

Test automation Overview

Team Lion

Agenda

- Manual tests
- Automated tests
- Eclipse plugin
- Report to JIRA



Manual Tests

Zephyr

https://www.getzephyr.com/products/zephyr-for-jira

	Comment Resolve Issue C	Clone More	e Actions * Execute		🗠 🐺 Exp
5				People	
1	🥖 Test	Status:	OPEN (View Workflow)	Assignee:	Unassigned
ty:	🚫 1 - Very High	Resolution:	Unresolved		Assign to me
ts Version/	s: None	Fix Version/s:	None	Reporter:	Gajdos, Jozef
ponent/s:	Reisebank Android	Security Level:	Public (all inhouse employees)	Votes:	• Vote for this issue
S:	reisebank-android reis	sebank-login release-test		Watchers:	 Start watching this issue
vironment	DEV, QA, TEST, PROD				
d:	ReiseBank			Dates	
Link:	New mobile app - Reise	Bank Android		Created:	25/Nov/16 8:44 AM
c	2 hzx59b:			Updated:	21/Feb/17 11:56 AM
	Test Step	Test Data	Expected Result		Select files
			Login screen is	Agile	
1	Open the app.		displayed		
1	Open the app.		displayed.	View on Board	
1	Open the app. Login with valid credentials		displayed. User is logged in, dashboard is displayed.	View on Board	
1 2 3	Open the app. Login with valid credentials Put app in the background and bring it back.		displayed. User is logged in, dashboard is displayed. Enter app PIN dialog is displayed.	View on Board	
	Test Step	Test Data	Expected Result	Agile	

Manual Tests

- Zephyr
 - Provide clear steps.
 - Try structure the tests steps to be able to reuse them later.

t Det	ails —			
		Test Step	Test Data	Expected Result
	1	Open the app.		Login screen is displayed.
	2	Login with valid credentials		User is logged in, dashboard is displayed.
	3	Put app in the background and bring it back.		Enter app PIN dialog is displayed.

Manual Tests

- Zephyr
 - Use please different labels to describe tested feature.

Details			
Type:	🥖 Test	Status:	OPEN (View Workflow)
Priority:	🚫 1 - Very High	Resolution:	Unresolved
Affects Version/s:	None	Fix Version/s:	None
Component/s:	Reisebank Android	Security Level:	Public (all inhouse employees)
Labels:	reisebank-android reisebar	nk-login release-test	
DI Environment:	DEV, QA, TEST, PROD		
Brand:	ReiseBank		
Epic Link:	New mobile app - ReiseBank	Android	
Rank:	2 hzx59b:		

Manual Tests

- Zephyr
 - Perform execution in every test cycle.

Test Executions	st Executions							
Version	Test Cycle	Status	Defects	Executed By	Executed On			
reisebank android v0.1.s4.001	Reisebank Android DELETE	FAIL	-	Mate, Pavol	Today 11:33 AM	E		
reisebank android v0.1.s4	Reisebank Android - AUTOMATION regression in sprint 4	UNEXECUTED	-	-	-	E		
reisebank android v0.1.s3	Reisebank android - Regression in sprint 3	PASS	-	Mesnikovich, Viktoria	21/Feb/17 12:15 PM	E		
reisebank ios v0.1.s2	Reisebank iOS Sprint 2	FAIL	-	Mate, Pavol	13/Feb/17 12:02 PM	Е		
reisebank android v0.1.s2	Reisebank android - Regression in sprint 2	PASS	-	Mesnikovich, Viktoria	23/Jan/17 11:21 AM	E		
reisebank android v0.1.s1	Reisebank Android Sprint 1	PASS	-	Mate, Pavol	05/Dec/16 12:42 PM	E		

Automated Tests

JAVA

• Add screens description by using XPaths and Serenity

import com.wirecard.risebank.pages.PageObjects; import com.wirecard.risebank.steps.anyuser.AtDevice;

import net.serenitybdd.core.annotations.findby.FindBy; import net.serenitybdd.core.pages.WebElementFacade;

import org.junit.Assert;

```
/**
```

// <u>bankomo</u>

```
@FindBy(xpath="//*[@id='iv_bank_title' or @accessibilityIdentifier='bankomoLogo']")
private WebElementFacade imgBankomo;
```

