Software Testing Mentor

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ISTQB Foundation Level and Software Testing Training

Module 3 Static Test Techniques

Session 2 – Review Process

Review Process

Reviews vary from informal to formal

Formality of reviews depends on many factors like Development maturity, Legal and Statutory requirements

Formal review process consists of six main steps

Informal reviews are the most common types of reviews

Informal reviews are not documented

Phases of a formal review

formal review follows a formal process.
Formal review consists of six main steps

- Planning
- Kick-off
- Preparation
- Review meeting
- Rework
- Follow up

Planning

Planning process starts with request for review Author submits the request for review to moderator(or inspection leader)

Moderator takes care of scheduling dates, time, place, invitation of the review

Moderator ensures that the document is ready to be reviewed i.e. document meets entry criteria

Select how many pages to review

Assigning who will play what roles in review meetings

Identifying the exit criteria for review

Scheduling the later stages of the review

Kick-off

Kick off is an optional step in review procedure

Kick off is an initial meeting to ensure that everyone is at the same level regarding the document to be reviewed

A short introduction about objectives of review and the documents is given

Any relationship between the document under review and other documents is explained

Distribution of the documents under review, source documents, related documents is also done

Role assignment, checking rate, pages to be checked is discussed in this meeting

Entry criteria for review is also discussed

Preparation

In preparation phase participants work individually on the documents to identify defects, doubts, comments according to their understanding about document

They record all the issues like spelling mistakes and annotate them in document which is provided to author after meeting ends

In this phase participants should not try to exceed the checking rate of documents (Usually 5-10 pages and hour)

Review Meeting

Review meeting typically consists of three phases

- Logging phase
- Discussion phase
- Decision phase

Logging phase

- Issues/defects identified by individuals are logged page by page, reviewer by reviewer by the author or scribe
- NO real discussion is allowed in this phase to make it more efficient
- If issues requires discussion it is handled in discussion phase
- Every defect and the severity of the defect is logged in logging phase
- Informal reviews may not have the logging phase, they can directly start with discussion phase

Discussion Phase

- Discussion about the defects and issues start in this phase
- Participants bring forward their comments and reasoning about the issues in this phase
- Moderator prevents discussion from getting personal
- Moderator ensures that all the discussion items have been covered and have the outcome or future action plan defined

Decision Phase

- In this phase the decision on the documents under discussion is made based on the exit criteria
- If the document does not meet the exit criteria then re-reviews are done

Rework

In rework phase author improves the reviewed document based on the comments in review meeting

The changes made by author are re-reviewed in follow-up phase

If author does nothing for the defect then he indicates that he has considered the issue

Follow-up

All the changes made by the author in rework phase are re-reviewed in follow-up phase

Moderator is responsible for ensuring that action has been taken on all the logged issues

Moderator also distributes the updated document to all the participants and collects feedback

Roles and Responsibilities

Participants of the formal review process should have adequate knowledge about the review process

Formal review is most successful when the participants are guided by trained moderators

Main roles in the review process are:

- The Moderator
- The Author
- The Scribe (or Recorder)
- The Reviewers
- The Manager

The Moderator

Moderator is also know and review leader, he leads the review process

He in co-operation with the author determines the type, approach and composition of the review team

He performs entry check and follow up work after review

He schedules the meetings

He circulates the review documents before meetings

He coaches other team members

He leads the discussion and stores the collected data

The Author

Author is the person who is responsible for the document which has to be reviewed

Authors responsibility during meeting is to understand about defects and issues in document

Author should try to learn as much as possible about how to improve future documents

The Scribe (or Recorder)

Scribe is also known as a Recorder

His main role in review meetings is to record each defect and suggestions for process improvement

Author play this role because it helps them to understand their own comments better during re-work

Having another person as Scribe can be advantageous as it makes Author to think more about the document

The Reviewers

Reviewers are also called as checkers or inspectors

Their main task is to check the document for any defects

Reviewers should be chosen from specific technical or business background based on the type of review

Reviewers should be chosen to represent different perspectives and roles in the review process

The Manager

Manager decides the execution of reviews, allocates time in project schedules

He also determines if the review objectives have been met

He also takes care of any review training requests required for participants

Depending on the managers background he can also play role in review meetings

Types of Review

There are three main review types

- Walkthrough
- Technical Review
- Inspection

Walkthrough

It is a step-by-step presentation of the document to establish common understanding and gather feedback about document

It is lead by the author of the document

Author does most of the preparation

Participants for walkthrough are from different departments and not required to do detailed study about document

Walkthrough is useful for high level documents like requirements specifications and high level architectural documents

Dry-runs can be done to validate the documentation

Goals of Walkthrough

To present document to the stakeholders from technical and business domains and gather feedback

To explain the and establish common understanding of the document

To examine the validity of the proposed solutions

Technical Review

Technical review focuses on the achieving consensus on technical content of document

Technical reviews are less formal than inspections

Defects are found by experts like Architects, chief designers

Technical review is documented defect-detection process which involves peers and technical experts

Performed as a peer review without management participation

It is ideally lead by a trained moderator or technical expert

Checklists, logging list, issue logs are optional

Goals of Technical Review

Asses the value of technical concepts and alternative

Inform participants about technical content of document

Establish consistency in use of technical concepts

Ensure that technical concepts are used correctly

Inspection

Inspection is the most formal review type

The inspection document is checked thoroughly by reviewers before inspection meeting

Any defects found in inspection meeting are just logged – Discussion about defects is postponed until discussion phase

Inspection is led by a trained moderator (not by the author)

It has defined role during the process

Involves peer for examining the product

Defects are logged in issue log

It is a formal process based on rules and checklists with entry & exit criteria

Metrics gathered and analyzed for optimizing the process

Goals of Inspection

Improve the quality of the document under review

Remove defects as early as possible

Improve quality of product

Come up to a common understanding about document by exchanging information

Learn from defects found and improve the process

Success factors for reviews

Critical success factors that improve the chances of success for reviews include:

Find the champion

- Champion will lead the process
- He should have expertise, enthusiasm and guide moderators and participants
- Management support is needed

Pick things which really count

- Pick most important documents for review(Requirements document, architecture documents etc.)
- Make sure each review has clear objectives
- Don't review every document by inspection
- Involve right people

Success factors for reviews cont.

Clearly plan and track activities

- The time spent in reviews should be accounted in project plans
- People involved should be promoted to track hours spent on reviews, rework etc.

Provide training to participants

- Train participants on review techniques (especially Inspections)
- Provide special training to moderators as they play critical role in review process

Manage people issues

- Reviews should not get personal
- People issues and Psychological issues should be dealt by moderator

Success factors for reviews cont.

Follow the rules but keep it simple

- Make the process as formal as the project culture or maturity level allows
- Do not become too detailed
- Do not become too theoretical

Continuously improve the process and tools

- Continuously Improve the process and tools involved
- Improve learning

Report results

- Report results to people involved
- Discuss consequences of defects if not found by reviews

Conclusion

Phases of a formal review

Roles and Responsibilities

Types of Review

Success factors for reviews

THANK YOU!!!