Educause NLII

January 2003, New Orleans

Making Yourself Heard in the e-Learning Standards Debate
(program session – “How to Listen to Heavy Metal”)

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Overview

Specification Lifecycle and Where HE Fits In
Why Higher Education’s Opinion Counts
How IMS Listens to Needs
Best Practice
The Role of Educause/NLII
Specification Lifecycle

- Requirements
- Spec. Writing
- Implementation

Evolution
Role of Higher Ed in Spec Lifecycle

Provide *requirements*

Participate in *spec writing* (IMS HE members)

*Implement* or Adopt Spec-compliant tools and content

Provide feedback to vendors or IMS, thereby informing subsequent *evolution* efforts
Why Higher Education’s Opinion Counts

Silence allows other perspectives to dominate

Expertise
  Best Practice
Research
Expectations
  Vendors
New Learners
How IMS Listens to Needs

Who
- Members
- Experts
- Practitioners (Users and Developers)

How
- General Meetings
- Special Interest Group Meetings
- White papers and surveys
- Online
Diagram 1

Technical Advisory Board

Chair(s)
Editor
Secretary

Requirements Committee

Chair

SIG

Development Committee

Chair

Project Group
Best Practice

Gathering Needs
Use a standard methodology
Use the parts that are appropriate for the participants and the stage of the specification development.

Communicating Needs
Use standard formats
Provide input to IMS and your vendors
Methodologies

Software Engineering

Rational Unified Process (RUP) – meta methodology accepted by the Object Management Group and an industry standard.

Use Case – Methodology for describing interactions between users and systems

Architecture: Charêtte – a rapid design process
Frequently-used terms

Usage Scenario – a narrative description describing a specific interaction between a real or fictional person(s) and system(s).

Use Case – a generalized version of one or more usage scenarios.

Behavior – an activity carried out by or on behalf of a user

Requirement – a constraint on a behavior addressing Function, Performance, Data, Capacity or Testing.

Function – action that occurs as part of a behavior

Types of Use Cases

Casual – narrative paragraph

Formal
- Primary Actor
- Scope
- Level
- Stakeholders and Interests
- Precondition
- Minimal Guarantee
- Success Guarantee
- Main Success Scenario
- Extensions

Multiple Levels – High Summary, Summary, User Goal, Subfunction

Notational

Reference: Writing Effective Use Cases, Alistair Cockburn
Using Charêttes for Requirements Gathering

- Best used in face to face meetings
  - 2-4 small groups per meeting
  - 6-8 people/group
  - Designated note taker and presenter per group
- All groups work on the same problem
- Limited time – e.g. 20-30 minutes
- Each group presents
  - Usage scenario
  - Behaviors (at a user goal level of detail)
  - Key requirements
- Combine results and use with other design methodologies in additional facilitated meetings.
General Example

Usage Scenario – John bought a red car from Car World.

Casual Use Case – a person buys an automobile from a dealer.

Behaviors – person buys car; dealer sells car

Requirement – the color of the car is red

Function – buy; sell
Technology Example

Usage Scenario – Jane wrote her English paper during her vacation away from school on her laptop and submitted it online on time for her English 101 course.

Casual Use Case – student writes assignment and submits it online

Behaviors – student uploads assignment; student submits assignment; system stores assignment

Requirement – stored assignments include the identity of the user who submitted it, time it was submitted, and the course identifier.

Function – upload, submit, store
Recommended Process

1. Use Charêttes to generate usage scenarios capturing different perspectives on a problem.
2. Group scenarios
3. Create casual use cases at a user level of detail
4. Create formal use cases (may require facilitator or hand off to use case specialist)
5. Identify Behaviors
6. Identify Requirements (may require facilitation)
7. Hand off for refinement and expression in more technical forms
Complexity of Artifacts

- Normal People
- Geeks

- Usage Scenarios
- Use Cases
- Behaviors
- Requirements

- Additional RUP Artifacts

- Facilitation

- Complexity
The Role of Educause/NLII

Voting member

Suggestions
  – Facilitation
    • March 7 – NLII meeting
  – Education – White paper
  – Translation – creating formal use cases

Other Ideas?