// logo world @FindBy(xpath="//*[@id='loginBackground' or @accessibilityIdentifier='logo_world_image']")
private WebElementFacade logoWorld;

Automated Tests

JAVA

Add description of steps

package com.wirecard.risebank.steps.guest.login; import net.thucydides.core.annotations.Step; import net.thucydides.core.steps.ScenarioSteps; import com.wirecard.risebank.pages.dashboard.DashboardPage; import com.wirecard.risebank.pages.forgotpassword.EnterEmailPage; import com.wirecard.risebank.pages.login.EnterPINPage; import com.wirecard.risebank.pages.login.LoginPage;

public class AtLoginPage extends ScenarioSteps {

private LoginPage onLoginPage;

private EnterPINPage onEnterPINPage;

private DashboardPage onDashboardPage;

private EnterEmailPage onEnterEmailPage;

@Step

public void logsInAs(String playerName, String password) {

onLoginPage.typeUserName(playerName); onLoginPage.typePassword(password); onLoginPage.clickLoginButton();

}

@Step

public void logsInAs(String playerName, String password, String pin) {

onLoginPage.typeUserName(playerName); onLoginPage.typePassword(password);

onLoginPage.clickLoginButton();

onEnterPINPage.checkPINPageAppears();

onEnterPINPage.typePIN(pin);

onEnterPINPage.checkPINPageAppears();

onEnterPINPage.typePIN(pin);

onDashboardPage.checkDashboardPageAppears();

}

Automated Tests

JAVA

- Create the automated test based on manual test as a JAVA class
- Include test information into the class to be sure what version of the test has been used.

```
@TestInfo(
    testSuiteName = "Regression",
    testCaseName = "[Login] - happy path",
    testCaseID = "ISSUINGAPP 8916",
    testCaseDescription = "Verify that user can login to the app using valid credentials."
                             +"Original Name in Jira =[Login] - happy path"
                             + "https://iira.wirecard.svs/browse/ISSUINGAPP-8916".
    testSteps =
              "1.Open the app.".
               "2.Login with valid credentials" +
               ....
              "3.Put app in the background and bring it back.",
    testStepsResults =
              "1.Login screen is displayed.",
              "2.User is logged in, dashboard is displayed.",
              "3.Enter app PIN dialog is displayed." +
    priority = Priority.HIGH,//HIGH, MEDIUM, LOW
    createdBy = "pavol.mate",
    tags = {"test step", "results"}
```

Automated Tests

- JAVA class
 - Be sure that automated test has exactly the same number of test steps as manual test has.

public class ISSUINGAPP_8916_NewVersion extends SimpleTestTemplate {

@Test
public void test() throws IOException {
 // 1.Open the app_
 guest.atLoginPage().checkLoginPageAppears();

// 2.Login with valid credentials logsInAs(PropertiesLoader.getUsers().getDefault().getName(), PropertiesLoader.getUsers().getDefault().getPassword());

// 3.Put app in the background and bring it back guest.atDashboardPage().suspendAndOpenAppAndCheckDashboard("2580");

}

}

Automated Tests

JAVA Suite class

Select list of tests and add test suite

package com.wirecard.risebank.tests.android; import java.io.IOException; import junit.framework.TestSuite;

```
@RunWith(Suite.class)
@SuiteClasses({
    ISSUINGAPP_8916_HappyPath.class,
    ISSUINGAPP_9078_AccountIsLocked.class
    })
```

```
@BeforeClass
public static void installApplication() throws IOException, RowsExceededException, WriteException, BiffException {
    PropertiesLoader.setBrand("reisebank");
    PropertiesLoader.setEnvironment("mock");
    PropertiesLoader.setPlatform("android");
}
@AfterClass
public static void finalizeReport() throws WriteException, IOException, BiffException {
}
```

