

Dr. T.W. Chim (E-mail: twchim@cs.hku.hk) **Department of Computer Science, The University of Hong Kong**



Learning Outcomes

Object-oriented Programming

Be able to understand better the objectoriented approach in programming. Students should be able to analyze and design a computer program to solve real world problems based on object-oriented principles.

Java Programming

Be able to write computer programs to solve real world problems in Java

Good Documentation Practice

To learn and appreciate the importance and merits of proper comments in source code and API documentations

GUI Programming

Be able to write simple GUI interfaces for a computer program to interact with users, and to understand the event-based GUI handling principles.



Syllabus

Object-oriented Programming

- OOP overview
- Abstraction, encapsulation, and information hiding
- Inheritance (Interface) and polymorphism (Java array and array list)

Java Programming

- Java heap and garbage collection, Java math library, Java exception, Java package
- Java IO package and object serialization, Java network programming

Good Documentation Practice

✓ Program documentation: JavaDoc

GUI Programming

GUI control and GUI libraries
Java AWT and Java Swing:
Event handling, Layout
manager

Online Examination

- Date: May 27, 2021 (Thursday)
- Time: 2:30pm 4:30pm (grace period until 4:45pm)
- Venue: Anywhere at your convenience
- Note: Open Book and Programming
- Important URLs:
 - Actual OLEX websites:
 - https://olex.hku.hk/exam/register.html
 - https://olex.hku.hk/exam/take-exam.html
 - Drill OLEX websites:
 - https://drill-olex.hku.hk/exam/register.html
 - https://drill-olex.hku.hk/exam/take-exam.html
 - Our course Moodle page

Mock Examination

- Date: May 7, 2021 (Friday)
- Time: 9:30am 9:45am (grace period until 10:00am)
- Venue: Anywhere at your convenience
- Note: Open Book and Programming
- Content: 1 simple programming question
- Note 1: Please use this chance to try whether you can run Zoom invigilation session, Desktop sharing session, do local recording, open OLEX, read course materials and use Eclipse to write/compile/run programs on the same computer at the same time!
- Note 2: Your results in mock examination will NOT be counted towards your final grade.

How does the paper look like?

THE UNIVERSITY OF HONG KONG

FACULTY OF ENGINEERING DEPARTMENT OF COMPUTER SCIENCE

COMP2396B: Object-Oriented Programming and Java

Date: May 27, 2021 Time: 2:30pm-4:30pm

Only approved calculators as announced by the Examinations Secretary can be used in this examination. It is the candidates' responsibility to ensure that their calculator operates satisfactorily, and candidates must record the name and type of the calculator on the front page of the examination script.

Instructions:

- This paper contains 3 sections.
- Answer ALL questions.
- Candidates are permitted to refer to any electronic/printed/handwritten materials in the examination. Internet searching and crowdsourcing from group messages, online forums or social media, etc. are strictly forbidden.
- For Section A and Section B, you should provide typeset or handwritten answer and upload the
 answer file in word or pdf format. For Section C, you should provide typeset programs and
 upload the .java files.
- · Write your University No. on the first page of the answer script.
- Total Mark is 100.

Question No.	Mark
Section A	20%
Section B	50%
Section C	30%
Total	100%

Contents

- The total score is 100.
- There will be 3 sections.
 - Section A: MC Questions (20%)
 - Section B: Short Questions (50%)
 - Section C: Programming Question (30%)
- Suggested time distribution:
 - Section A: ~30 minutes
 - Section B: ~60 minutes
 - Section C: ~30 minutes

Thank you for taking this course and wish you superpass exams of all courses!



What should you do now?

```
try {
          reviseLectureMaterials();
          doAssignments();
          doOnlineExam();
catch (DoNotUnderstandMaterialsException e1) {
          sendEmail("twchim@cs.hku.hk");
catch (DoNotKnowHowToDoAssignmentsException e2) {
          sendEmail("twchim@cs.hku.hk");
catch (DoNotKnowHowToDoExamException e3) {
          readLectureSlides();
          readTextBook();
          reviseSamplePrograms();
catch (FaceTechnicalProblemException e4) {
          sendEmail("exam@cs.hku.hk");
          sendEmail("twchim@cs.hku.hk");
          doExam.continue();
finally {
          completeCOMP2396();
          return new JavaExpert();
```

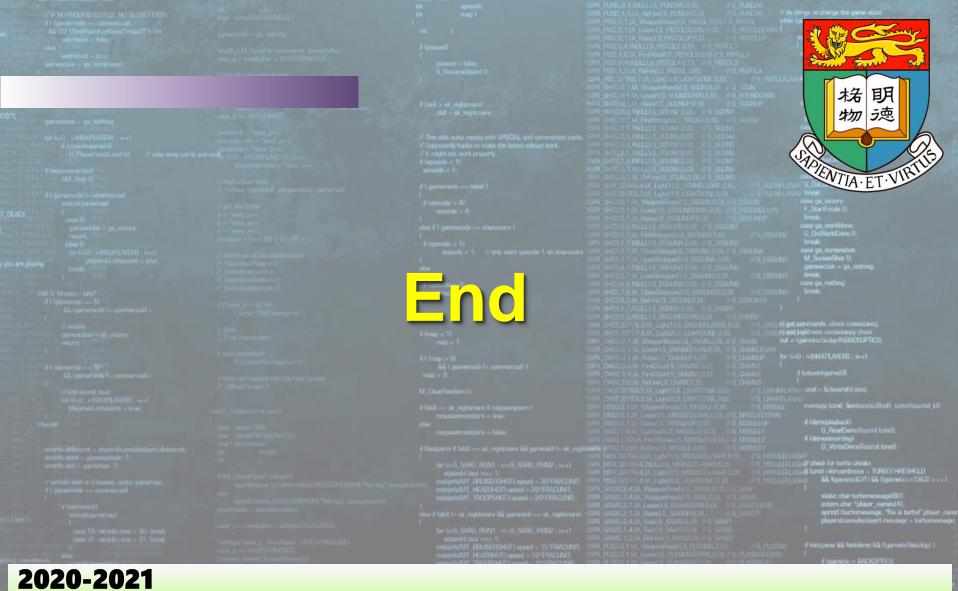
Any problems?



If you encounter any problems in understanding this set of materials, please feel free to contact me or my TAs.

We are always with you!





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