

# Software Testing Mentor

[www.softwaretestingmentor.com](http://www.softwaretestingmentor.com)

**ISTQB Foundation Level and Software Testing Training**

[www.softwaretestingmentor.com](http://www.softwaretestingmentor.com)

# **Module 4**

## **Test Design Techniques**

### **Session 5 – Experience Based Testing Techniques**

# Experienced Based Techniques

It is true that testing should be rigorous, thorough and systematic but this is not all about software testing

Non systematic testing (i.e. testing based on person's knowledge, experience etc.) also play important role in testing

Reason for this is that some defects are hard to find with systematic testing approach and so a good bug hunter can find those defects with his experience

We will discuss two experience based techniques in this session

- Error Guessing
- Exploratory Testing

# Error Guessing

This is a Test design technique where the experience of a tester is used to find the components of software where defects might be present.

It is mostly done by experienced testers who can use their past experience, skills and intuition to find defects in software.

Error guessing has no rules for testing, it only uses the testers previous skills.

Error guessing is not a replacement of formal testing, it should be used to complement other formal testing

# Advantages and disadvantages of Error Guessing

## Advantages

- Error guessing is used to complement systematic testing techniques
- Used to identify special tests which cannot be easily found by other formal testing techniques

## Disadvantages

- Error guessing is non structured and not systematic
- Success & effectiveness of error guessing depends on the skills and experience of tester

# Some Error Guessing Tests

In error guessing testers can think of situations where software will fail. **For example:**

- Division by zero
- Pressing submit button on form without filling any entries.
- Entering wrong data in the fields and checking software behavior.
- Null in mandatory fields
- Entering reserved characters (@&) in web forms
- Entering quotes (") in data input fields

# Approach to design Error Guessing tests

If somebody says for the software “That could never happen”, always consider that scenarios in error guessing test

Structured approach of Error Guessing can be followed, which is to create a list of possible errors and then design test cases to reproduce those errors.

Tester can use his experience and skills to build list of possible errors. For Example

- “Submitting form with all customer data field blank”
- “Entering future date as DOB for customer”

# Exploratory Testing

Exploratory testing is a hands on approach in which testers are involved in minimum planning and maximum test execution

As testers do minimum planning and maximum execution of the software, they get in depth idea about the software functionality, once the tester starts getting insight into the software he can make decisions to what to test next.

In exploratory testing tester focuses more on how the software actually works

The test design and test execution activities are performed in parallel without creating much test documentation

Test logging is undertaken as test execution is done, key aspects of testing, any further testing required and defects are documented

Some notes are made by testers during exploratory testing to produce test report

Exploratory Testing is mostly performed by skilled testers.

Exploratory testing is mostly used if the requirements are incomplete and time to release the software is less.



# Advantages and disadvantages of Exploratory Testing

## Advantages

- It is useful when there is little or no specification documentation
- Very useful when there are severe time pressures
- It complements other more formal testing, helping to establish more confidence in software
- It assists tester to learn about software quickly
- Help ensure the most serious defects are found
- It is good to get rapid feed back

## Disadvantages

- It is not scripted or structured
- It mostly relies on the skills of the tester to carry out the testing

# Conclusion

## Experienced Based Testing Techniques

- Error Guessing
- Exploratory Testing

## Advantages and disadvantages of Error Guessing

## Approach to design Error Guessing tests

## Advantages and disadvantages of Exploratory Testing

**THANK YOU!!!**