Software Testing

Lesson 7
Test Design Techniques
Dynamic Testing II
Homework Feedback
V1.0

Uwe Gühl

Winter 2013 / 2014

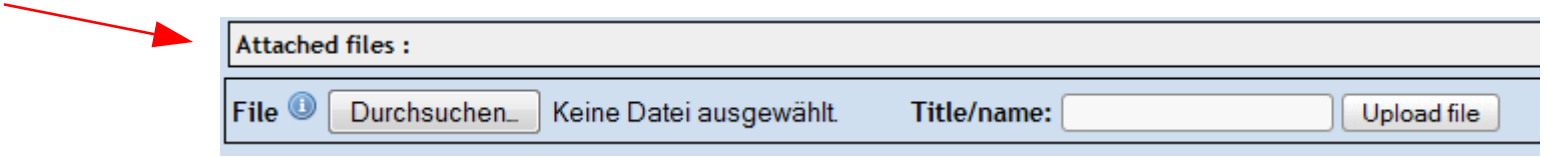
Feedback to Homework 07

Basic information

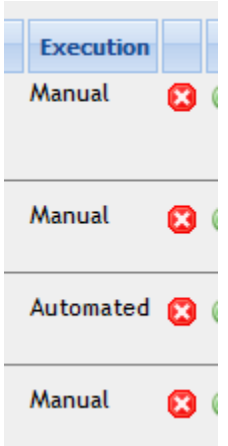
- Software under test (SUT)
  Which software, application, web-site we are testing? Which version, which browser, which operating system?
- Web site test: Which website to enter / to test?
- Test data
  - If credentials required: Test user, test password
  - Synchronization: Detailed test files / folder to be synchronized

Feedback to Homework 07

- General request concerning test cases: “Anyone” should be able to execute it
  - Neutral test data required that could be used
    - test user / test password – **Don't use your private data**!
    - test files



- Kind of execution
  Manual: manual activity of a tester
  Automated: Execution of a (test) tool



Feedback to Homework 07

==> Use concrete (low level) test cases

- Abstract (logical, high level) test case
  A test case without concrete (implementation level) values for input data and expected results. Logical operators are used; instances of the actual values are not yet defined and/or available
- Concrete (low level) test cases
  A test case with concrete (implementation level) values for input data and expected results. Logical operators from high level test cases are replaced by actual values that correspond to the objectives of the logical operators.

Feedback to Homework 07

- Pre conditions
  "*Program has been installed on your windows XP, 7 or 8*"
  - parameter
    Proposal:
    - Define exactly which OS
    - Do three test cases with different priority
  - Reference
    Instead of "*... has been installed*"
    Refer to other test case "*installation successful done*".

Feedback to Homework 07

- Precondition
  Which devices to use?
  "*User log in via diffent platform device.*"
- Precondition
  Good idea: Put required test data into preconditions:
  "*User's information : Username, Password, Name, Email*"

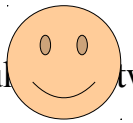
  … including concrete data, or e.g. a general accessible file, where tester could get test data

Feedback to Homework 07

- Roles
  At the beginning of a test case, define roles

  E.g. "*Summary – Uploaded files can be share with other users (User / other user)*"
  Idea: "Roles:
  - Uploader (who uploads a file to share),
  - Fellow (who may access)
  - Not-Fellow (who may not access)"

- User role = Guess



Feedback to Homework 07

- Roles
  User role = Guest → really?!
- *“Pre conditions:*
  User opened and logged in to Snapchat.
  User have at least 1 friend in Snapchat.”
  Proposal: Define two testing roles
- “ *Test step 5*
  Click "Hide" button
  The other users will not be able to look at his/her private profile.”
  Proposal: Define role “other user”

Feedback to Homework 07

- Concrete test cases expected Preconditions
  Using google chrome Browser and already login with google account

  1 User Role = Guest
  2 User open web https://www.draw.io/
  saving diagram is show on screen
  3 Select at "Google Drive" icon
  Authorization confirm button is show on screen
  4 Click "Authorize"
  the system will login with your google drive account

Feedback to Homework 07

Expected results

- Enter concrete expected results
  Not sufficient:
  "*Program should search and show the result of Joule's law*"
- Example: Sync:
  "*The program indicate that it has finished syncing process*"

  Better: How could a tester "measure" success?

