

COMP2026

Problem Solving Using Object Oriented Programming

Course Introduction

Teaching Staffs

Instructor

- Dr. Kevin Wang King Hang
 - Office: RRS712
 - Tel: 7704
 - Email: kevinw@comp.hkbu.edu.hk
- I speak Cantonese, Mandarin, English, C++, Java, markdown, SQL
- I spoke latex, bash script, kotlin, Python, php, js, C, C#, ASP, VBA, matlab



Teaching Staffs

Lab Instructor

- Ms. Sandy Lo
 - Office: RRS637
 - Tel: 5881
 - Email: sandylo@comp.hkbu.edu.hk



Teaching Assistant

- Mr. KWONG, Karsten Hok Ning
 - Office: RRS734
 - Email: karsten@comp.hkbu.edu.hk
- Mr. LIU, Silver Ho Fai
 - Office: RRS734
 - Email: silver@comp.hkbu.edu.hk

Section 1

- Lecture:
 - Monday. 13:30-15:20 RRS638
 - Friday. 15:30-17:20 RRS638
- Lab:
 - Wednesday. 14:30-16:20 RRS638

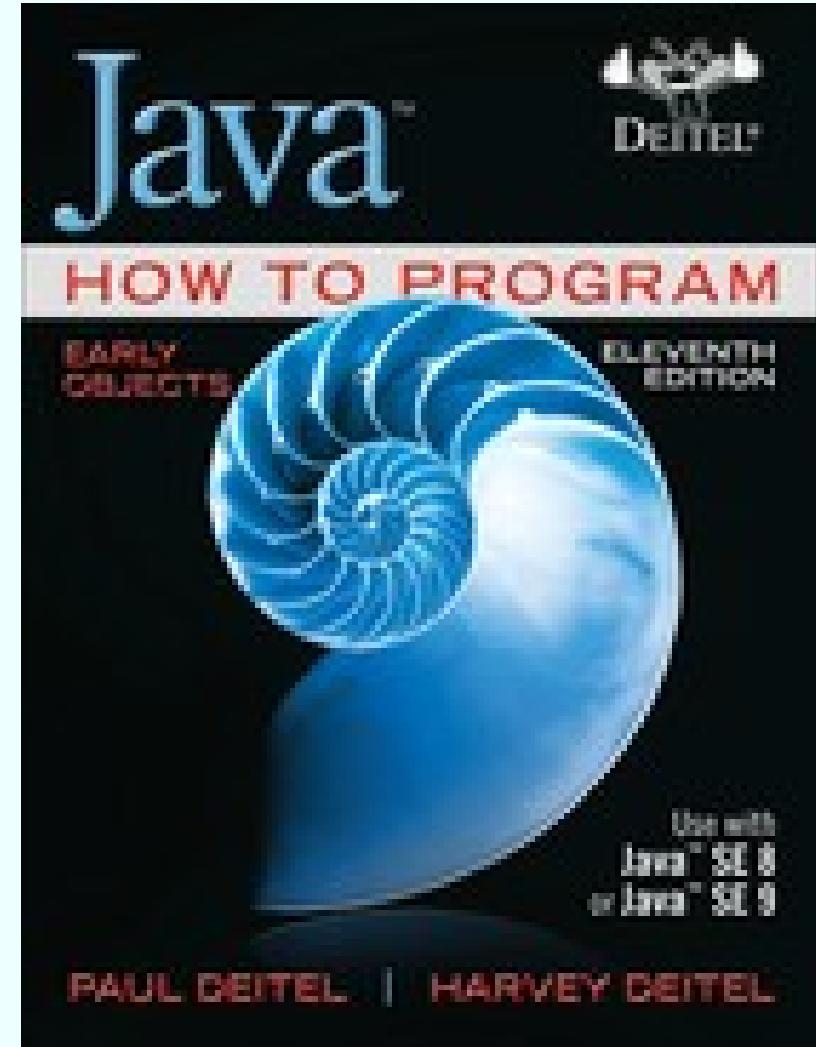
Section 2

- Lecture:
 - Monday. 15:30-17:20 RRS638
 - Wednesday. 12:30-14:20 RRS638
- Lab:
 - Tuesday. 12:30-14:20 RRS638

