Basis of Software Requirement Engineering

LECTURE # 2
Chapter 1 – Karl Weigers

Requirements Engineering Requirements Development Requirements Management Elicitation Analysia Specification Validation

REQUIREMENT DEVELOPMENT

- Identify product's user classes
- Eliciting needs from user classes
- Understanding user tasks to achieve business objective
- Analyze information given by users and divide them as different levels of requirements, rules, solutions

REQUIREMENT DEVELOPMENT

- Negotiating implementation priorities
- Understanding quality attributes importance
- Translating user needs into requirement specification document and models
- · Reviewing and validating requirements

REQUIREMENT MANAGEMENT

- · Defining requirement baseline
- Reviewing proposed requirement changes & evaluating the impact of change before approval
- Incorporating the approved requirement changes into the project in a controlled way

REQUIREMENT MANAGEMENT

- Keeping plans current with the requirements
- Tracing individual requirements to their corresponding design, code, test cases
- Tracking requirement status and change activity throughout the project

REQUIREMENT DEVELOPMENT MANAGEMENT BOUNDARY Marketing, Customers, Management requirements Development Requirements Development Requirements Development Requirements Current Daseline Marketing, Customers, Management Requirements Current Daseline Requirements Current Daseline Requirements Customers, Customers, Change Process Project Changes Process

REQUIREMENT RISKS

- Insufficient User Involvement
- Creeping user requirements
- · Ambiguous requirements
- Gold Plating
- · Minimal Specifications
- Overlooked user classes
- Inaccurate Planning

REQUIREMENT PROCESS - BENEFITS

- Reduced Development rework
- · Better understanding of user community
- Reduces expectation gap
- Customer loyalty
- Fewer requirement defects
- · Fewer unnecessary features

REQUIREMENT PROCESS - BENEFITS

- · Reduced scope creep
- Reduced project chaos
- High customer satisfaction
- More accurate system testing estimates

Excellent Requirement - Characteristics

- Complete
- Correct
- Feasible
- Necessary
- Prioritized
- Unambiguous
- Verifiable
- Atomic

Requirement Specification - Characteristics

- Complete
- Consistent
- Modifiable
- Traceable

END OF TOPIC #2

-COMING UP!!!!!!
-Business Analysts & Requirement
Engineering Practices
-Business Requirements

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