**outlookor.java**

**package** com.mysite.www.objectrepository;

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

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

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

**public** **class** outlookor {

WebDriver driver;

**public** outlookor(WebDriver driver){

**this**.driver = driver;

}

**public** WebElement signinbutton() {

**return** driver.findElement(By.*xpath*("//a[@class='linkButtonSigninHeader']"));

}

**public** WebElement emailidtextbox() {

**return** driver.findElement(By.*xpath*("//input[@placeholder='Email, phone, or Skype']"));

}

**public** WebElement nextbutton() {

**return** driver.findElement(By.*xpath*("//input[@value='Next']"));

}

**public** WebElement pwdtextbox() {

**return** driver.findElement(By.*xpath*("//input[@name='passwd']"));

}

**public** WebElement signinbutton1() {

**return** driver.findElement(By.*xpath*("//input[@value='Sign in']"));

}

**public** WebElement sentItems() {

**return** driver.findElements(By.*xpath*("//span[text()='Sent Items']")).get(0);

}

**public** WebElement Inbox() {

**return** driver.findElements(By.*xpath*("//span[text()='Inbox']")).get(0);

}

**public** WebElement InboxMessage(String subject) {

**return** driver.findElements(By.*xpath*("//span[text()='"+subject+"']")).get(0);

}

**public** String MessageDate() {

**return** driver.findElement(By.*xpath*("//div[contains(@class,'item-header-actions')]/div[2]/div")).getText();

}

**public** WebElement getMessage() {

//WebElement messagediv = driver.findElement(By.xpath("//div[@class='wide-content-host']"));

**return** driver.findElement(By.*xpath*("//div[@dir='ltr']"));

}

}

**indexpageor.java**

**package** com.mysite.www.objectrepository;

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

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

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

**public** **class** indexpageor {

WebDriver driver;

**public** indexpageor(WebDriver driver){

**this**.driver = driver;

}

**public** WebElement firstname() {

**return** driver.findElement(By.*xpath*("//input[@id='firstname']"));

}

**public** WebElement lasttname() {

**return** driver.findElement(By.*xpath*("//input[@id='lastname']"));

}

**public** WebElement dob() {

**return** driver.findElement(By.*xpath*("//input[@id='dob']"));

}

**public** WebElement otp() {

**return** driver.findElement(By.*xpath*("//input[@id='otp']"));

}

**public** WebElement place() {

**return** driver.findElement(By.*xpath*("//input[@id='place']"));

}

**public** WebElement city() {

**return** driver.findElement(By.*xpath*("//input[@id='city']"));

}

}

**OutlookFunctions.java**

**package** com.mysite.www.functions;

**import** java.text.ParseException;

**import** java.text.SimpleDateFormat;

**import** java.util.ArrayList;

**import** java.util.Date;

**import** java.util.Iterator;

**import** java.util.List;

**import** java.util.Set;

**import** org.openqa.selenium.JavascriptExecutor;

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

**import** com.mysite.www.objectrepository.outlookor;

**public** **class** OutlookFunctions {

**public** String getOutlookMessage(WebDriver driver, String subject, String verificationtext) **throws** InterruptedException, ParseException {

//Get the Main Window Handle

String mainwindowhandle = driver.getWindowHandle();

JavascriptExecutor js = (JavascriptExecutor) driver;

js.executeScript("window.open('https://outlook.live.com/mail/inbox','\_blank')");

//Get the outlook window handle

String outlookwindowhandle = **null**;

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

Iterator<String> it = st.iterator();

**while**(it.hasNext()) {

String handle = (String) it.next();

**if**(handle.equals(mainwindowhandle)) {

}

**else** {

outlookwindowhandle = handle;

}

}

driver.switchTo().window(outlookwindowhandle);

outlookor olo = **new** outlookor(driver);

Thread.*sleep*(2000);

olo.signinbutton().click();

Thread.*sleep*(2000);

olo.emailidtextbox().sendKeys("subbupadala@outlook.com");

Thread.*sleep*(2000);

olo.nextbutton().click();

Thread.*sleep*(2000);

olo.pwdtextbox().sendKeys("VInayaka123\*\*");

Thread.*sleep*(2000);

olo.signinbutton1().click();

//Get Current Date as Date and Time in Minutes as Integer342

List<Object> li = getCurrentDateandTime();

Date curdate = (Date) li.get(0);

**int** curtime = (**int**) li.get(1);

**int** waittime = 120;

String outlookmessage = **null**;

**int** outertime = getcurrenttimeinsec();

**boolean** oldmessage = **true**;

orig: **while**(oldmessage) {

**int** innertime = getcurrenttimeinsec();

Thread.*sleep*(2000);

olo.sentItems().click();

olo.Inbox().click();

olo.InboxMessage(subject).click();

Thread.*sleep*(4000);

String messagedate = olo.MessageDate();

List<Object> msgdatetimelist = getMessageDateandTime(messagedate);

Date msgdate = (Date) msgdatetimelist.get(0);

**int** msgtime = (**int**) msgdatetimelist.get(1);

**if**(msgdate.compareTo(curdate)>0) {

outlookmessage = olo.getMessage().getText();

oldmessage = **false**;

