Session Based Testing in an Agile environment

The test sessions I do during a sprint

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Who am I

- Simon ‘Peter’ Schrijver
- Age: 51
- Coming from The Netherlands
- Married with children
- Independent Tester
- Since 2005
- Founding Member of DEWT
- BBST Instructor for AST
- Current: Mobile App Tester
Content

- Current Assignment
- Session Based Test
- Start of the Sprint
- Layout Session Report
- Example User Story
- Archive Your Session Reports
Current Assignment

- Team of 7 (9) in a Scrum / Agile environment
- Mobile Banking App
- Android dev, iOS dev, UX designer, Visual designer, Solution designer, Business Analyst, Tester, (Scrum Master, Product Owner)
Context

- A two week sprint
- Select user stories from the backlog
- Planning session
- Refinement of user stories
- Retrospective
Probably you recognize this?
Sprint burn down

The sprint planning has been done

The first user story is selected

The developers start

And the tester ……

…… has to wait
What to do

- As a tester in an agile/scrum team you have to use your time effectively.

- Don’t sit and wait, start preparing the work you have to do later in the sprint
Prepare for the test execution

• **What is in the sprint** for the coming period, i.e. the user stories

• **Collect knowledge and information** about the user stories taken in the sprint

• **Investigate** if your **environment** is up and running (application and back end systems)

• **Do a (detailed) risk assessment** on the user stories
Session Based Test is an approach to help me with this
Session Based Test

- Based on the Exploratory Testing approach
- Created by Jon and James Bach (2000)
- To provide management a structured way of information to support their decision making
Session Based Test

- 6 types of session reports
- Intake Session Report
- Survey Session Report
- Setup Session Report
- Analysis Session Report
- Deep Coverage Report
- Closure Session Report
The goal of the intake session is to

“negotiate the mission”

with the stakeholders and/or the project manager.

Make an overview of the user stories you are going to work on in the current sprint
The goal of the survey session is to

“learn the application”

For each user story, collect information to learn what the user story is about.

In the report, write down a summary.
Setup Session Report

- The goal of the setup session is to “create testing infrastructure”

- Write down all the related information of the environment you are going to test
Analysis Session Report

- The **goal** of the analysis session is to
  
  “get ideas for deep coverage”

- For each user story, do a **risk assessment** to guide further testing.

- Make notes of your test ideas
Deep Coverage Session Report

- The **goal** of the deep coverage session is to "find the bugs".

- These sessions are the reports of **all the tests** you have **executed**, the **observations** you have encountered and give you an **overview** of the state of the application.
**Closure Session Report**

- The **goal** of the closure session is to
  
  “get ready to release”

- The **bugs** are **fixed**, the deferred bugs are accepted, the identified risks are **covered**.

- The “**ready to ship**” statement can be given
Intake Session Report

- Current assignment:
  - Make an overview of the user stories I’m going to work on in the current sprint
  - This is brought in by the Product Owner and agreed with the team
Survey Session Report

• Current assignment:

• Collect detailed information about the users' stories

• If needed, make a mind map of the user stories. It can help later on with the Analyses session
Setup Session Report

• Current assignment:
  • Release ID of the Mobile App
  • Release ID of the backend
  • OS of the handsets
  • Type of handsets
  • Preparation of test data
Has development already delivered something?
Analysis Session Report

• Current assignment:

  • Which part of the software is new/changed?
  • What are the related risks?
  • Come up with test ideas to deal with these risks
  • Make a mind map of the user story (or stories)
I need some software to test now
Ask for something that can be delivered/built and do a First Impression Test.
First Impression Test

• Get acquainted with the new/changed software
• Feedback to improve your test ideas
• Feedback to developers about the code
Deep Coverage Session Report

• Current assignment:
  • Execute tests derived from the test ideas
  • Write down what I have observed
  • Evaluate the information obtained
  • Create new test cases. Adjust test ideas. Re-assess identified risk.
  • Keep making notes.
The sprint has come to an end
Closure Session Report

- Current assignment:
  - Overview of all created session test reports
  - Risks which are not covered must be notified and explained
  - Recommendation to your stakeholders
Layout of Session Report

- Charter
  What will be covered/tested in this session

- Areas
  User Story info
  Environment info
  Device info

- Start
  Time indication when the session has been started

- Tester
  Name of the tester
CHARTER

SCI-645 : Implement message dividers in the confirmation page after signing in multiple tasks

#AREAS
Other | Improvements
User Story | SCI-645
Session | Deep Coverage Session

TestEnvironment | ET-1
Backend Release | R132

Handset | Android | Samsung Galaxy S7 Edge | MBK12
Handset | OS | Android | 6.0.1
Software | Android build | Version | Develop Build local | 201707171051

