Honourcode, Inc.
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Tutorial Information
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Effective Design Reviews

A Four-Hour Tutorial

Quality Control of System Design Depends on Good Reviews

Complex products and systems require effective teams. With today's complexity, no individual is capable enough to stand alone. One of the best methods to improve design quality is through the use of effective design reviews, which help:

- Create the team baseline
- External reviewers see hidden faults
- Team approval of each other's parts
- Customer approval
- Document baseline for the record

Honourcode, Inc. offers a tutorial to give you powerful methods to create effective design reviews.

***You should attend this tutorial if you are*:**

- Leader or key member of a design team
- Concerned about the team success
- Interested in creating better quality designs
- Looking for practical methods to use

***Topics covered*:**

This tutorial covers the topic of design reviews from beginning to end, emphasizing their contribution to quality control. It starts with explanations of the goals and types of design reviews and then walks through the steps to hold an effective review. At each step, the course includes description of common pitfalls and how to avoid them.

Design Review Goals – (30 minutes) What any design review hopes to achieve. Specific goals and objectives. Impact of design reviews on the quality of the design effort.

Types of Design Reviews – (30 minutes) The four primary dimensions of a design review. When to hold what different kinds of design review. What differences exist in different kinds of design reviews. Internal reviews vs. customer reviews. Proposal vs. contract reviews. Requirements reviews, system reviews, product reviews, test reviews.

Preparation – (45 minutes) How to get ready for a design review. Planning, scheduling, pre-review information, authority and responsibility, review readiness. *Includes short-answer exercise on review preparation with discussion.*

Conducting the Review – (45 minutes) What to do during the review. Role of Quality Control personel during a review. Stand-up presentations vs. peer reviews vs. document reviews. Typical schedules, room arrangement, required roles, record-keeping, personal behavior, effective communications.

Case Study – (30 minutes) Study of a real development project to evaluate the impact of design reviews. Based on the implementation of safety air bags in automobiles.

After the Review – (45 minutes) What records to keep and why. Baseline development and creation. Evaluating design review effectiveness with metrics. Enterprise-wide evaluation of design reviews. Using design review data in Quality Control.

Summary – (15 minutes) Review of the material and key messages. Course evaluation.

***The Presenter*:**

Mr. Honour has been in international leadership of the engineering of systems for nearly a decade, part of a 33-year career of complex systems development and operation. His energetic and informative presentation style actively involves class participants. He was the founding chair of the INCOSE (International Council on Systems Engineering) Technical Board in 1994, was elected to INCOSE President for 1997, and continues as Director for Sponsored Research. He was selected in 2000 for Who's Who in Science and Technology. He has been a systems engineer, engineering manager, and program manager at Harris Information Systems, E-Systems Melpar, and Singer Link, preceded by nine years as a US naval officer flying P-3 aircraft. He has led or contributed to the development of 16 major systems, including the Air Combat Maneuvering Instrumentation systems, the Battle Group Passive Horizon Extension System, the National Crime Information Center 2000, and the DDC1200 Digital Zone Control system for heating and air conditioning. Mr. Honour now heads Honourcode, Inc., a consulting firm offering effective methods in the development of system products. Mr. Honour has a BSSE (Systems Engineering) from the US Naval Academy and MSEE from the Naval Postgraduate School.