Inspection of Requirements Exercise

Objectives
- ➢ To gain experience in conducting formal inspection.
- ➢ To develop skills in detecting defects at the document level.
- ➢ To gain experience in collection of defect and inspection data.

Preparation (individual)
1. Read the document (DigitalHome Software Requirements Specification version 1.2) in detail, looking for defects.
2. Focus on looking for defects in **Functional Requirements (Sections 4.1, 4.2, 4.3, 4.4, 4.5)**
3. Record the time you start reading and the time you finish, and any time for which you were interrupted on the inspection log.
4. Document all the issues found on the inspection log. Classify all problems as major or minor. Identify the location associated with each defect.
5. Make your recommendation:
    - ➢ the document should be accepted as it is,
    - ➢ accepted with minor changes, or
    - ➢ major changes and an additional inspection are required.

Inspection (group)
1. After the preparation, you will form a team of 4-5 (reader, moderator, producer, and tester). Decide who will play which role.
2. Debate the correctness and quality of the document, referencing your preparation work.
3. All team members are responsible for pointing out possible defects in the document.
4. The moderator must control the meeting.
5. The moderator records the results. On the inspection summary form, for each defect, record who found the defect and log its location.
6. Calculate the metrics: yield, inspection rate, defect density, etc.
7. Make your recommendation:
    - ➢ the document should be accepted as it is,
    - ➢ accepted with minor changes, or
    - ➢ major changes and an additional inspection are required.

Roles

Reader: the reader describes each piece of the code to the group.

Moderator: the moderator runs the meeting, helping the team to come to agreement, and records each decision or criticism once it is agreed upon.

Producer: the producer is the one who wrote the document. It is his responsibility to defend the document when another teammate brings up a potential problem that does not turn out to be a problem.

Tester: the tester focuses on problems related to correctness of the document.

Notes:
- Inspectors should not review at a very fast rate.
- Each member must record all the time spent, during the inspection process.
- Focus on identifying defects, not fixing them.
- The requirements document is a not a design specification. Check that design elements have not been added to the requirements document. However, design constraints are acceptable.

Individual Inspection Log

Name: _____   Date: _____

Team: _____

Part/Level: _____   Cycle: _____

Moderator: _____   Owner: _____

Time Information

Start Time	
End time	
Interruption	
Total review time	

Defect Information

Location	Description	Severity major	minor	Classification

Summary

Number of major defects: _____   Number of minor defects: _____

Major/Total defect: _____   Size of reviewed artefact: _____ *page or LOC*

Inspection rate: _____ *pages/hour or LOC/hour*   Yield (major defects): _____*defects/hour*

Recommendation:

Accept as is: ____

Accept with minor change: ____   Major change and reinspection: _____

Inspection Summary (group)

Team: _____ Date: _____
Part/Level: _____ Cycle: _____
Moderator: _____ Owner: _____

Individual Data

Staff Name	Defects		Preparation Data			Yield
	Major	**Minor**	**Size** (*Size Units*)	**Time** (**hours**)	**Rate** *(Size Units/hr)*	
Totals:						

Defect Data

No.	Defect Description	Severity		Staff				
		Major	**Minor**	(**finding major defects**)				
Totals:								
Unique Defects:								

Product Size: _____ **Size Measure:** _____ **Common Defects:** _____

Est. Total Defects: _____ **Total Number Found:** _____ **Number Left:** _____

Meeting Time: _____ **Total Insp. Hours:** _____ **Overall Rate (size/hr):** _____

Major Defects/Total: _____ **Defects / *Size Unit*:** _____ **Defects / Hour** _____

Recommendation:

Accept as is: _____
Accept with minor change: _____   Major change and reinspection: _____