Handset | iOS | iPhone 7 | MBK31
Handset | OS | iOS | 10.3.2
Software | iOS build | Version | Develop Build local | 201707171032 (0a3ced46a)

START

07/17/17 11:00am

TESTER

Simon Peter Schrijver
Layout of Session Report

• Task breakdown

• Duration
  Short (60), Normal (90), Long (120)

• Session Set Up
  Test Design and Execution
  Bug Investigation and Reporting

• Charter vs. Opportunity
TASK BREAKDOWN
-----------------------------------------------
#DURATION
  short

#SESSION SETUP
  10

#TEST DESIGN AND EXECUTION
  90

#BUG INVESTIGATION AND REPORTING
  0

#CHARTER VS. OPPORTUNITY
  100/0
Layout of Session Report

- Data Files
  Files, screenshots used to support the session report

- Test Notes
  Observations written down during the test session

- Bugs
  Problems that jeopardize the product

- Issues
  Problems that jeopardize the project
DATA FILES
__________________________________________________________
DeCoS_SCI-645_et-psc-170717-c.zip

TEST NOTES
__________________________________________________________
User profiles

555433811 / 985

Test – 1 : Create several tasks, sign them via task list and check the confirmation screen, iOS

Open the MB App with user profile 555433811 / 985.

Create two tasks for this user profile.
- A Manage Customer Data request, change mobile number, is enough.
- An unblock debit card request is created and put on the task list

Sign them all at once
The signing succeeded. A confirmation screen is shown with both text but with a separator

Test result : Passed

BUGS
__________________________________________________________
#N/A

ISSUES
__________________________________________________________
#N/A
Session report naming conventions

- InS_Sprint14-Scissors_et-psc-170714-a.ses
  - InS stands for Intake Session Report.
  - Sprint14 -> the sprint you working on
  - et -> Exploratory Test approach
  - psc -> initials of the tester (creator of session report)
  - 170714 -> date of test execution
  - a -> Sequence number
Session report naming conventions

• SuS_Sprint14-Scissors_et-psc-170717-a.ses
  • SuS stands for Survey Session Report

• SeS_Sprint14-Scissors_et-psc-170717-b.ses
  • SeS stands for Setup Session Report

• AnS_SCI-597_et-psc-170719-a.ses
  • AnS stands for Analyses Session Report
Session report naming conventions

- **DeCoS_SCI-645_et-psc-170717-c.ses**
  - DeCoS stands for Deep Coverage Session
  - SCI-645 -> ID of the user story
- **CIS_Sprint14-Scissors_et-psc-170717-b.ses**
  - CIS stands for Closure Session Report
Example User Story

US - Modify balance notification settings

As a user,
I want to be able to change the balance alert amount
So that I will receive alerts for the appropriate balance
Example User Story

US - Modify balance notification settings

- When a user selects a balance amount (either upper limit or lower limit) a keyboard with only numbers is shown and the user can modify the amount.

- Negative numbers must be possible.

- We do not allow that the lower limit is more than the higher limit

- Pressing done or outside the keyboard will dismiss the keyboard

- Validating that lower number is indeed lower or equal than higher number

- No decimal for the balance amounts.

- Keyboard should not overlap the entry fields.
Do the (Risk) Analysis
Take Notes
CHARTER
================================
Show account payment alert settings

#AREAS
EPIC | Alerting - Payment Alerts - MPS-33
User Story | SCI-597
User Story | SCI-598
User Story | SCI-599
User Story | SCI-600
Session | Analyses Session

START
================================
07/17/17 1:00pm

TESTER
================================
Simon Peter Schrijver

TASK BREAKDOWN
================================

#DURATION
normal

#SESSION SETUP
0

#TEST DESIGN AND EXECUTION
100

#BUG INVESTIGATION AND REPORTING
0

#CHARTER VS. OPPORTUNITY
100/0

DATA FILES
================================

#N/A

TEST NOTES
================================

User Story
As a user,
    I want to see what type of alerts are enabled and for what values
    So that I can instantly see when and why I will receive notifications
Test ideas:
  * Turn on switch for 'Balance'
    - Entry fields become active
    - Can be filled in separately
    - Lower then: Check on entry is related to value in entry field Higher then
    - Higher then: Check on entry is related to value in entry field Lower then
    - Send request with empty entry field
      + no value in entry field Higher
      + no value in entry field Lower
      + no value in both entry fields
    - Both entry fields have same value
      + warning message
    - When switch turned off, entered values remain visible but greyed out
    - Can be cleared, what is reaction of other entry field
    - When 0 is entered and switch is turned off, 0 must remain
    - Delete value and turn off/on switch, placeholder must be shown
    - Enter negative numbers

