Software Inspections & Peer Reviews

TRAINING

Duration

1 day

Instructor

Karl E. Wiegers

Class Limit

20 students

Prerequisite

None

Price

On-site

Please contact SPC for pricing (contact information on page 2)

Public Training

$795 (1 day)

Materials Provided

- Student manual containing the course slides
- Student handouts with class exercises
- *Peer Reviews in Software: A Practical Guide* by Karl E. Wiegers (Addison-Wesley Professional, 2001)

Effective peer reviews of all types of work products are essential if software development organizations are to reduce their cost of producing software. Formal inspections of requirements specifications, designs, source code, and other work products are a proven means for finding errors and improving the quality of software products.

This seminar shows software practitioners how to effectively apply both formal inspections and less formal reviews to software products. The inspection process and roles are described in detail. A practice inspection session will help students learn to conduct effective reviews on their own projects.

On completion of this seminar, participants will be able to:

- Explain why peer reviews add value at all stages of software development.
- Describe the differences between formal and informal reviews.
- List the participants in an inspection and describe their roles.
- Describe the activities performed at each stage in an inspection.
- Summarize the guidelines for conducting a successful review.
- Select an appropriate review strategy for each work product.
- Participate in an effective review or inspection.

Intended Audience

This seminar will be useful to software engineers, managers, quality engineers, and others who wish to learn how to systematically search for defects in software work products of any kind. Non-software people who review requirements documents have also found the seminar to be easy to understand.

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Software Inspections & Peer Reviews

Instructor

Karl E. Wiegers is a leading speaker and consultant in the requirements engineering and software process improvement arenas. As Principal Consultant with Process Impact, he conducts training seminars for corporate and government clients worldwide and speaks at numerous industry events. Previously, Karl spent 18 years at Eastman Kodak Company.

The author of four books and over 160 articles, Karl has twice won the Software Productivity Award which honors excellence in productivity-enhancing products and books. Karl received a B.S. degree in chemistry from Boise State College, and a M.S. and Ph.D. degrees in organic chemistry from the University of Illinois. He is a member of the IEEE, IEEE Computer Society, and ACM.

Outline

Introduction to Software Peer Reviews
- definition and objectives of reviews
- discussions about reasons why people don't do reviews now and what kind of work products can be reviewed
- peer reviews and process improvement
- building reviews into the project plan
- relative cost of fixing defects depending on when found
- reported benefits of reviews
- peer reviews and process improvement models
- effectiveness of testing vs. inspection

Software Inspections
- what makes a review formal
- what kind of people should review various work products
- definition of inspections
- inspection entry and exit criteria
- roles of inspection participants
- characteristics of effective moderators
- inspection rates
- the inspection process and descriptions of the stages of an inspection
- the inspection package
- defect checklists
- inspection records and forms
- metrics to keep on your inspections

Other Peer Review Methods
- other review methods besides inspections, including team reviews, walkthroughs, and peer deskchecks
- pluses and minuses of formal inspections vs. informal reviews

Making Peer Reviews Work for You
- video and discussion: "Scenes of Software Inspections"
- guidelines for successful reviews
- documenting your organization's peer review process
- critical success factors for reviews
- review traps to avoid

Practice Inspection
- overview meeting
- individual preparation
- inspection meeting

TRAINING

For more information on this or other SPC Springboard courses, please visit www.spcspringboard.com or e-mail SPC at info@spc.ca

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