

# Overall Project Process and Plan for All Projects

# Topics covered

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

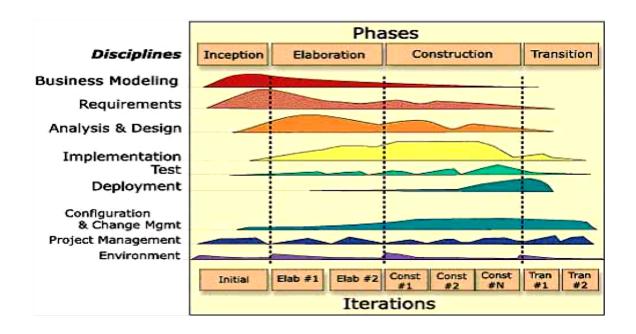
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## **Process Applied**

- 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

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## 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 (26/10 8/11)
    - Project plan, vision document, weekly report
- Elaboration
  - □ Week 3 6 (two sprints)
    - 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
  - 3 sprints (6 weeks)
  - Week 7 12
    - Revised artifacts submitted in Elaboration
    - Test cases
    - Source code
    - Test report
    - Defects
    - Weekly reports
  - Final review week 12 (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?