  * Turn on switch 'Withdrawal'
    - Entry fields become active
    - Send request with empty entry field
    - When switch turned off, entered value remain visible but greyed out
    - When 0 is entered and switch is turned off, 0 must remain
    - Delete value and turn off/on switch, placeholder must be shown

  * Turn on switch 'Deposit'
    - Entry fields become active
    - Send request with empty entry field
    - When switch turned off, entered value remain visible but greyed out
    - When 0 is entered and switch is turned off, 0 must remain
    - Delete value and turn off/on switch, placeholder must be shown

  * Enter new value on an entry field and move focus to other entry field. Previous entry field must keep its new value
  * Clear value on an entry field and move focus to other entry field. Previous entry field must keep its cleared value (0)
  * Enter new value on an entry field and toggle the switch of an other entry field. Previous entry field must keep its new value
  * Clear value on an entry field and toggle the switch of an other entry field. Previous entry field must keep its cleared value (0)

  * Turn off all notifications at once
  * Turn on all notifications at once
  * Turn off one notification at the time
  * Turn on one notification at the time

  * Turn on switch for 'Specific party transfer'
    - Type in an IBAN to search
    - Type in a name to search
    - Type in a partly name and select a name from the auto suggest options
    - Type in a partly IBAN and select a name from the auto suggest options
    - Type in an incorrect IBAN
Execute the test(s)
Write down your observations
CHARTER
Payment alerts - Alert setting Balance, Android - Higher, Lower

#AREAS
EPIC | Alerting - Payment Alerts - MPS-33
User Story | SCI-597
User Story | SCI-598
User Story | SCI-599
User Story | SCI-600
Session | Deep Coverage Session

Handset | Android | LG Nexus 5X | MBK28
Handset | OS | Android | 6.0.1
Software | Android build | Version | Branch_SCI-600 Build local | 201707211321

START
07/21/17 4:30pm

TESTER
Simon Peter Schrijver

TASK BREAKDOWN

#DURATION
normal

#SESSION SETUP
10

#TEST DESIGN AND EXECUTION
80

#BUG INVESTIGATION AND REPORTING
10

#CHARTER VS. OPPORTUNITY
100/0

DATA FILES

DeCoS_SCI-597_et-psc-170721-d.zip

TEST NOTES

Test - 1 : Switch On Balance, Enter values
In 'Payment alerts' screen
Set switch 'Balance' to 'on'
Top on 'Lower than' entry field, enter 60
Top on 'Higher than' entry field, enter 120
Top on button 'Done' of keypad
Set switch 'Withdrawal' to 'on'
Entries are accepted. Focus is not moved away from Balance.

Test Result : Hold
Test - 2 : Switch On Balance, Enter a higher value which is lower than lower value, 'Lower than' entry first

In 'Payment alerts' screen
Set switch 'Balance' to 'on'
Tap on 'Lower than' entry field, enter 100
Tap on 'Higher than' entry field, enter 50
Tap on button 'Done' of keypad

Set switch 'Withdrawal' to 'on'
Higher entry is not accepted. An error message is shown 'Invalid. Type a larger number than "Lower than"'. Note that previous value 'Higher than' entry field is still displayed.

Test Result : Passed

Test - 3 : Switch On Balance, Enter a lower value which is higher than higher value, 'Higher than' entry first

In 'Payment alerts' screen
Set switch 'Balance' to 'on'
Tap on 'Higher than' entry field, enter 50
Tap on 'Lower than' entry field, enter 100
Tap on button 'Done' of keypad

Set switch 'Withdrawal' to 'on'
Lower entry is not accepted. An error message is shown 'Invalid. Type a smaller number than "higher than"'. Note that previous value 'Lower than' entry field is still displayed.

Test Result : Passed

Test - 4 : Switch On Balance, Enter a lower value which is higher than higher value, Change 'Lower than' entry of current setting

In 'Payment alerts' screen
Set switch 'Balance' to 'on'
Tap on 'Lower than' entry field, enter 70
Tap on 'Higher than' entry field, enter 140
Tap on button 'Done' of keypad

Set switch 'Withdrawal' to 'on'
Entries are accepted.
Tap on 'Lower than' entry field, enter 200
Tap on button 'Done' of keypad

Lower entry is not accepted. An error message is shown 'Invalid. Type a smaller number than "higher than"'. Note that previous value 'Lower than' entry field is still displayed.

