

# Lecture 16

## Validating the Requirements: *Reviews & Inspections*

Com S/SE 409/509

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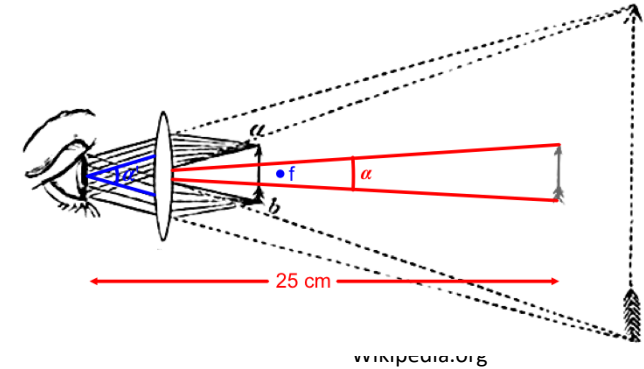
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Robyn's Office Hours: **Tues & Thurs, 9:30-10:45**

Wandi's Office Hours: **Mon 10 am. & Wed 7 pm**

Olukorede's Office Hours--**Wed 10**

**HW3 due 10/15**



# Reviews & Inspections of SRS

Quality Gateway: Application of a checklist to assure the quality of individual requirements before they become part of the Software Requirements Specification (SRS). [Robertsons, Glossary].


Goal of SRS review/inspection: assure the quality of the SRS

## Reviewing the SRS

Who?

\* Requirements analyst, team members, project manager, architect, designer, quality assurance, domain expert, system test engineer

How?

1. Planning: set up meeting
  2. Preparation: each reads SRS using a checklist of common defects
  3. Meeting: step together through SRS, record defects found, assign action items
  4. Re-work: resolve defects and open issues
  5. Follow-up: confirm and report
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## Inspecting the SRS

**Formal (Fagan) Inspection**: a more structured review

- Assigned roles
  - Author: delivers spec; fixes defects afterwards
  - Moderator: leads meeting
  - Reader: steps participants through SRS
  - Recorder: logs defects & issues
  - Inspectors: **prepare** by examining SRS for defects; **identify defects & raise issues during meeting**

team  
members

# Benefits of Formal (Fagan) Inspection

- ✧ • Author not on “hot seat”
- Checklist of typical defects aids preparation & inspection
- 2 hours max
- Effective way to remove requirements defects early
- Reduces cost of development

*“Fagan inspections can be a very effective weapon to ensure the correctness and completeness of your requirements. Try them.” [Robertsons]*

# Examples from a Formal Inspection

[P. Jalote textbook: excerpts below are from an SRS for scheduling courses, based on input about classrooms, lecture times & time preferences of instructors.]

1. "There are no more than 30 courses."

"Input\_file\_2 contains information about the courses being offered."

"For input\_file\_2 containing 20 courses and up to 5 preferences for each course, the reports should be printed in less than 1 minute."

30? Incomplete

2. "The postgraduate (undergraduate) courses should be scheduled in the order in which they appear in the input file."

"Preference is given to postgraduate courses over undergraduate courses for scheduling."

Inconsistent?

Unclear

3. "d is a digit." "valid lecture times are of the form MWFd or MWFdd or TTd or TTd:dd or TTdd:dd."

"There are no more than 15 valid lecture times."

Inconsistent!

Incorrect? TT3 TT10:30  
TT3:30

4. "The system will run on a Sun workstation with 16 MB RAM."

5. Issues: more than 1 section? more than 1 instructor for course?

Missing?? Incorrect Assumptions.

→ Constraint:  
Infeasible!