

**SOFTWARE TESTING - ISYS1085-7** 

# **TUTORIAL SHEET: WEEK 8/9**

# Software Inspections: Overview and Planning



Introduction	
Roles for the Software Inspection	2
Week 8 Activities, Tasks and Responsibilities	3
Week 9 Inspection meeting	4

### Introduction

This is a guide based on the <u>Peer Inspection Model paper</u> tailored for our tutorial exercise.

#### **Roles for the Software Inspection**

#### Author: <Insert Name>

- Creator or maintainer of the work product to be inspected.
- Initiates the inspection process by asking the peer review coordinator to assign a moderator.
- States his or objectives for the inspection.
- Delivers work product and its specification or predecessor document to moderator.
- Works with Moderator to select inspectors and assign roles.
- Addresses items on the Issue Log and Typo Lists
- Reports rework time and defect counts to moderator.

#### Moderator: <Insert Name>

- Uses Inspection Moderator's Checklist as a work aid.
- Plans, schedules, and leads the inspection events.
- Works with author to select inspectors and assign roles.
- Assembles inspection package and delivers it to inspectors at least 3 days prior to the inspection meeting.
- Determines whether preparation is sufficient to hold the meeting. If not, reschedules the meeting.
- Facilitates inspection meeting. Corrects any inappropriate behavior. Solicits input from inspectors as reader presents each section of the work product. Records any action items or side issues that arise during the inspection.
- Leads inspection team in determining the work product appraisal.
- Serves as verifier or delegates this responsibility to someone else.

- Delivers completed Inspection Summary Report, Typo List and Issue Log to the organization's peer review coordinator Tutor Ivan Sun.
- Documents: Inspection moderator checklist

#### Reader: <Insert Name>

 Presents portions of the work product to the inspection team to elicit comments, issues, or questions from inspectors.

#### Recorder: <Insert Name>

- Records and classifies issues raised during the inspection meeting.
- **Documents**: Inspection Issue Log, Typo log

#### Inspector (Reviewer): <Insert Names>

- Examines work product prior to the inspection meeting to find defects and prepare for contributing to the meeting.
- Records preparation time.
- Participates during the meeting to identify defects, raise issues, and suggest improvements.
- **Documents:** Inspection Typo log, Inspection Issue log, Java Checklist

#### Week 8 Activities, Tasks and Responsibilities

Activity	Task	Who?	Done
Planning	1. Give moderator the work product to be inspected and supporting documents, such as specifications, predecessor documents, or pertinent test documentation.	Author	
	2. Determine whether work product satisfies inspection entry criteria.	Moderator	
	3. Based on the size and complexity of the work product, determine how many inspection meetings will be required.	M/A	
	4. Select inspectors and assign roles to individuals. Gain	M / A	

-		
	agreement from the other inspectors to participate.	
	5. Determine whether an overview meeting is required.	Author
	6. Schedule the inspection, and possibly overview, meetings and distribute a meeting notice.	Moderator
	7. Distribute the inspection package to the participants at least 3 working days prior to the inspection meeting.	M/A
Overview	8. Describe the important features of the work product to the rest of the inspection team. State inspection objectives.	Author
	9. Evaluate the assumptions, history, and context of the work product.	M/A
	9.5. Review the Java checklist and tailor as required.	M/A
Prepara- tion	10. Ask Individual inspectors to prepare with specific objectives in mind, such as: checking the consistency of cross-references; checking for interface errors; checking traceability to, and consistency with, predecessor specifications; or checking conformance to standards.	M/A
	11. Examine the work product, to understand it, find defects, and raise questions about it. Use the appropriate <u>defect</u> <u>checklist</u> to focus attention on defects commonly found in the type of product being inspected. Use other analysis methods to look for defects as appropriate.	Inspectors
	12. Log minor defects found, such as typographical errors or style inconsistencies, on the <u>Typo List</u> . Deliver this to the author at or prior to the inspection meeting.	Inspectors

# Week 9 Inspection meeting

The activities are tabled here only to help prepare for the following week.

Task	Who?	Done
1. <b>Open the Meeting:</b> Introduce the participants (if necessary) and state their roles, state the purpose of the inspection, and direct inspectors to focus their efforts toward finding defects, not solutions. Remind participants to address their comments to the work product under review, not to the author.	Moderat or	

<b>2. Establish Preparedness</b> : Ask each inspector for his or her reparation time and records the times on the Inspection Summary Report. If preparation is insufficient, reschedule the meeting.	Author/ Moderat or	
3. <b>Present Work Product:</b> Describe portions of the work product to the inspection team.	Reader/A uthor	
4. <b>Raise Defects and Issues:</b> Point out concerns, potential defects, questions, or improvement opportunities after the reader presents each section.	Inspector	
5. <b>Record Issues:</b> Capture the information in Table 2 on the Issue Log for each issue raised. State aloud what was recorded to make sure it was recorded accurately.	Recorder	
6. <b>Answer Questions:</b> Respond briefly to any specific questions raised, and contribute to defect detection based on special understanding of the work product.	Author	
7. <b>Make Product Appraisal:</b> After all meetings scheduled for a given inspection are complete, decide on the work product appraisal, selecting from the options in Table 3. If the inspectors disagree, assign the most conservative appraisal offered by any of the inspectors.		
8. <b>Sign Inspection Summary Report</b> : All participants sign the Inspection Summary Report to indicate their agreement with the inspection outcome.	All	
9. <b>Collect Inspection Feedback.</b> Ask the inspectors to evaluate the inspection and suggest improvements, using the Inspection Lessons Learned Questionnaire.	Moderat or	

## **Appendix: Example Inspection Team**

#### Week 8: Team members are appointed for Team Monday-

- Justin (author), Duncan (moderator)
- Tester A , B , C (all Inspectors)

Bayu and Stella will decide on work to be inspected, and Stella will send each member work product and any necessary logs/forms. All and other members need to review work product and complete individual logs/forms.

#### Week 9: Inspection meeting.

- Justin will be the author. Duncan will be the moderator (make sure the meeting runs to plan) and appoint Reader (Tester A) and Recorder (Tester B).
- Reader will go introduce the work product (eg. method by method) then all Inspectors will share their defects for the methods, and Recorder will write down a team defect log.
- At end of meeting, Moderator will collect all logs and forms and upload via canvas for Ivan for marking.