

Overall Project Process and Plan for All Projects

Topics covered

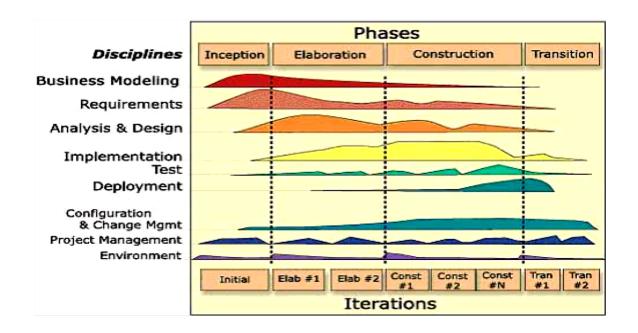
- Software process applied to class projects
- Planning for your project
- Q&A

Process Applied

- Projects follow some elements of RUP (not fully following)
 - Core workflows
 - Requirements
 - Project managements
 - Analysis and design
 - Implementation
 - Testing
 - Artefacts/work products
 - Project development plan
 - Vision document
 - Use case model and description
 - Software architecture document
 - Test plan and test cases

RUP

- Activities are grouped into workflows
- Includes four phases Inception, Elaboration, Construction, and Transition
- Each phase is divided into one or more iterations



RUP Phases

Inception

Establish the business case for the system.

Elaboration

 Develop an understanding of the problem domain and the system architecture.

Construction

System design, programming and testing.

Transition

Deploy the system in its operating environment.

RUP Workflows

Business modeling

The business processes are modeled using business use cases

Requirements

 Actors who interact with the system are identified and uses cases are developed to model the system requirements

Analysis and Design

 Software architecture and design are created and presented via architectural models, component models, object models, etc.

Implementation

Software components are implemented

RUP Workflows (cont'd)

Testing

 Includes testing activities performed to verify and validate the product against the requirements

Deployment

- Activities to release and deploy the product and help users to use the product successfully
- Configuration and Change Management (SCM)
 - Manages changes to the software product
- Project Management
 - Manages software development

Environment

 Prepares and ensures software tools, processes, and hardware for the development team

Weekly Scrum

- Teams need to practice weekly scrum
- Three questions need to be answered in the practice session
 - What have been done since last week?
 - What issues the team is facing?
 - What will be accomplished by the next scrum?

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Project Timeline

- One iteration or sprint = 2 weeks
- Inception
 - Week 1, 2 (PA1)
 - Project plan, vision document, weekly report
- Elaboration
 - □ Week 3 6 (two sprints) PA2, PA3
 - Revised project plan
 - Revised vision document
 - Use case document with a revised use case model
 - Design document (including UI prototypes, architecture document)
 - Test plan
 - Weekly reports

Project Timeline (cont'd)

- Construction (PA4, PA5)
 - Two sprints (4 weeks)
 - Week 7 11
 - Revised artifacts submitted in Elaboration
 - Test cases
 - Source code
 - Test report
 - Defects
 - Weekly reports
 - Final review week 11 (likely after the final exam)
 - Presentation + Demo
 - Final submission

Roles and Responsibilities

- Each role will be responsible by one main person and one backup
- Team lead/project manager
 - Responsibilities
 - Write project plan (including assign tasks)
 - Monitor and report status (weekly report)
 - Coordinate meetings
 - Contact point for the project
- Business analyst
 - Responsibilities
 - Document requirements (interview customers, etc.)
 - Communicate with team members about the requirements
 - Coordinate to review requirements

Roles and Responsibilities (cont'd)

Designer

- Responsibilities
 - Design the system (components, classes, databases, etc.)
 - Design user interface
 - Create Software Architecture Document

Implementer

- Responsibilities
 - Write source code
 - Perform unit test
 - Review source code
- Require 3 people for this role

Roles and Responsibilities (cont'd)

- Tester
 - Responsibilities
 - Write test plan and test cases
 - Perform system test
- Summary
 - Roles
 - Team Lead/Project manager
 - Business Analyst
 - Designer
 - Implementer
 - Tester
 - Tasks performed by all roles
 - Attend meetings
 - Review requirements
 - Present status review

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Question?