}

**else** **if**(msgdate.compareTo(curdate)==0) {

**if**(msgtime >= curtime) {

outlookmessage = olo.getMessage().getText();

oldmessage = **false**;

}

}

**if**(innertime-outertime > waittime) {

outlookmessage = "no email";

**break**;

}

**boolean** sectime = **true**;

**while**(sectime) {

**int** rechecktime = getcurrenttimeinsec();

**if**(rechecktime-innertime >= 5) {

**continue** orig;

}

}

}

driver.close();

driver.switchTo().window(mainwindowhandle);

**return** outlookmessage;

}

**public** String getOTP(WebDriver driver, String subject, String splittext) **throws** InterruptedException, ParseException {

String outlookmessage = getOutlookMessage(driver, subject, splittext);

String otp = **null**;

**if**(outlookmessage.equalsIgnoreCase("no email")) {

otp = "no email";

}

**else** {

String[] arr1 = outlookmessage.split(splittext);

otp = arr1[1].trim().substring(0, 6);

}

**return** otp;

}

**public** List<Object> getCurrentDateandTime() **throws** ParseException{

//Get Current Date as date and time in minutes as int

SimpleDateFormat sdf = **new** SimpleDateFormat("MM/dd/yyyy");

String curdatestr = sdf.format(**new** Date());

Date curdate = sdf.parse(curdatestr);

String curtimehr = **new** SimpleDateFormat("HH").format(**new** Date());

String curtimemin = **new** SimpleDateFormat("mm").format(**new** Date());

**int** curtime = Integer.*parseInt*(curtimehr)\*60+Integer.*parseInt*(curtimemin);

List<Object> l = **new** ArrayList<Object>();

l.add(curdate);

l.add(curtime);

**return** l;

}

**public** List<Object> getMessageDateandTime(String messagedate) **throws** ParseException {

//Get Message Date as date and time in minutes as int

String arr1[] = messagedate.split(" ");

SimpleDateFormat sdf = **new** SimpleDateFormat("MM/dd/yyyy");

Date msgdate = sdf.parse(arr1[1]);

**int** msgtimeinmin = 0;

**if**(arr1.length == 4) {

SimpleDateFormat sdf12hrs = **new** SimpleDateFormat("hh:mm a");

SimpleDateFormat sdf24hrs = **new** SimpleDateFormat("HH:mm");

Date date12hrs = sdf12hrs.parse(arr1[2]+" "+arr1[3]);

String date24hrs = sdf24hrs.format(date12hrs);

String[] arr2 = date24hrs.split(":");

msgtimeinmin = Integer.*parseInt*(arr2[0])\*60+Integer.*parseInt*(arr2[1]);

}

**else** **if**(arr1.length == 3) {

String[] arr2 = arr1[2].split(":");

msgtimeinmin = Integer.*parseInt*(arr2[0])\*60+Integer.*parseInt*(arr2[1]);

}

List<Object> l = **new** ArrayList<Object>();

l.add(msgdate);

l.add(msgtimeinmin);

**return** l;

}

**public** **int** getcurrenttimeinsec() {

SimpleDateFormat sdf24hrs = **new** SimpleDateFormat("HH:mm:ss");

Date date24hrs = **new** Date();

String timeinsec = sdf24hrs.format(date24hrs);

String[] arr1 = timeinsec.split(":");

**int** timeinsecinint = Integer.*parseInt*(arr1[0])\*60\*60+Integer.*parseInt*(arr1[1])\*60+Integer.*parseInt*(arr1[2]);

**return** timeinsecinint;

}

}

TestWithEmailOTP.java

**package** com.mysite.www.test;

**import** java.text.ParseException;

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

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

**import** org.testng.Assert;

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

**import** com.mysite.www.functions.OutlookFunctions;

**import** com.mysite.www.objectrepository.indexpageor;

**public** **class** TestWithEmailOTP {

@Test

**public** **static** **void** testwithotp() **throws** InterruptedException, ParseException {

System.*setProperty*("webdriver.chrome.driver", "C:\\BrowserDrivers\\chromedriver.exe");

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

//Open the webpage

driver.get("file:///D:/Outlook%20Automation/index.html");

indexpageor ip = **new** indexpageor(driver);

//Enter first name

ip.firstname().sendKeys("Subbu");

ip.lasttname().sendKeys("Padala");

ip.dob().sendKeys("25/08/1978");

//Create Object for OutlookFunctions Class

OutlookFunctions of = **new** OutlookFunctions();

String subject = "Transaction OTP - Do not share the OTP";

String splittext = "The otp for your transaction is";

String otp = of.getOTP(driver, subject, splittext);

**boolean** otpassertion = **false**;

**if**(otp.equalsIgnoreCase("no email")){

System.***out***.println("no email");

otpassertion = **true**;

driver.close();

}

Assert.*assertEquals*(otpassertion, **false**, "No email with in waittime. Exiting............");

ip.otp().sendKeys(otp);

ip.place().sendKeys("Manikonda");

ip.city().sendKeys("Hyderabad");

Thread.*sleep*(5000);

driver.close();

}

}