}

Eclipse plugin

How to generate JAVA test skeleton

- We can use our own eclipse plugin which can help us to generate test case skeleton with test description get directly from JIRA ticket
- Close Eclipse instance if it is running
- You can find the plugin file here: T:\Staff\lion_wizard\com.wirecard.mobile.wizard_0.1.0.jar
- Copy the plugin file into plugins folder of your eclipse instance: C:\[Eclipse]\plugins
- Start Eclipse
- The plugin should be available

Eclipse plugin

How to generate JAVA test skeleton

Navigate to your test package



Eclipse plugin

How to generate JAVA test skeleton

Add a new Other item



- How to generate JAVA test skeleton
 - Looking for JIRA Test Case item and select it

New	
Select a wizard	
Create Java class skeleton from JIRA test case	
Wizards:	
JIRA Test Case	R
JIRA JIRA Test Case	
Sack Next > Finish	Cancel

- How to generate JAVA test skeleton
 - Provide ticket number ISSUINGAPP-8916 but replace with _ (JAVA naming conventions) and add rest of the test name
 - ISSUINGAPP_8916_NewVersion

🔘 JIRA test cas	e class	- • •
New JIRA Tes Create a new J content.	s tCase skeleton JIRA TestCase Java class skeleton by reading JIRA zephyr item	C
Source folder:	risebank-tests/src/test/java	Browse
Package:	com.wirecard.risebank.tests.android.login	Browse
Name: Modifiers:	ISSUINGAPP_8916_NewVersion public Odefault Oprivate Oprotected abstract final static	
Superclass:	$com.wire card.rise bank.test common.Simple {\sf TestTemplate}$	Browse
Interfaces:		Add
		Remove
Do you want to	o add comments? (Configure templates and default value <u>her</u>	re)
?	< Back Next > Finish	Cancel

- How to generate JAVA test skeleton
 - Set correct Superclass
 - In current case: com.wirecard.risebank.testcommon.SimpleTestTemplate



- How to generate JAVA test skeleton
 - Finish the generation



Eclipse plugin

How to generate JAVA test skeleton

• Finish the generation

🛞 Java EE - risebank-tests/src/test/java/com/wirecard/risebank/tests/android/login/ISSUINGAPP_8916_NewVersion.java - Eclipse 📐 📃					
<u>File Edit Source Refactor Navigate Search Project Run Window</u>	Help				
🖬 ▼ 🖩 🦷 🔍 元 🔿 元 🍽 🗆 🖷 🖉 🏧 -	O + Q ₄ + 1 [*] + 6 [*] + 1 [*] ⊕ ⊕ Ø + 1 [*] P Ø P Ø ■ 1 [*] Q Q Q Q Q + 1 [*] + 4 [*] + 4 [*] + 4 [*]	▼ ⇒ ▼ ≥			
	Quick Access 🕴 😭 😨 Java EE 🕸 Debug 🤚 Mercurial Repository Exploring 🕠 P	lug-in Development			
Project Explorer 🔀 📄 🕒 🗖	👔 ISSUINGAPP 🔊 AtDashboardP 👔 SuitAndroidM 👔 ISSUINGAPP 🔀 🎽	' 🗆 🔭 2			
ccpusc-mock-server com.wirecard.mobile.wizard [default] com.wirecard.mobile.wizard [default] com.wirecard.mobile.wizard [default] com.wirecard.mobile.wizard [default] com.wirecard.risebank com.wir	<pre>testCaseName = "[login] - happy path", testCaseID = "ISSUINGAPP_8916", testCaseDescription = "Verify that user can login to the app using valid credentia +"Original Name in Jira =[login] - happy path" + "https://jira.wirecard.sys/browse/ISSUINGAPP-8916", testSteps = { "1.0pen the app.", "2.Login with valid credentials" + "", "3.Put app in the background and bring it back.", }, testStepsResults = { "1.Login screen is displayed.", "2.User is logged in, dashboard is displayed.", "3.Enter app PIN dialog is displayed." + "", ,</pre>	Finished a Runs:			
Big issuindarP_90/5_mnpossible rologinintoco Big issuindarP_90/5_mnpossible rologinintoco Big issuindarP_90/5_mobileAppInterrupt.java Big registration Big SuitAndroidMock.java Big ios Mano Romandancies	<pre>} @Test public void test() throws IOException { // 1.0pen the app. // 2.Login with valid credentials // .</pre>	Ji junit.f ■ at coi ■ at coi			
IRE System Library [JavaSE-1 7]		Ŧ			
Since System clonary (navase-1.7)	۰ III ا	< - >			
· ••••					

