CS5351 Software Engineering 2024/25 Semester A Examination

Dr W.K. Chan

Department of Computer Science

Email: wkchan@cityu.edu.hk

Website: http://www.cs.cityu.edu.hk/~wkchan

Exam (Tentative)

- Date: 18 December 2024 (Wed)
- ◆ Time: 18:30-20:30
- Venue: LI-1503 and LI-1507
 - Come to the right lecture theatres.
 - In-Person and on-Campus
- Closed-Book Exam
 - A maximum of 3 sheets of notes in the A4 paper size can be brought into the venue during the examination.
- Write answers in the question paper

In Case of Mitigation Request

- ◆ CityU website: https://www.cityu.edu.hk/sgs/student/masters/assessment/illness
- "... inform your home academic unit offering the programme in which you are enrolled."
 - e.g., MSCS => CS; MSEIE => EE
- via AIMS, follow the URL above
 - "The ORIGINAL of all supporting documents ...
 no later than 5 working days of the examination"

CITY UNIVERSITY OF HONG KONG

Course code & title :	CS5351 Software Engineering	
Session :	Semester A 2024/25	
Time allowed:	Two hours	
This paper has 16 pages	(including this cover page).	7 questions
This paper consists	of 7 questions.	Angwar all quactions
2. Answer ALL quest	ions.	Answer all questions
If additional space 16.	for answering a question is required, use Page	
This is a closed-book ex	amination.	
unauthorized materials	are allowed during the whole examination. If any or aids are found on a student during the examination, ect to disciplinary action.	

	1	2	3	4	5	6	7	lotal
Max	10	15	15	10	20	15	15	100
Mark								

Student number

Student ID:

Seat Number:

Seat Number

Reminder

- Each answer box is designed to have **sufficient space** for a hand-written answer (e.g., in point 16)
 - If there is insufficient space, use Page 16
 - Raise hands if you need more blank papers
- Assess the **general quality** of an answer
 - not on whether an answer contains a specific keyword for a particular scoring point.
- All parts of all questions should be answered.

Questions 1-7

- 1. Software Process
- 2. Software Requirement
- 3. Software Architecture
- 4. Technical Debt and Software Maintenance
- 5. Code with Quality
- 6. Program Testing
- 7. Modern Code Review

Answers should include justifications and explanation

- Question 1
 - A relatively short case study is given
 - Ask for process improvement

- Question 2
 - A relatively long case study is given
 - Ask for requirement elicitation using a specific method and its process

- Question 3
 - Yet another case study is given
 - Quality attribute statements
 - Design the architecture

- Question 4
 - TD process, maintenance issue
 - Give examples

- Question 5
 - Process and statistics are provided

- Sketch code/diagram for design concepts and principles
- Code smell, refactoring, process, and concerns

- Question 6
 - A piece of code is given
 - Fuzzing
 - Test Oracle
 - Debugging

- Question 7
 - A case study is given
 - Customize the process