Feedback to Homework 07

Expected results

- Test step 3
  “*User enters "name.lastname@gmail.com" (email) and "123456" (password) to input form and click "Sign in"*
  System redirect to homepage with correct user profile”
  What is the correct user profile?

Feedback to Homework 07

Expected results

- *“Test step 6 Click "save" button project file is downloading”*
  How do we know it was successful?
- “ *Test step 4 The download finished. User has a file in a device.*”
  What is the activity of the tester?
  How do we know it was successful?

Feedback to Homework 07

Expected results

- Test step 4
  "*User fill in title, post body content. (As needed select a category, add tags and other settings) User can fill in an information.*"
  What is expected by the tester to do?
  How do we know it was successful?

Feedback to Homework 07

Expected results – difference positive / negative test case

- Test step 3
  "*User enter their username and password. And select login button. (in operating system keyboard)*
  If user entered correct username and password, application redirect user to application home page.

  But if user entered wrong username or password, application redirect user back to login page and notify the error."
  Suggestion: 2 test cases

Feedback to Homework 07

Expected results – difference positive / negative test case

- Test step 4
  " user puts their email in email field *system checks if their put email in the right form (xxx@yyy.zzz).*"
  Suggestion: 1 positive test case,
  1 (or n) 1 negative test case
  ==> Concrete data

Feedback to Homework 07

Expected results – clear results expected

- Test step 1
  “ User put in username
  System check if the username is valid or not”
  Test step 2
  “User put in password
  System check if the password is valid or not”

  Suggestion: 1 positive test case,
  2 negative test cases (user name wrong / username right, password wrong)

Feedback to Homework 07

Test data

- Test user?
  Test.todayAndEver@gmail.com, 123456
- Files to be uploaded
  Concrete movies, pictures, office docs
- Conversion
  MSDoc → GoogleDoc: What should be exactly same (e.g. content, tables)? What could differ (format, tab positions)?

Feedback to Homework 07

- Use parameter
  - Status :
  - Importance :
  - Execution type :
  - Estimated exec. (min) :
  - Keywords:

Feedback to Homework 07

- How much should be tested?
- Example
  “*2 Select "change" in topic language*
  3 Select any language
  4 Repeat step 2”

- Better: Concrete language to check (e.g. based on main customers, most important) or
  Check every language

Feedback to Homework 07

- Good: Active phrase
  "*User click share "link to document"*"

- Concrete description
  "3 select image name "my_test_img.png" dropbox upload the image and show detail (filename,size(kb)) on display
  4 click done button
  The image is already in the dropbox file
  5 click on my_test_img.png in dropbox file
  The image will be shown on display"

Which details?

on website, img viewer?

Backup

Homework (1/4)

1. Forward your latest test strategy out of homework 03 to your fellow student, appearing three lines below your entry in “KU Studentlist 219343 2014”, e. g.