- Moodle
- Piazza
 - Linkable from Moodle
 - Login directly from [Piazza.com](https://www.piazza.com)
- Flipped lecture
 - Self studied notes (must read)
 - Explained with [Youtube Video](#)
- [Trinket.io](#)

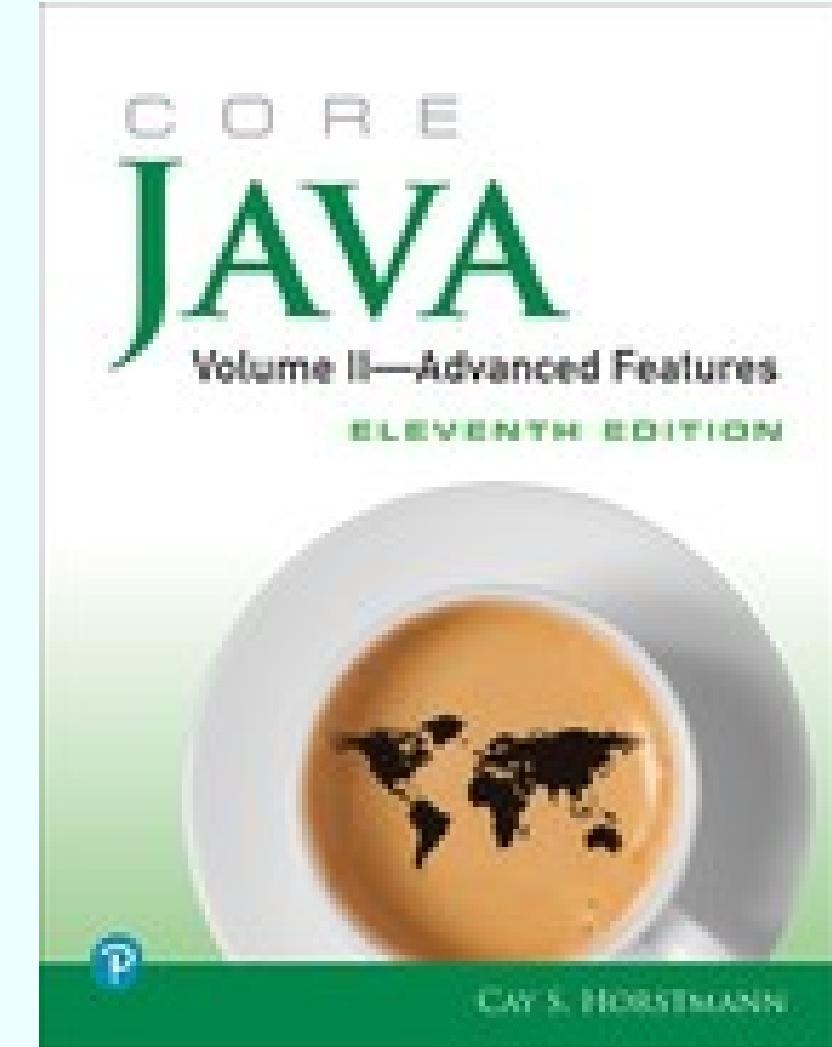
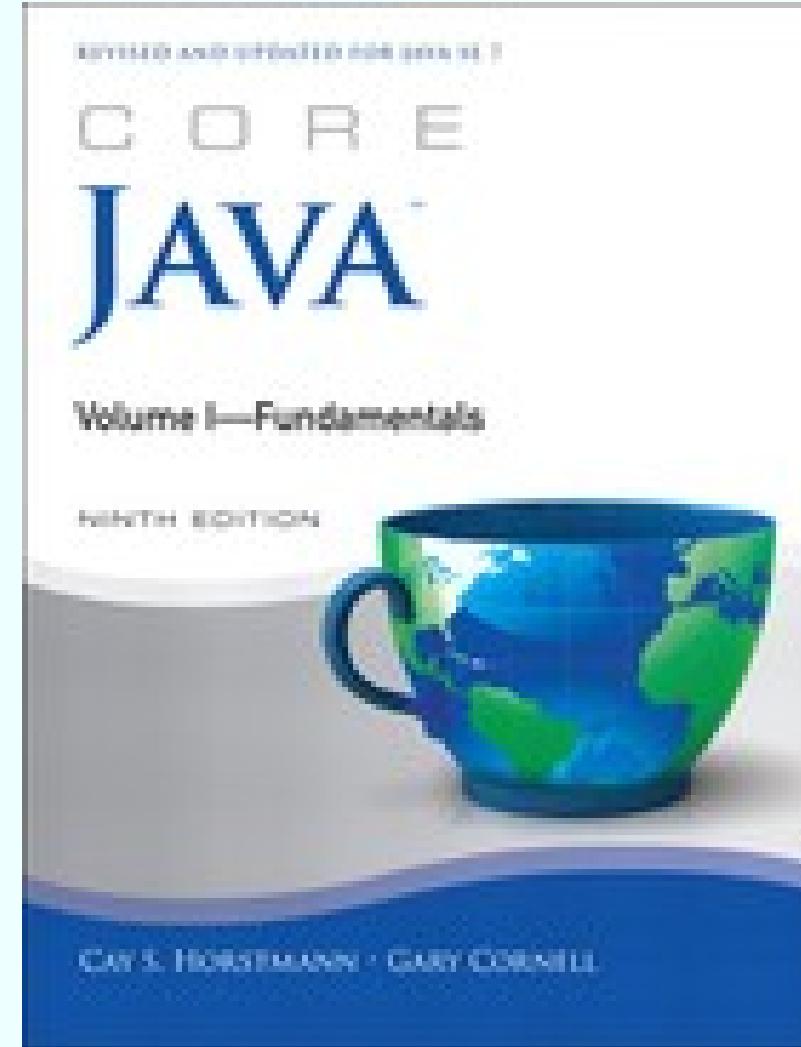
Reference Books

