Risk analysis / test strategy practice

219343 Software Testing

3x2 possible projects

- KU registration system
  - Web application
  - Mobile application
- Photo sharing system
  - Web application
  - Mobile application
- Discussion board
  - Web application
  - (Mobile application)

What to do?

- Risk analysis
- Test strategy based on the risk analysis

Risk analysis: enumerate

- With in these categories, list potential risks:
  - Functionality
  - Performance and Reliability
  - Usability
  - Error handling
  - Localization
  - Compatibility
  - Maintainability
  - Security

Example: a software for room booking

1. Functionality Risk

- The program may book the room incorrectly.

- The program may not be able to handle the situation when many people are booking rooms at the same time.

- The program may not be able to handle complex promotional booking requirements.

2. Performance Risk

- If the website gets popular, it may be overloaded.

Risk analysis: analysis

- Try to identify the likelihood and impact level
- Sort the risks by the products of the two factors

Choosing test techniques

- For each risk, try to identify appropriate test techniques to test the product.

- Don't forget to think about the risk (challenges) in the chosen techniques.

Examples

- Risk: The program may book rooms incorrectly
- Test techniques:
  - Use automated tests to cover various simple room booking scenarios
  - Use exploratory testing to cover complex booking scenarios
- Potential challenges:
  - What are simple room booking scenarios to cover with automated tests?
  - We might need to figure out the effort ratio between automated testing and exploratory testing.