Menti Q&A QR

Introduction

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Menti Q&A

- We will take lecture questions via Menti
  - Use the link/QR code on the slides
  - https://www.menti.com/alo6c2asngoh
  - Will try and keep the same link each week
- Questions
  - Please make them specific
  - Anonymous unless you identify yourself
- Can **vote** for important questions
  - Please use this instead of duplicating
- Can take *some* questions in person
  - In case Menti fails or you don't have a device
  - Difficult for everyone to hear when the class is large

Overview

- Last semester: the *processes* behind building software.
  - Are we building the right thing?
  - How to manage a project
  - How to place software in a wider context

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- Last semester: the *processes* behind building software.
    - Are we building the right thing?
    - How to manage a project
    - How to place software in a wider context
- This semester: how we *write* the software
    - What does good design look like?
    - What tools do we have for design/architecture?
    - How do we know we built the right thing?
    - What common patterns/architectures exist?

Caveats

There are **a lot** of ways to build software

- We focus on:
  - Object Orientated Programming (OOP)
  - Java Programming Language

This is not *better* or more *correct* than another style/tool!

Good Software Engineers are **flexible**

Pre-requisite Knowledge

- You know intermediate Java
- You can compile and execute Java programs (for the labs)

Admin

- 2h lecture each week (lots of breaks, don't worry!)
- JMS 641
- Labs each week **[Starting from 25th Jan]**
  - Wed 9:00–10:00 / 12:00–13:00 / 13:00–14:00
  - We have some friendly lab tutors: a very valuable resource, please speak to them if you need any help
- Second Assessed exercise later in the course (TBC; likely starting week 6)
- Questions not answered in labs can be posted to Moodle
  - Common questions covered in the lectures
- Private questions via email
  - Use COMPSCI5059 in the subject (else you will not get a reply!)

Proposed Lecture Schedule (Subject to Change!)

	Topic
Week 1	Recap of Sem 1 + Recap of OOP
Week 2	Challenges, Handling Complexity, Coupling and Cohesion
Week 3	Object Orientated Design
Week 4	Tools for Software Modelling (UML)
Week 5	Testing
Week 6	Errors/Safe Classes/Java Packages
Week 7	Live Refactoring Example
Week 8	Design Patterns (Creational)
Week 9	Design Patterns (Structural)
Week 10	Design Patterns (Behavioural)
Week 11	Revision of Sem 1 and 2

To Do Well

- SE is a *practical* subject
    - Go to the Labs!
    - *Critically Read* lots of code (github and otherwise)
    - Write lots of code