[Java How To Program \(Early Objects\)](#),
by Paul J. Deitel and Harvey Deitel



Reference Books

Core Java Volume I--
Fundamentals
Core Java, Volume II--
Advanced Features
by Horstmann



How this Course Fits In?

Y4-S2	FYP 2 (CST/ISA/DMC*)			
Y4-S1	FYP 1 (CST/ISA/DMC)	ITPP		JOUR4046/3155
Y3-S2	Algo2 (CST) ISM(ISA)	SW-DDT (CST) / IS-D&I (ISA)	Dist & Cloud (CST) InfoSysMgt (ISA)	DataAna+Visual COMP3925 JOUR2085
Y3-S1	Network	Software Engineering		
Y2-S2	Algo1	DB	OS	
Y2-S1	OOP	CompOrg	Facets of Computing	

Core

- COMP2015 Data Structures and Algorithms
- COMP2016 Database Management

- COMP2017 Operating Systems
- COMP3015 Data Communications and Networking
- COMP3047 Software Engineering

Electives

- COMP3026 Digital Media Computing (require 2015)
- COMP4025 Interactive Computer Graphics (require 2015)

- COMP4037 E-Technology Architectures, Tools and Applications
- COMP4057 Distributed and Cloud Computing (require 3015)
- ...

Top priority is expected

- This is a four-units course.
- Failing this will severely affect your study plan.
 - And we did fail students.
- Can't do a FYP without any programming skill.
- HKBU students can program!
- No group project for free rider.
- Heavy continuous assessment. Passing exam is not a sufficient condition to pass. Failing in continuous assessment is a sufficient condition to fail.

Key to success

Learning programming isn't easy.

