Program szkolenia:

Strategie testowania i utrzymywania wysokiej jakości

Informacje:

Nazwa:	**Strategie testowania i utrzymywania wysokiej jakości**
Kod:	**QA-strategy**
Kategoria:	Testowanie dla QA
Odbiorcy:	testerzy, developerzy
Czas trwania:	3 dni
Forma:	50% wykłady / 50% warsztaty

The course will explain how different factors can influence the strategy of testing. The course will explain how to suit up the strategy for a project.

The second goal of training is meant to have common understanding of what testing means. It is often observed that people even with bigger experience in testing applications have a different perspective what qa is, which may lead to different testing standards in team.

Zalety szkolenia:

- Strategic approach
- Metrics
- Tools and best practices

Szczegółowy program:

1. Introduction to testing

- 1.1. What is testing?
- 1.2. What is QA?
- 1.3. What is QA...not?
- 1.4. QA Roles in project
  - 1.4.1. Tester
    - 1.4.1.1. Can a tester be a Business Analyst?
  - 1.4.2. Defect Manager and Quality Manager - Big and small projects
  - 1.4.3. The Enemy of the Tester - Developer
- 1.5. Cooperation with non QA people - One Team
- 1.6. When testing is done?
  - 1.6.1. Exit criterions
- 1.7. Testing for better Software
- 1.8. Testing Documents
  - 1.8.1. Testing strategy
  - 1.8.2. Testing policy
- 1.9. Testware
- 1.10. Environment

2. Levels of testing - based on V Model

- 2.1. Unit Testing
- 2.2. Integration Testing
- 2.3. System Testing
- 2.4. Acceptance Testing

- 2.5. System Integration Testing

3. Types of testing - based on Agile Quadrants

- 3.1. Test Pyramid examples

4. Defect Management - can it influence the quality strategy?

- 4.1. What is a defect?
- 4.2. Cost of a defect
- 4.3. Herding of the defects
- 4.4. Defect Lifecycle
  - 4.4.1. Basic statuses
  - 4.4.2. Standard
  - 4.4.3. Optional cases statuses
  - 4.4.4. Acceptance Testing with internal confirmation statuses
- 4.5. A Perfect Defect Report
  - 4.5.1. Severity vs Priority
  - 4.5.2. Steps to reproduce
  - 4.5.3. Expected result
  - 4.5.4. Other fields
- 4.6. Defect Issues and special cases
  - 4.6.1. Defect Ping-pong in Integration and Acceptance testing
  - 4.6.2. Never to be solved low defects
  - 4.6.3. Testability of application vs Defects (?)
  - 4.6.4. Specification Defects? Gaps?
  - 4.6.5. Test Case Defects?
  - 4.6.6. Who creates a defect?
  - 4.6.7. Repairing a defect without analysis

- 4.6.8. Defect Antipatterns
  - 4.6.8.1. Defect in e-mail
  - 4.6.8.2. Insulting
  - 4.6.8.3. Personal opinion
  - 4.6.8.4. Too much information
- 4.6.9. Acceptance testing: Who pays for defect and smuggling new functionality
- 4.6.10. Defect Decision Board - Sprint with defects
- 4.6.11. Sinking with defects - Bug busters week
- 4.6.12. Consultation hours

5. Metrics in scope of quality

- 5.1. Are metrics really useful when talking about quality?
  - 5.1.1. Quality of the system
  - 5.1.2. Quality of the testers work
  - 5.1.3. Quality of developers work
- 5.2. Examples of QA metrics
  - 5.2.1. Count of defects
  - 5.2.2. Number of reopens
  - 5.2.3. Tests passed vs Test Failed - Greener is better?
  - 5.2.4. Coverage reports

6. Testing techniques

- 6.1. Whitebox Techniques
- 6.2. Blackbox Techniques

7. A Good Test Scenario

- 7.1. Attributes of test scenario
- 7.2. Good Case vs Bad Case

7.3. Manual Case vs Automated Test - should be the same?

7.4. Granularity - Level of details in steps

7.5. Number of steps in scenario

7.6. Expected Result

7.7. Can test be a specification?

8. Execution of testing

8.1. Bottom2up

8.2. Up2Bottom

9. Requirement Based Testing

10. Risk Based Testing

11. Test Automation

11.1. Advantages of automation

11.1.1. Regression of automation

11.2. Disadvantages

11.2.1. Cost of automation

11.2.2. Maintenance

11.3. Continuous Integration

12. Other QA Topics

12.1. Estimation in testing

12.1.1. Small changes in code, big effort to test

12.1.2. Big changes in code, hardly nothing to test

12.1.3. Risks, and increasing effort

12.2. Reviews (Optional)

12.2.1. Spec Reviews

12.2.2. Code Reviews

12.2.3. Test Case Review