CS3500 Software Engineering

2017/2018

Dept. Computer Science
Dr. Klaas-Jan Stol

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Welcome to CS3500

Graded Task 3

Actions for Graded Task 3

Please work in the same teams as for Task 1, 2.

Graded Task 3:

Based on what you have learned thus far, design and document an architecture for an e-voting system for Ireland.

In particular, the following "views" should be included:

- A Use-case diagram (see slide deck L04b)
- One or more Module-view diagrams (slides L05b)
- One or more Component & Connector view diagrams (slides L05b)
- One or more Allocation view diagrams (slides L05b)

Goal:
A. To learn selected UML diagram types
B. To learn how to draw some UML using an editor
C. To learn how to document a system.

Actions for Graded Task 3

Input:

1. Your architecturally significant requirements document (Graded Task 2) and/or the Input document for Graded Task 1.
2. A UML editor.

Process:

1. Familiarize yourself with the different types of UML diagrams.
2. Familiarize yourself with the UML editor.
3. Develop the different types of diagrams, and present them in a report.
4. The design can be simple.

Which UML editor?

Any one you like—as long as it supports UML 2.x

Options:
- http://www.draw.io (online)
- Visual Paradigm (installed on lab PCs, but a bit complex!)
- Any other program/site will do.

Make sure you:
- Test it before you invest lots of time
- Know how to export diagrams.
- Can export diagrams as PDF (preferred) or PNG (2nd best choice) format. PDF format is best because it is vector-based.

Actions for Graded Task 3

Output:

A report with the 4 types of diagrams.

1. Use-cases
2. Module view diagram(s)
3. Component & Connector diagram(s)
4. Allocation diagram(s)

Graded Task 3

Contents of Deliverable D3:

- **Cover page** with team member names, student IDs, and assigned Team Name
- **Table of contents**
- **Introduction page** that describes the system briefly.
- **Set of sections**, each with the specific diagrams as specified.
  - For each diagram, provide a brief description.

Graded Task 3

- Submission must be in PDF format.

- Submit through Moodle by November 11.

- Please: Only 1 submission per team.

How do we learn UML?

- Many sources online; easy to get lost (or drown in information)

- I do not recommend reading the official standard—it is > 700 pages.

- A good resource is this page:

  http://www.uml-diagrams.org/uml-25-diagrams.html

Which UML diagrams needed

Required diagram	Use this UML diagram type
Use-case diagram	• Use-case
Module view diagram	• Package diagram *Optional – use only as you see fit:* • *Class diagram* • *Composite structure diagram*
Component & Connector view diagram	• Component diagram
Allocation view diagram	• Deployment diagram

Evaluation criteria

- Are the UML diagrams correct? (syntactically)

- Are the UML diagrams consistent?

- Are the UML diagrams clearly described?
  —a diagram alone is not a design, and must come with some description to highlight important aspects (don't go overboard either)

Questions?

Please email: k.stol@ucc.ie

Thank you
for your attention

Questions & suggestions can be sent to:
k.stol@ucc.ie