- Attend all labs
- Follow us on Piazza
- Ask us
- Practice more!
- Plan your time for assignment



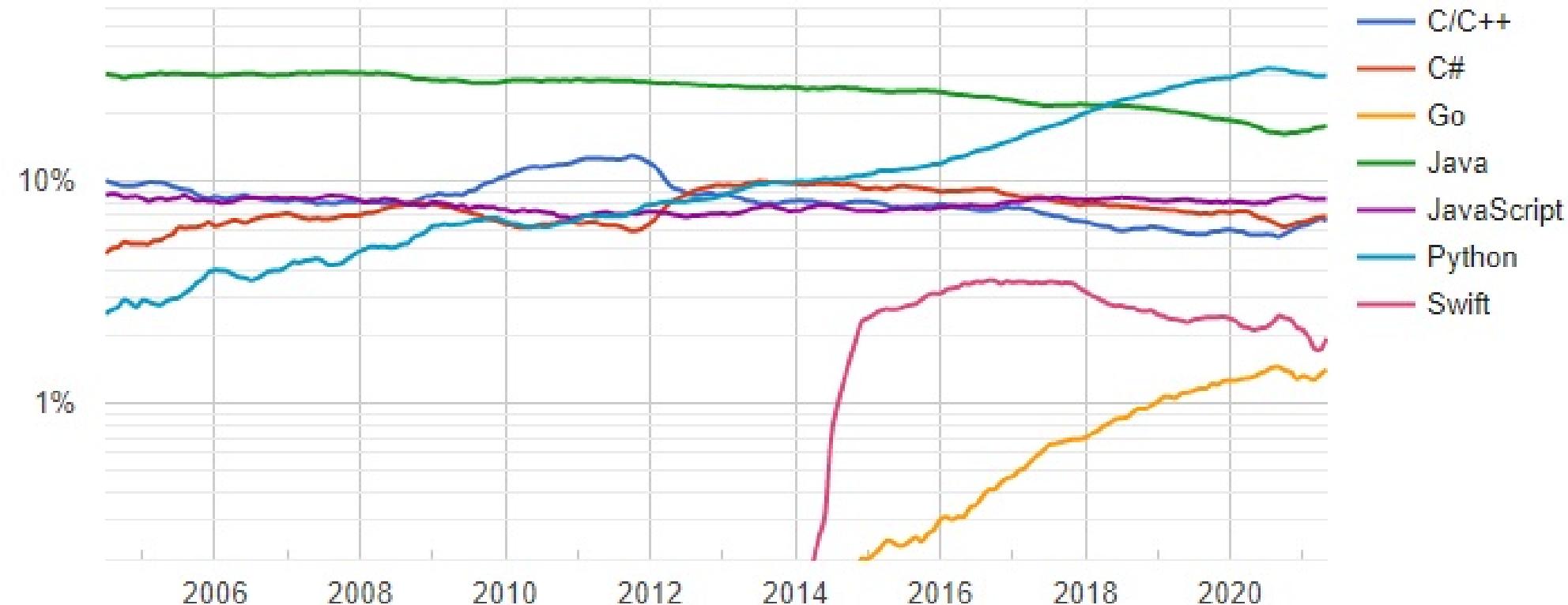
Let us carry you!



