

Process Models

Agile

- Embrace change – requirements never fixed
- Deliver early and deliver often

Lean

- Think big, act small, fail fast

Ethics

Australian Computer Society (ACS)

- Primary of Public Interest
- Enhancement of Quality of Life
- Honesty
- Competence
- Professional Development
- Professionalism

Requirements

Functional Requirements

- Requirements (or capabilities) for functions (specific behaviour) that must be performed by the system
- Primary focus of most requirements activities

Non-Functional Requirements

Constraints on performance or quality

- Product Properties – Requirements on the behaviour of the product (min 8 transactions per second)
- Process Properties – Requirements on the practices used to develop / produce the system (Follow a standard)

Elicitation

Interviews

Effective for understanding problem and eliciting general requirements

Workshops

Multiple stakeholders; resolve conflicting requirements, quickly gather broad system usage

Focus Groups

Broad stakeholder representation. Gather broad-based ideas

Observations

Time consuming. Users often cannot describe everything they do.

Questionnaires

Inexpensive and easily administered to remote sites. Good questionnaires difficult to write

System Interface Analysis

Look at other system's functionality

User Interface Analysis

Study existing systems. What should be replicated and avoided

Document Analysis

Existing system documentation. Industry standards or legislation

Use Cases

<<include>> relationship

Factor out common behaviour in use cases (scenario always uses included steps)

<<extend>> relationship

Factors out optional behaviour in use cases (when there are optional or uncommon steps)

Prioritisation

MoSCoW

Must have, Should have, Could have, Won't have

Review

Types of Reviews

Technical Review

Review for conformance to standards or achievement of project milestones

Software (Fagan) Inspection

Peer review with formal process. Focus on defect detection and description

Structured Walkthrough

Less formal than inspection. No formal data collection

Audit

External review of work product. Usually late in the process

Inspection Participants

Moderator

Responsible for leading inspection process

Recorder

Keeps records of all significant inspection results

Producer

Responsible for work under review

Reader

Presents work instead of producer in formal inspection

Reviewers

Directly concerned with, and aware of work under review

Inspection Process

Request → Entry → Planning → Overview (optional) → Preparation → Inspection Meeting → Rework → Follow-up → Exit → Release

Issue Classification

Major, Minor, Grammatical, Questions