O365\_MainLink\_Me']")

WebElement button\_userinfo;

@FindBy(xpath="//div[@class='mectrl\_accountDetails']/div[1]")

WebElement txt\_username;

@FindBy(xpath="//div[@class='mectrl\_accountDetails']/div[2]")

WebElement txt\_useremail;

@FindBy(xpath="//div[@title=\"OneCognizant\"]")

WebElement one\_cog\_button;

//Action Methods

**public** **void** userinfo()

{

**try**

{

WebElement userIcon = button\_userinfo;

Actions actions = **new** Actions(driver);

actions.moveToElement(userIcon).click().build().perform();

Thread.*sleep*(3000);

userIcon.click();

Thread.*sleep*(3000);

System.***out***.println("USER-INFORMATION");

System.***out***.println(txt\_username.getText());

System.***out***.println(txt\_useremail.getText());

}

**catch**(Exception e){

System.***out***.println(e);

}

}

**public** **void** buttonclick()

{

one\_cog\_button.click();

}

}

**OneCognizant.Java**

**package** TruTime;

**import** java.util.ArrayList;

**import** java.util.Set;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.WebElement;

**import** org.openqa.selenium.support.FindBy;

**public** **class** OneCognizant **extends** BaseClass{

**public** OneCognizant(WebDriver driver) {

**super**(driver);

// **TODO** Auto-generated constructor stub

}

//locators

@FindBy(xpath ="//input[@id=\"oneC\_searchAutoComplete\"]")

WebElement search;

@FindBy(xpath ="//\*[@id=\"newSearchAppsLST\"]/div/div/div[2]")

WebElement buttonclick ;

//action methods

**public** **void** switchWindow()

{

Set<String> windows =driver.getWindowHandles();

ArrayList<String> windowtabs = **new** ArrayList<String>(windows);

driver.switchTo().window(windowtabs.get(1));

}

**public** **void** Tru\_Time\_search()

{

search.sendKeys("TruTime");

}

**public** **void** tru\_button\_click()

{

buttonclick.click();

}

}

**TruTime.Java**

**package** TruTime;

**import** java.util.ArrayList;

**import** org.openqa.selenium.By;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.WebElement;

**import** org.openqa.selenium.support.FindBy;

**public** **class** TruTime **extends** BaseClass {

**public** TruTime(WebDriver driver) {

**super**(driver);

}

// locators

@FindBy(xpath = "//iframe[@id='appFrame']")

WebElement switchframe;

@FindBy(xpath = "//div[@class='dayHeadr active ng-binding ng-scope']")

WebElement cur\_data;

@FindBy(xpath = "//span[@class=\"ui-datepicker-month\"]")

WebElement month;

@FindBy(xpath = "//span[@class=\"ui-datepicker-year\"]")

WebElement year;

@FindBy(css = "span.topupavailablefromDate")

WebElement back;

@FindBy(id = "legendListID")

WebElement legend;

// agent methods

**public** **void** Switchframe() {

driver.switchTo().frame(switchframe);

}

**public** Boolean currentdate() {

Boolean result = cur\_data.isDisplayed();

System.***out***.println("The current date is : "+cur\_data.getText());

**return** result;

}

**public** Boolean c\_month() {

Boolean result\_month = month.isDisplayed();

System.***out***.println("The current month is: "+month.getText());

**return** result\_month;

}

**public** Boolean c\_Year() {

Boolean result\_year = year.isDisplayed();

System.***out***.println("The current year is: "+year.getText());

**return** result\_year;

}

**public** String backdate() {

**return** back.getText();

}

**public** **boolean** legends() {

System.***out***.println("The legends are : "+legend.getText());

**return** legend.isDisplayed();

}

**public** ArrayList<String> Tru\_Time\_Week\_det() {

Switchframe();// switching to frame

ArrayList<WebElement> tru\_time\_week = (ArrayList<WebElement>) driver

.findElements(By.*xpath*("//div[@class='dayHeadr ng-binding ng-scope']"));

WebElement tru\_time\_cur\_date = driver

.findElement(By.*xpath*("//div[@class='dayHeadr active ng-binding ng-scope']"));

tru\_time\_week.add(tru\_time\_cur\_date);

ArrayList<String> trutime\_week = **new** ArrayList<String>();

**for** (WebElement y : tru\_time\_week) {

trutime\_week.add(y.getText());

}

System.***out***.println("True Time week:");

**for** (WebElement x : tru\_time\_week) {

System.***out***.println(x.getText());