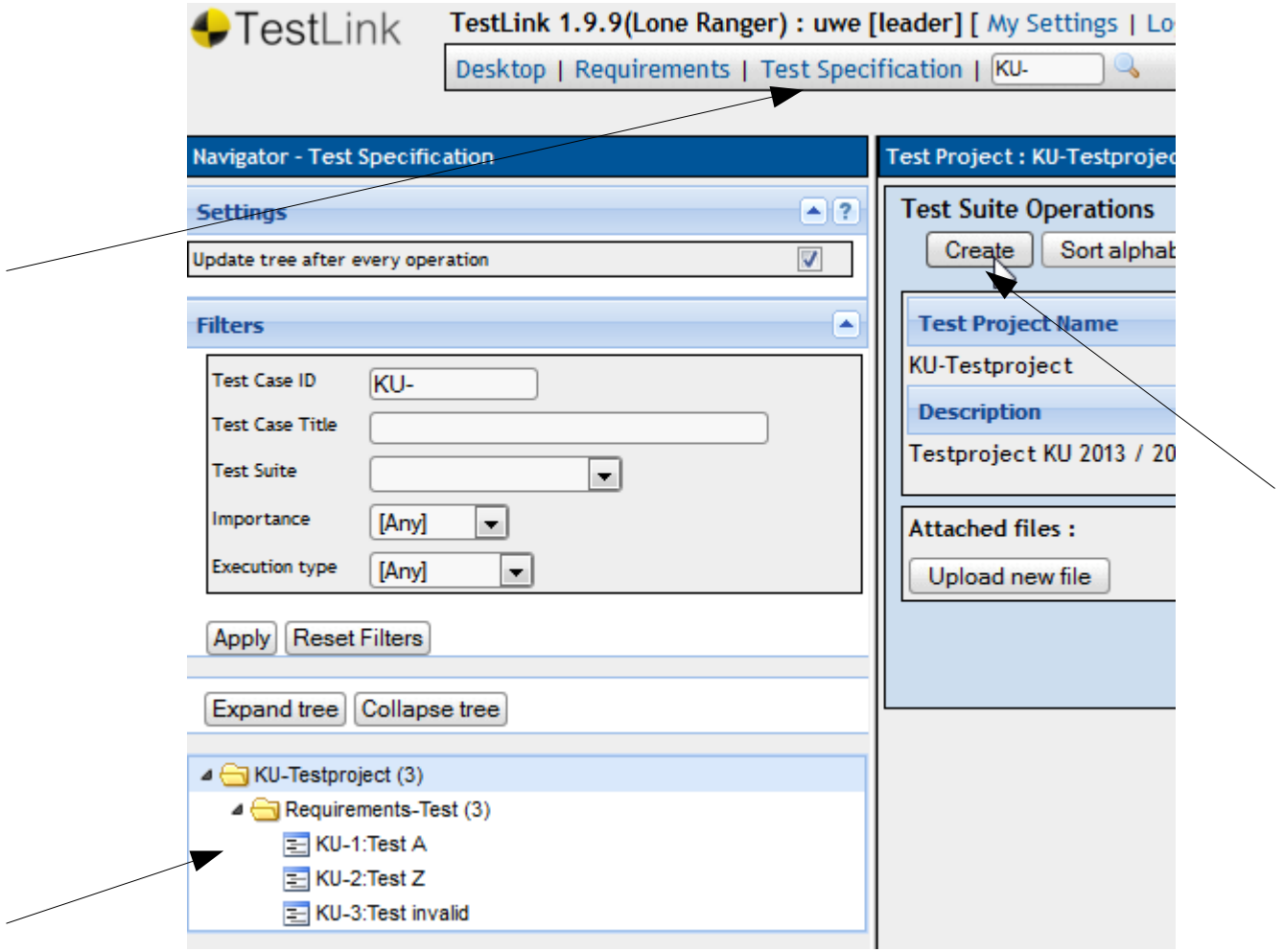
No.	Id		No.	Id
1	5410545036	→	4	5410545079
2	5410545044	→	5	5410545915
	...			
28	5610045428	→	2	5410545044
29	5610045410	→	3	5410545061

2. Ensure that you got a test strategy out of homework 03 from your fellow student, appearing three lines before your entry in “KU Studentlist 219343 2014”.
   Send a gentle reminder in case.

Homework (2/4)

3. Login to “testlink”
   http://158.108.180.78/testlink/login.php
   a) User name, as suggested in “KU Studentlist 219343 2014”
   b) Standard initial password “start01”
   c) Please change your password
   d) In KU-Testproject, section “Test specification” please create a test suite with following naming convention out of “KU Studentlist 219343 2014”
      - No_Id_Nickname Example:
      - 34_2219660007_Uwe

Homework (3/4)


TestLink
TestLink 1.9.9(Lone Ranger) : uwe [leader] [My Settings | Lo
Desktop | Requirements | Test Specification | KU-
Navigator - Test Specification
Settings
Update tree after every operation
Filters
Test Case ID
KU-
Test Case Title
Test Suite
Importance
[Any]
Execution type
[Any]
Apply
Reset Filters
Expand tree
Collapse tree
KU-Testproject (3)
Requirements-Test (3)
KU-1:Test A
KU-2:Test Z
KU-3:Test invalid
Test Project : KU-Testprojec
Test Suite Operations
Create
Sort alphab
Test Project Name
KU-Testproject
Description
Testproject KU 2013 / 20
Attached files :
Upload new file

Homework (4/4)

4. Based on the test strategy, develop in testlink in your test suite 2 test cases.
   a) Please enter steps.
   b) Enter additional information as needed.
5. Get an agreement from your fellow student, that your developed test cases fit to his test strategy.
   In case overwork your test cases, until you get a common understanding.

   Send an email including an exported file contenting your 2 created test cases until end of next week to uweguehl@hotmail.com