

“Get the Right Stuff, Fast – Software Development West 2002”

A report by Rich Wayne, April 2002

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Armed with chimes, giant sticky-notes, and a big inflatable hammer, consultant Ellen Gottesdiener deftly solved two difficult problems Tuesday: teaching a large, diverse class how to collect and manage requirements, and keeping them awake. Only a sprinkling of attendees used any kind of tools to collect and manage requirements; only a small minority, in fact, used a formal methodology at all. But they all came with tough questions:

- “How do I get accurate requirements when the customer is unavailable, uninterested, or (in the case of a startup) unknown?”
- “How do I generate user-verifiable requirements that make developers say: ‘Cool!’?”
- “How do I get to the point that the client and I have the same understanding of the requirements?”
- “How do you ferret out those hidden requirements – those unknown to the customer at the outset?” (Gottesdiener: “And those become the boogeyman later in the project, right?”)
- “How do I convince management of the value of direct customer involvement?”
- “How do I decide the appropriate level of detail in requirements documents?”

Gottesdiener, the author of *Requirements By Collaboration* (Addison Wesley Longman, 2002), pointed out that it’s critical to collect high-quality requirements, quoting research studies showing that errors in requirements consume something in the neighborhood of one-third of total software development costs. “If fixing a defect at the requirements-gathering stage costs you, say, 20 cents,” she said, “fixing after the product has gone out will cost you 20 dollars.” She gave the class a framework for classifying requirements, and an introduction to the detailed techniques used by specialists in the field. Perhaps even more important, she gave attendees some go/no-go items that are crucial to any successful effort, like a glossary of terms, identifying the stakeholders (Who’s the project sponsor? Who’s the project’s champion?), and ensuring that the collected requirements all trace back to business needs. It’s especially important, she added to phrase the requirements in objective, testable language: “not just ‘fast’ – how about ‘response time under three seconds’?”

She reminded the class that it’s important to respect the people who will be affected by the software, quoting Ed Yourdon: “We’re the only field, aside from the illegal drug trade, that refers to our customers as *users*.” And, she said, requirements gathering is a serious business: “People’s lives are going to change when you build software.”

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