}

**return** trutime\_week;

}

}

**TestngClass.Java**

**package** TruTime;

**import** java.io.IOException;

**import** java.time.Duration;

**import** java.time.LocalDate;

**import** java.time.format.DateTimeFormatter;

**import** java.util.ArrayList;

**import** java.util.Locale;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.chrome.ChromeDriver;

**import** org.testng.Assert;

**import** org.testng.annotations.AfterClass;

**import** org.testng.annotations.BeforeClass;

**import** org.testng.annotations.Test;

**public** **class** TestngClass {

WebDriver driver;

BaseClass ba;

BeCognizant be ;

OneCognizant oncog ;

TruTime tru ;

LocalDate currentDate = LocalDate.*now*();

DateTimeFormatter formatter = DateTimeFormatter.*ofPattern*("EEE, d MMM", Locale.***ENGLISH***);

//Navigating the website

@BeforeClass

**void** Navigate()

{

driver = **new** ChromeDriver();

driver.manage().window().maximize();

driver.get(" https://be.cognizant.com");

driver.manage().timeouts().implicitlyWait(Duration.*ofSeconds*(10));

ba = **new** BaseClass(driver);

be = **new** BeCognizant(driver);

oncog = **new** OneCognizant(driver);

tru = **new** TruTime(driver);

}

//Step 1 and 2 ------Displaying user info and Clicking on One Cognizant Application.

@Test(priority =1)

**void** becognizant() **throws** IOException, InterruptedException

{

ba.takeScreenshot("Becognizant");

be.userinfo();

ba.takeScreenshot("User\_Info");

Thread.*sleep*(3000);

be.buttonclick();

}

//Step 3 Switching window to point on one cognizant page

@Test(priority =2)

**void** oneCognizant() **throws** IOException, InterruptedException

{

oncog.switchWindow();

Thread.*sleep*(3000);

ba.takeScreenshot("One\_Cognizant");

String act\_title = driver.getTitle();

String exp\_title = "OneCognizant";

Assert.*assertEquals*( act\_title,exp\_title,"The title is not correct");

}

//Step -3 ---Search Tru Time in Search bar and click on Tru Time application from search results.

@Test(priority =3)

**void** Tru\_Time\_searchandClick() **throws** IOException, InterruptedException

{

oncog.Tru\_Time\_search();

oncog.tru\_button\_click();

Thread.*sleep*(3000);

ba.takeScreenshot("Tru\_time");

}

//Step4 ---------Get current week details from Tru Time and compare it with system calendar.---------

@Test(priority = 5)

**void** currentweek() //------ error here not able to validate

{

///----tru time --------//////

ArrayList<String> tru\_week = tru.Tru\_Time\_Week\_det();

///------local week ----------////

LocalDate currentDate = LocalDate.*now*();

ArrayList<String> Calendar\_Week = **new** ArrayList<String>();

**for** (**int** i = 0; i <= 6; i++) {

LocalDate weekDay = currentDate.minusDays(currentDate.getDayOfWeek().getValue() - i);

DateTimeFormatter formatter = DateTimeFormatter.*ofPattern*("EEE, dd MMM", Locale.***ENGLISH***);

String formattedDate = weekDay.format(formatter);

System.***out***.println("Calendar Week :"+formattedDate);

Calendar\_Week.add(formattedDate);

}

Boolean bol = tru\_week.containsAll(Calendar\_Week);

Assert.*assertTrue*(bol);

}

//Step5----Validate current date is visible in Tru Time application.

@Test(priority = 6)

**void** current\_date() //-------error here unable to locate the element

{

//Tru time current date

**boolean** current\_date = tru.currentdate();

Assert.*assertTrue*(current\_date,"The Date is not visible");

}

//Step----6 Visibility of current month and Year in tru time

@Test(priority =7)

**void** current\_monthYear()

{

// Find the elements displaying the month and year in the Tru Time application

**boolean** Year = tru.c\_Year();

**boolean** month = tru.c\_month();

//validation of visibilty :

Assert.*assertTrue*(month,"The month is not visible ");

Assert.*assertTrue*(Year,"The year is not visible ");

}

// Step-7---Validate backdated TopUp date is displayed correctly or not (with 15 days backdated date).

@Test(priority =8)

**void** backdate()

{

**boolean** topupDate =tru.backdate();

Assert.*assertTrue*(topupDate,"The backup date is not visible");

}

//Step8----Validate all the legends displayed in Tru Time.

