

# Pair Testing

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# Pair Testing

According Wikipedia

- Pair testing is a software development technique in which two team members work together at one keyboard to test the software application.
- One does the testing and the other analyzes or reviews the testing.
- This can be done between one tester and developer or business analyst or between two testers with both participants taking turns at driving the keyboard.

## Pair testing gone wrong



"Not so fast Michael! It says here that you should write the test case before you can execute it."

AG

Andy Glover [cartoontester.blogspot.com](http://cartoontester.blogspot.com) © 2012

# Test

## Definition of Test I work with

- In search of quality related information
- To question the product in order to evaluate it, to learn from it
- Gathering information to make an informative decision

# Test

- Testing is all about asking questions and collecting information.
- You can start early with testing

“You can start early with Pair Testing”

# Pair Testing

- The biggest disadvantage is that two persons are working as a pair on the same assignment
- They should be working on different assignments or different parts of an assignment.
- Working as a pair has its advantages

# Working as a team



# Working as a team

- Two different minds and sets of eyes focused on the assignment
- Constant trigger
  - One observes and asks
  - Other thinks and responds
- Great exercise to come up with test ideas
- Unanimous decisions are made
- Work can be divided
  - One execute
  - One takes notes
- Makes you go faster



# Coverage of knowledge



# Coverage of knowledge

## While working on assignment

- Two persons have the same level of knowledge about application(s)
- No single point of failure
- One on leave, the other will cover
  - Quick alignment
  - Easy knowledge transfer

# Learning



# Learning

- Pair consist out of a junior and a senior tester
- The senior is mentoring the junior
- The junior executes the test, the senior is observing and guiding
- The senior can/will ask from time to time clarifying question to see if the junior understands what he is doing.

# Bug investigation





# Bug investigation

- Sometimes you run into a problem which is hard to investigate. You see some behavior of the application under test, but you can not figure out what is wrong
- Pair can consist of
  - Two testers
  - Tester and developer
- Investigate :
  - Replay the error scenario to reveal the bug
  - Test with other input/data to see if there are more problems

# Test preparation



# Test preparation

- Read the documentation separately
- As a pair you continue the preparation :
  - You have a brainstorm session
  - You identify risks
  - You create a mind map of areas to cover
  - You know where the problems are
  - You have questions you need to work on
  - Create test ideas for execution
- The discussion you have with each other will create a flow of thoughts you will not have for sure when you work alone.



# Two different persons



# Two different persons

- Persons involved can have different working times.
- The early person can start with some preparation of the test ideas to be investigated.
- The late person can finish up by completing the test reports and file the bugs that have been found.

# Distraction



# Distraction

- A single tester is easily distracted by his surroundings.
- He loses focus as his mind starts to wander away from the work he supposed to do.
- When you are working as a pair, there is more focus on the assignment.
- If one person starts to wander, the other one will get him back on track.

# Pair Testing

- Advantages
  - Working as a team
  - Coverage of knowledge
  - Learning
  - Bug investigation
  - Test preparation
- Attention points
  - Two different persons
  - Distraction

# Pair Testing

- Active Pair Testing
  - Test preparation
  - Execution of test ideas
- Implicit Pair Testing
  - Investigating a problem
  - Learning
  - Coverage of knowledge
- Works better in an environment where there is room for exploration, thinking and being creative.

# When to do Pair Testing

- Learning perspective
- Support to other disciplines
- Problem investigation

# Who can do Pair Testing

A tester in combination with

- Colleague tester
- Developer
- Documentation Writer
- Customer
- Business Analyst
- Solution Designer
- ...



# Pair Programming differs

## Pair Programming:

- Output is documented code
- Programmer is in control

## Pair Testing:

- Output is information
- Tester is in control

# How to do Pair Testing?

- Team up with a colleague you trust who buys into the concept of Pair Testing
- Determine the focus and scope of the Pair Testing session
- Plan the work for Pair Testing upfront
- Set up the environment
- Evaluate the outcome

# Outcome

In Pair Testing, there can be several outputs:

- Test documentation
  - Test plan
  - Test ideas
- Defect report(s)
- Session report(s)
- Shared knowledge
- Information for stakeholders to formulate decisions

# Simon Says

## Thank you



Do you have any questions ?