Tap on 'Lower than' entry field, enter 40
Tap on button 'Done' of keypad
Entries are accepted.

Test Result : Passed
Test - 5: Switch 'On Balance', Enter a higher value which is lower than lower value, Change 'Higher than' entry of current setting

In 'Payment alerts' screen

Set switch 'Balance' to 'on'
Tap on 'Higher than' entry field, enter 200
Tap on 'Lower than' entry field, enter 100
Tap on button 'Done' of keypad

Set switch 'Withdrawal' to 'on'
Entries are accepted.

Tap on 'Higher than' entry field, enter 50
Tap on button 'Done' of keypad

Higher entry is not accepted. An error message is shown 'Invalid. Type a larger number than "Lower than"'. Note that previous value 'Higher than' entry field is still displayed.

Tap on 'Higher than' entry field, enter 150
Tap on button 'Done' of keypad
Entries are accepted.

Test Result: Passed

BUGS

#N/A

ISSUES

#N/A
Scripts for automation
@PaymentAlerts @Main @TestSuite

Feature: Set account payment alert settings

Background:
  Given I am logged in with UBI ON with account default_user

Scenario: PAL001-M1 – For my account, I want to set a notification when my balance is lower than €50
  Given I see the screen dashboard
  # tap on button manage is no longer valid
  And I tap on the button settings
  And I tap on the button app
  And I tap on the button notifications
  # In this screen there is a button in right upper corner called notifications
  And I tap on the button notifications
  And I see the screen payment alerts
  And I switch on the button balance
  And I tap on the input field lower than for balance
  # keypad is shown
  And I enter the value 50 in field lower than for balance
  # keypad disappeared
  And I tap on the button done
  And I tap on the button save
  Then I see the screen payment alerts

Scenario: PAL001-M2 – For my account, I want to set a notification when my balance is higher than €100
  Given I see the screen dashboard
  # tap on button manage is no longer valid
  And I tap on the button settings
  And I tap on the button app
  And I tap on the button notifications
  # In this screen there is a button in right upper corner called notifications
  And I tap on the button notifications
  And I see the screen payment alerts
  And I switch on the button balance
  And I tap on the input field higher than for balance
  # keypad is shown
  And I enter the value 100 in field higher than for balance
  # keypad disappeared
  And I tap on the button done
  And I tap on the button save
  Then I see the screen payment alerts
**Scenario: PAL001-M3 – For my account, I want to set a notification when the withdrawal amount is higher then €75**

Given I see the screen dashboard
# tap on button manage is no longer valid
And I tap on the button settings
And I tap on the button app
And I tap on the button notifications
# In this screen there is a button in right upper corner called notifications
And I tap on the button notifications
And I see the screen payment alerts
And I switch on the button withdrawal
And I tap on the input field higher than for withdrawal
# keypad is shown
And I enter the value 75 in field higher than for withdrawal
And I tap on the button done
# keypad disappeared
And I tap on the button save
Then I see the screen payment alerts

**Scenario: PAL001-M4 – For my account, I want to set a notification when the deposit amount is higher then €150**

Given I see the screen dashboard
# tap on button manage is no longer valid
And I tap on the button settings
And I tap on the button app
And I tap on the button notifications
# In this screen there is a button in right upper corner called notifications
And I tap on the button notifications
And I see the screen payment alerts
And I switch on the button deposit
And I tap on the input field higher than for deposit
# keypad is shown
And I enter the value 150 in field higher than for deposit
And I tap on the button done
# keypad disappeared
And I tap on the button save
Then I see the screen payment alerts
Archive Your Session
Reports
CHARTER

Closure Session report for Sprint 14

#AREAS
EPIC | Alerting - Payment Alerts - MPS-33
Regression | MB 10.0
Other | Improvements
Other | Bugs
Session | Closure Session

START
07/25/17 10:00am

TESTER
Simon Peter Schrijver

TASK BREAKDOWN

#DURATION
normal

#SESSION SETUP
100

#TEST DESIGN AND EXECUTION
0

#BUG INVESTIGATION AND REPORTING
0

#CHARTER VS. OPPORTUNITY
100/0

DATA FILES

#N/A
This Closure session report contains an overview of the session reports made for Sprint 14 of Team Scissors

Intake session
SCI-699 => InS_Sprint14-Scissors_et-psc-170714-a.ses : Intake Session report for Sprint 14

Survey session
SCI-700 => SuS_Sprint14-Scissors_et-psc-170717-a.ses : Survey Session report for Sprint 14

Setup session
SCI-701 => SeS_Sprint14-Scissors_et-psc-170717-b.ses : Setup Session report for Sprint 14

Analyses sessions
SCI-720 => AnS_SCI-597_et-psc-170719-a.ses : Show account payment alert settings

Deep Coverage sessions
SCI-726 => DeCoS_SCI-645_et-psc-170724-b.ses : SCI-597 : Payment alerts - Specific party transfer

Risk:
As we encountered a lot of changes on functionality and layout, the test which are done only provided feedback to the development and design team. A real functional test needs to be done when connection with the back end is in place.