Eclipse plugin

How to generate JAVA test skeleton

• Add test steps

```
testCaseName = "[Login] - happy path",
 testCaseID = "ISSUINGAPP 8916",
 testCaseDescription = "Verify that user can login to the app using valid credentials."
 +"Original Name in Jira =[Login] - happy path"
     + "https://jira.wirecard.sys/browse/ISSUINGAPP-8916",
 testSteps =
 {
     "1.Open the app.",
     "2.Login with valid credentials" +
         ·",
     "3.Put app in the background and bring it back.",
 },
 testStepsResults =
 {
     "1.Login screen is displayed.",
     "2.User is logged in, dashboard is displayed.",
     "3.Enter app PIN dialog is displayed." +
         ۳,
 },
 priority = Priority.HIGH, //HIGH, MEDIUM, LOW
 createdBy = "pavol.mate",
 tags = {"test step", "results"}
 )
 /* @formatter:on */
 public class ISSUINGAPP_8916_NewVersion extends SimpleTestTemplate {
\Theta
     @Test
     public void test() throws IOException {
         // 1.Open the app.
       // 2.Login with valid credentials
         // 3.Put app in the background and bring it back.
```

Report to JIRA

- Settings to be able make connection and report to JIRA
 - Find or create your zephyr settings (zephyr.name.surname.properties)

#######################################		
# Zephyrn		#
# introduce your own property file by using your user name as it is below	#	
# zephyr.username.properties		#
#######################################		
# perform JIRA report test result		
zephyr.performReport=true		
# provide your JIRA user name		
zephyr.userNameJira=name.surname@wirecard.com		
# provide encrypted JIRA password generated by SecurityUtils		
zephyr.passwordJira=5NQ5uwEFeNK73eFP		
# basic JIRA URL		
zephyr.urlJira=https://jira.wirecard.sys		
# JIRA project name		
zephyr.projectName=IssuingAPPS		
# project version you want to report to		
zephyr.projectVersion=reisebank android v0.1.s4.001		
# test plan name		
zephyr.testCycleName=Reisebank Android DELETE		

Report to JIRA

- Settings to be able make connection and report to JIRA
 - Find or create your zephyr settings (zephyr.name.surname.properties)

#######################################		
# Zephyrn		#
# introduce your own property file by using your user name as it is below	#	
# zephyr.username.properties		#
#######################################		
# test plan description		
zephyr.testCycleDescription=Temporary test suite!		
# test plan build		
zephyr.testCycleBuild=One		
# test plan environment		
zephyr.testCycleEnvironment=MOCK		
# add test to test plan flag		
zephyr.addTestCaseToTestCycle=true		
# add only new test to test plan		
zephyr.addNewTestCaseToTestCycleOnly=true		
# add only old test to test plan		
zephyr.addOldTestCaseToTestCycleOnly=true		
# test package		
zephyr.testPackage=		

Report to JIRA

- Run test/tests and check JIRA
 - Navigate to JIRA test cycles space and set Selected Version to "reisebank android v0.1.s4.001"
 - You should see "Reisebank Android DELETE" test suite with test ISSUINGAPP-8916 execution

≡	wirecar	d Dashboar	ds Projects Issues	s Agile Tests	Structo	ure BigPicture	Create	Se		۹ 🕐	۵ 🤱
~	Test S	Summary Test	Cycles Traceability								
급 □	∽ Cycle S	elect Versions:	reisebank android vC 🔹							+ Create	e New Cycle
≜₂ Nu	~ 🍅	Reisebank / Started On: 20/Mar	Andro Auton /17 Ended On: 20/Mar/17	nated test run on 20 Created By	/Mar/17 Mate, Pavo	bl	Build:	Envir	1 onment:		100%
-62 -62		ID	Status	Summary	Defect C	omponent	Label		Executed By	Executed On	
್ಷ ∿≣		ISSUINGAPP- 8916	FAIL	[Login] - happy path	R	teisebank Android	reisebank-android,	reisebank-login, release-test	Mate, Pavol	Yesterday 11:33	AM E =
6	> 🖐	Ad hoc No Start Date set	No End Date set	Created By			Build:	Enviro	No Tests	I	Execute Test
Ø											
	Atlassian JIRA Project Management Software (v6.4.12#64027-sha1:e3691cc) · About JIRA · Report a problem										
						X Atlass	ian				