Java is still very hot

PYPL PopularitY of Programming Language

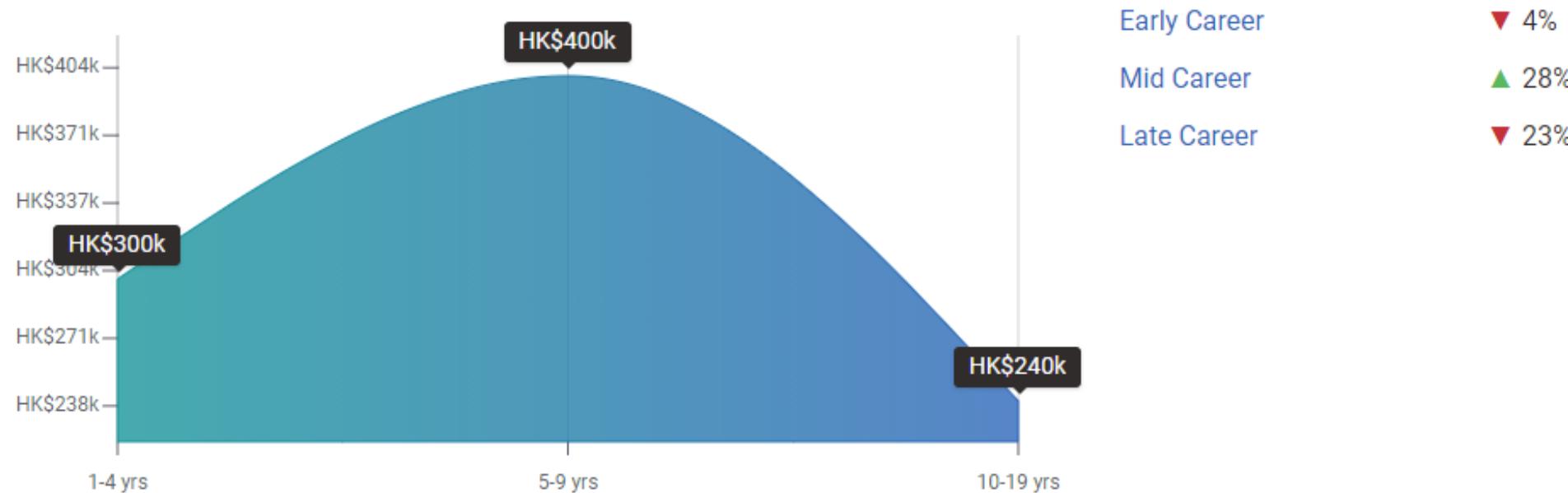
src: pypl.github.io



Java is still very hot

What is the Pay by Experience Level for Java Developers?

src: www.payscale.com



An early career Java Developer with 1-4 years of experience earns an average total compensation (includes tips, bonus, and overtime pay) of HK\$300,000 based on 13 salaries. A mid-career Java Developer with 5-9 years of experience earns an average total compensation of HK\$400,000 based on 5 salaries. An experienced Java Developer with 10-19 years of experience earns an average total compensation of HK\$240,000 based on 3 salaries. [Read less](#)

Mother tongue spoken in different CS dept

C++

- HKUST
- CityU

Java

- HKBU
- CUHK
- PolyU
- HKU

not in a particular order, non-exhaustive list

Tentative Assessment Scheme

- Continuous Assessment (60%)
 - Assignments (3): 24%
 - MC Quizzes: 5% (**23/9/2021 Thursday night**)
 - Practical Tests (2): 15%
 - Lab Exercise (12-13): 12-13%
 - In-class Exercise and Bonus: 3-4%
- Examination (40%)
 - Covers all topics of the course.
 - Exam date: TBA

Topics to Cover (Tentative)

- 1. Bridging from Python and Processing
- 2. Problem Solving with Java
- 3. String
- 4. Array
- 5. Methods
- 6. Exception Handling and File IO
- 7. Class - constructor/
attributes/methods
- 8. Class - access modifier/static
- 9. Inheritance
- 10. Polymorphism
- 11. Interface and Lambda expression
- 12. Recursion and Revision



The University staunchly upholds the principles of academic integrity. As one part of HKBU's effort to prevent plagiarism, the software Turnitin is used to compare all assignments against multiple sources whenever appropriate. A report on each assignment is generated that includes a percentage similarity and links to specific similar sources. Turnitin does not conclusively prove whether or not an assignment is plagiarized – the faculty will make this determination.

To make sure you do not commit any kind of academic dishonesty/plagiarism:

- Do not copy any assessment from others
- Do not upload your assessment to any public repository online
- Do not send your assessment to your friends
- Do you copy any work from other website without properly citation.
- If you have doubt, consult your instructor for explicit clarification.

Official Penalty for Plagiarism

http://ar.hkbu.edu.hk/curr/avoid_plagiarism/

<http://ar.hkbu.edu.hk/file/22>

Penalty for Plagiarism in our Course

- Assignment/Labs being caught for plagiarism:
 - 1st offense: zero the assignment with additional penalty, applied to **both** source(s) and copier(s).
 - 2nd offense: fail the course directly and send to the department to keep a record.
- Quiz/Test/Exam being caught for plagiarism:
 - Fail directly and send to the department to keep a record.
- Will allow you to defense if you are being accused for plagiarism.