Advice for Product Owner
Based on the tests we have executed we can give the recommendation that the user stories for Sprint 14 can be moved to the next stage. Hence it can not be released to production. The interface with the backend for Payment alerts has not been incorporated in this sprint.
SPRINT GOAL: Implement saving of payment alert settings

Details
- Type: Task
- Priority: Medium
- Affects Version/s: None
- Component/s: None
- Labels: None
- Acceptance Criteria: Please specify!
- Sprint: Scissors 14

Status: DONE (View Workflow)
- Resolution: Done
- Fix Version/s: None

Description
Click to add description

Attachments
Drop files to attach, or browse.

Sub-Tasks
1. Intake Session - InS_Sprint14-Scissors_et-psc-170714-a.ses  DOI: SCI-699  status: DONE  Simon Schrijver
2. Survey Session - SuS_Sprint14-Scissors_et-psc-170717-a.ses  DOI: SCI-700  status: DONE  Simon Schrijver
4. Closure Session - CIS_Sprint14-Scissors_et-psc-170725-z.ses  DOI: SCI-729  status: DONE  Simon Schrijver
### Sub-Tasks

<table>
<thead>
<tr>
<th></th>
<th>Task Description</th>
<th>Status</th>
<th>Assigned to</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Risk Analysis Session - AnS_SCI-597_et-psc-170719-a.ses</td>
<td>✔️</td>
<td>SCI-720 Simon Schrijver</td>
</tr>
<tr>
<td>2</td>
<td>Test : Deep Coverage Session - DeCoS_SCI-597_et-psc-170720-b.ses</td>
<td>✔️</td>
<td>SCI-721 Simon Schrijver</td>
</tr>
<tr>
<td>4</td>
<td>Test : Deep Coverage Session - DeCoS_SCI-597_et-psc-170721-a.ses</td>
<td>✔️</td>
<td>SCI-723 Simon Schrijver</td>
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<td>Test : Deep Coverage Session - DeCoS_SCI-597_et-psc-170721-b.ses</td>
<td>✔️</td>
<td>SCI-724 Simon Schrijver</td>
</tr>
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<td>7</td>
<td>Test : Deep Coverage Session - DeCoS_SCI-597_et-psc-170724-b.ses</td>
<td>✔️</td>
<td>SCI-726 Simon Schrijver</td>
</tr>
</tbody>
</table>
Test: Deep Coverage Session - DeCoS_SCI-597_et-psc-170724-a.ses

Details
Type: Sub-task
Priority: Normal
Affects Version(s): None
Component(s): None
Labels: SessionReport_Sprint14
Acceptance Criteria: Please specify!

Status: Done (View Workflow)
Resolution: Done
Fix Version(s): None

Description
User story test report

Dates
Created: Tuesday 11:03 AM
Updated: Tuesday 11:06 AM
Resolved: Tuesday 11:06 AM

Development
Create branch

Agile
Active Sprint: Scissors 15 ends 06/Aug/17
Completed Sprints: Scissors 13 ended 12Jul/17
Scissors 14 ended 23Jul/17

View on Board
Closure Session - CIS_Sprint14-Scissors_et-psc-170725-z.ses

Details
Type: Sub-task
Status: DONE (View Workflow)
Priority: Normal
Resolution: Done
Affects Version/s: None
Fix Version/s: None
Component/s: None
Labels: SessionReport_Sprint14
Acceptance Criteria: Please specify!

Description
Closure session report

Attachments
Drop files to attach, or browse.

CIS_Sprint14-Scissors_et-psc-170725-z.ses
2 days ago
3 kB
Many thanks to ...

- James Bach
- Jon Bach
- Michael Bolton
Information

- simonsaysnomore.wordpress.com
- www.developsense.com
- www.satisfice.com

- 'Pathway Exploratory Testing' by Marcel Gehlen
  http://thatsthebuffettable.blogspot.nl/2017/07/pathway-exploratory-testing.html
Simon Says
Thank You

Do you have any questions?

@simonsaysnomore
p.schrijver@test-pro.nl