Report to JIRA

Run test/tests and check JIRA

• Check execution details

IssuingAPPS /	/ reisebank android v0.1.s4.001 / Reisebank Android DELETE / ISSUINGAPP-8916	 Return to Test ♦ Return to Test 	1 of 1 ▲ ▼ Cycle ♦ Return to Search
[Login] - happy	y path		
 Description 		✓ Execution History	÷ 0
Verify that user can log	gin to the app using valid credentials.	Mate, Pavol made changes - Vest	erday 11:33 AM
 Test Execution 		Field Old Value status UNEXECUTED	New Value FAIL
Execution Status: Assigned To:	FAIL	Mate, Pavol made changes - Yest comment	erday 11:33 AM AUTOMATED Tested by: com.wire card.risebank.tests.
Executed By: Executed On: Defects:	Mate, Pavol Yesterday 11:33 AM		android.login.ISSUI NGAPP_8916_New Version Message: This is ju st test what happen d if test fails.
Comment:	AUTOMATED Tested by: com.wirecard.risebank.tests.android.login.ISSUINGAPP_8916_NewV ersion Message: This is just test what happend if test fails.	Mate, Pavol made changes - Yest comment AUTOMATED Tested by: com. card.risebank.te android.login.15 NGAPP 846 B	erday 11:33 AM wire sts. SUI 4an
✓ Attachments (Executive Structure) ISSUINGAPP_8 ISSUINGAPP_8 ISSUINGAPP_8	ution) . 8916_NewVersion-test-2017-3-20-11-32-55_ERROR.zip 3034803 Yesterday 11:33 AM	+ pyPath Message: This i st test what hap d if test fails.	sju ppen

Test Details

	Test Step	Test Data	Expected Result	Status	Comment	Attachments	Defects
1	Open the app.		Login screen is displayed.	PASS	Enter Comment	+	Enter Defects
2	Login with valid credentials		User is logged in, dashboard is displayed.	PASS	Enter Comment	+	Enter Defects
3	Put app in the background and bring it back.		Enter app PIN dialog is displayed.	FAIL	This is just test what happend if test fails.	+	Enter Defects

Report to JIRA

Run test/tests and check JIRA

Check execution status

Description

Verify that user can login to the app using valid credentials.



Report to JIRA

- Run test/tests and check JIRA
 - Check execution history

	ory	•			
🍔 Mate, Pavol made changes - Yesterday 11:33 AM					
Field	Old Value	New Value			
status	UNEXECUTED	FAIL			
💦 Mate, Pavol made changes - Yesterday 11:33 AM					
comment		AUTOMATED			
		Tested by: com.wire card.risebank.tests. android.login.ISSUI NGAPP_8916_New Version			
		Message: This is in			
		st test what happen			
		d if test fails.			
🌉 Mate, Pavol	made changes - Yester	day 11:33 AM			
comment	AUTOMATED				
	Tested by: com.w	vire			
	card.risebank.tes	ts.			
	android.login.ISS	UI			
	NGAPP_8916_Ha	ар			
	pyPath				
	Message: This is	ju			
	st test what happ	en			
	d if test fails.				

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Report to JIRA

- Run test/tests and check JIRA
 - Check test details

✓ Test Details

	Test Step	Test Data	Expected Result	Status	Comment	Attachments	Defects
1	Open the app.		Login screen is displayed.	PASS	Enter Comment	+	Enter Defect s
2	Login with valid credentials		User is logged in, dashboard is displayed.	PASS	Enter Comment	+	Enter Defect s
3	Put app in the background and bring it back.		Enter app PIN dialog is displayed.	FAIL	This is just test what happend if test fails.	+	Enter Defect s



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