@Test(priority =9)

**void** legends()

{

**boolean** legend =tru.legends();

Assert.*assertTrue*(legend,"The legends are displaying");

}

// -----closing the browser

@AfterClass

**void** close()

{

driver.quit();

}

}

**Testng.xml**

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name=*"Suite"*>

<test name=*"Test"*>

<classes>

<class name=*"TruTime.TestngClass"*/>

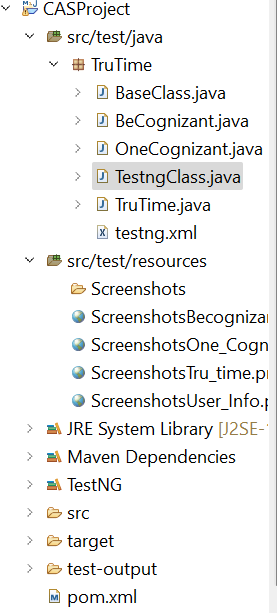
</classes>

</test> <!-- Test -->

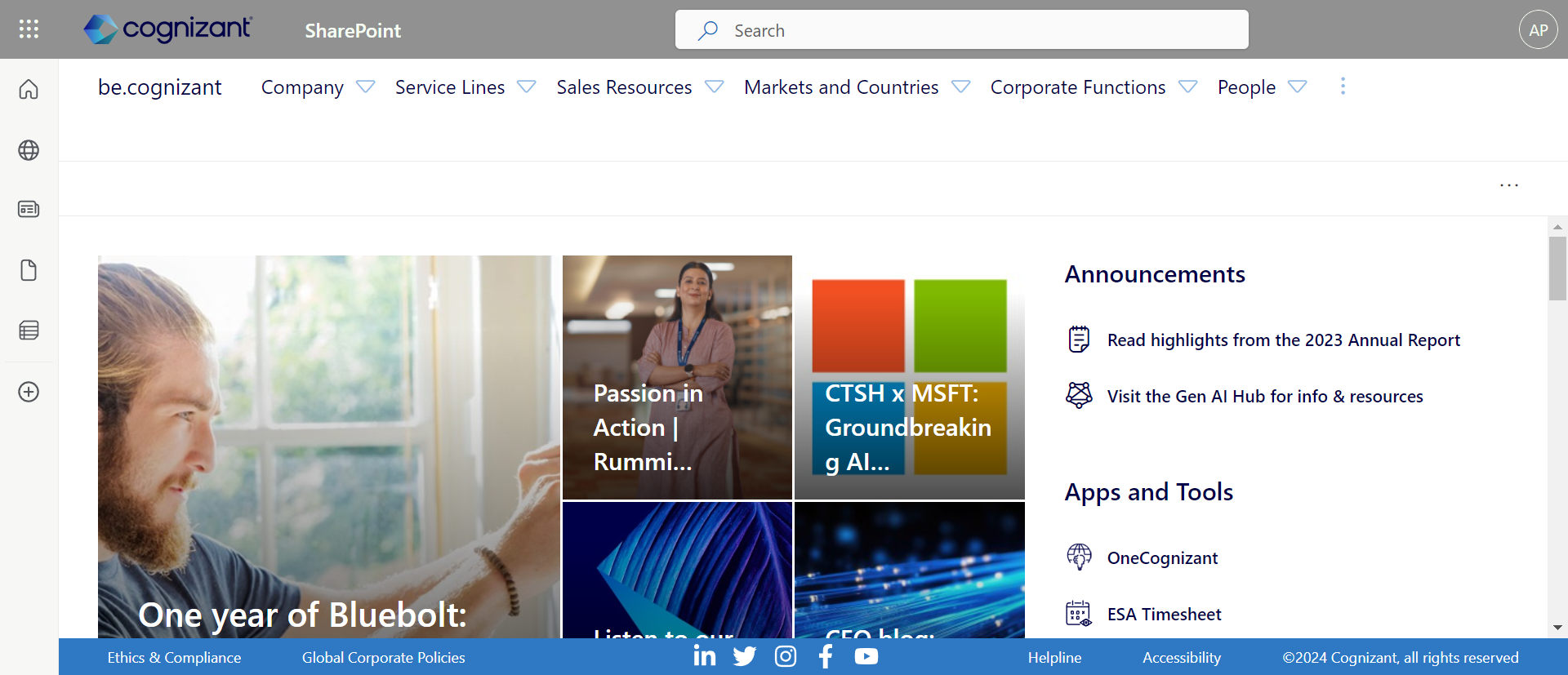
</suite> <!-- Suite -->

**Outputs :**

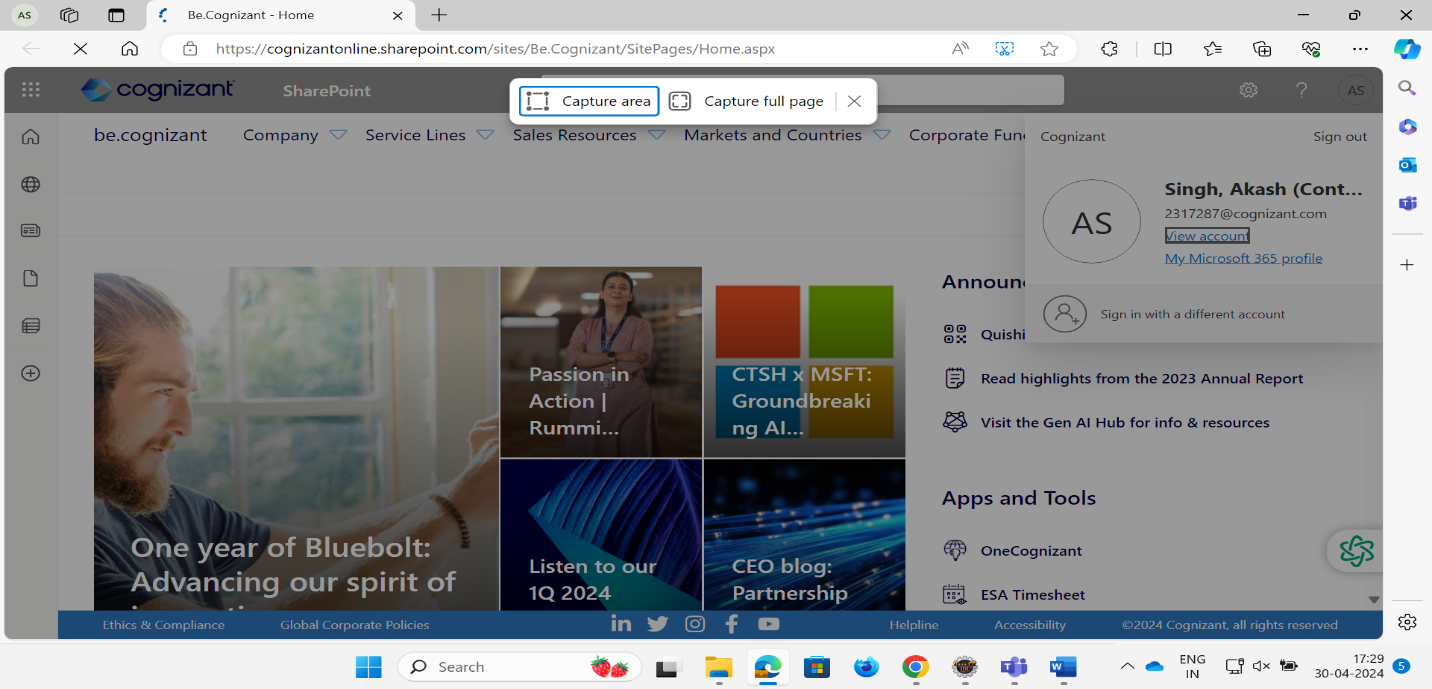
**Folder Structure:**

****

**BeCognizantPage:**

****

**UserInfo:**

****

**OneCognizant :**

**A screenshot of a computer

Description automatically generated**

**TruTime :**

**A screenshot of a computer

Description automatically generated**

**ConsoleOutput:**

[RemoteTestNG] detected TestNG version 7.4.0

USER-INFORMATION

Singh, Akash (Contractor)

2317287@cognizant.com

True Time week:

Sun, 28 Apr

Mon, 29 Apr

Wed, 01 May

Thu, 02 May

Fri, 03 May

Sat, 04 May

Tue, 30 Apr

Calender Week:

Sun, 28 Apr

Mon, 29 Apr

Tue, 30 Apr

Wed, 01 May

Thu, 02 May

Fri, 03 May

Sat, 04 May

The current date is : Tue, 30 Apr

The current year is: 2024

The current month is: April

The Backdate is :Mon, 15 Apr

The legends are : Data Porting 10+Hrs 9-10Hrs 7-9Hrs <7Hrs NoTimeLog Holiday Leave HalfDayLeave Travel ClientHoliday ClientLocation Approved Rejected Pending

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Suite

Total tests run: 8, Passes: 8, Failures: 0, Skips: 0

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**![A white background with black and white clouds

Description automatically generated](data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAABZgAAAJpCAMAAAAXGqfEAAAAAXNSR0IArs4c6QAAAARnQU1BAACxjwv8YQUAAAAGUExURf///wAAAFXC034AAAACdFJOU/8A5bcwSgAAAAlwSFlzAAAh1QAAIdUBBJy0nQAAA29JREFUeF7twQEBAAAAgiD/r25IQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADwqwZ+hAABAgJcCwAAAABJRU5ErkJggg==)**