Anti-plagiarism checking software

- Code plagiarism is much easier to catch.
- Specific software is used.
- Please do not challenge us.

Tentative Schedule

Week	Activities	Marks	Remarks
3	MC Quiz	5%	23/9/2021 evening $\frac{1}{2}$ hr
5	Assignment 1	8%	
6	Practical Test 1	7.5%	Saturday
8	Assignment 2	8%	
11	Practical Test 2	7.5%	Saturday
13	Assignment 3	8%	
1-13	Lab	12~13%	



Late Penalty Rule

Applies to all your submitted work, including assignments and lab reports

Late	Penalty
24hrs	<pre>mark = (int)(mark * 0.8);</pre>
48hrs	<pre>mark = mark >> 1;</pre>
72hrs	<pre>mark = mark >> 2;</pre>
>72hrs	<pre>mark &= 0;</pre>



Whenever you see the icon  you can click onto it and try the code online.

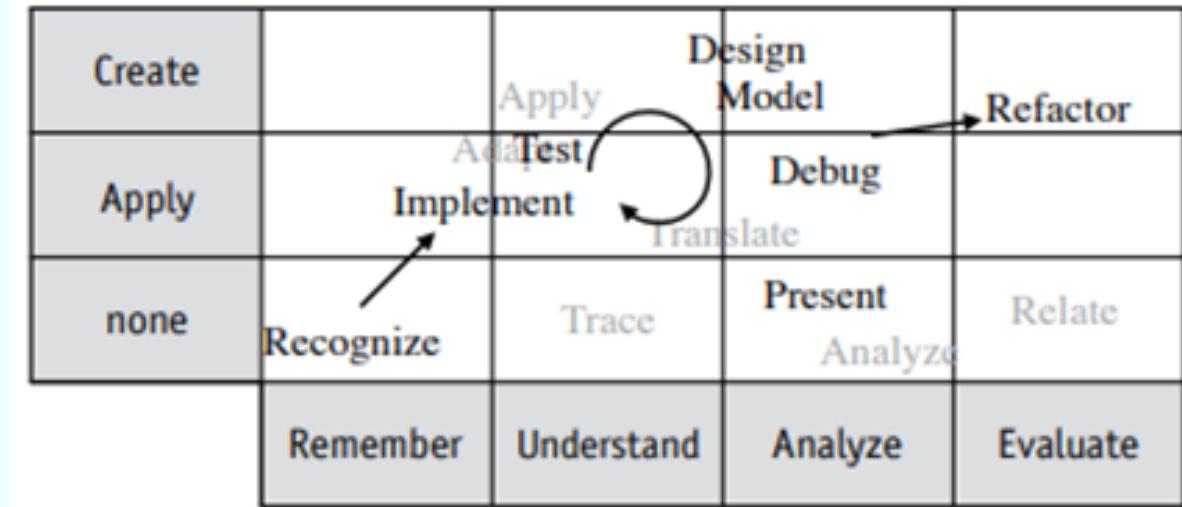
Our Expectation on you

- Got a computer at home with JDK (not JRE!) installed.
- Attend all lectures and labs - 6 hours/week.
- Watch assigned videos - <1 hour/week.
- Do assignment on your own, on time - 8 hours/assignment.
- Do the lab exercise - 0.5-3 hour/week
- Be an active learner.
 - Actively participate on Piazza - 1 hour/week.
 - Do revision - 1 hour/week.

Our Expectation on you

You can progressively improve from:

- Recognize: Able to read lecture material
- Implement: Translates the completed design to code
- Test & Debug: Detect and correct flaws
- Design & Model: Understand and design a new solution structure
- *Refactor*: Optimize a given design according to OO principles



Part of the notes developed by Dr. Joe Yau are used in this course.