JAVA PROGRAMMING

Week 1: Course Introduction

Lecturers:

- Hồ Tuấn Thanh, M.Sc.

Teaching Staff

- Lecturer:
  - Hồ Tuấn Thanh, M.Sc.
    - VNU-HCMUS-FIT-SE
    - Email: htthanh@fit.hcmus.edu.vn
- TA & Lab TA:
  - Trương Phước Lộc, M.Sc.
    - VNU-HCMUS-FIT-SE
    - Email: tploc@fit.hcmus.edu.vn

Course objectives

- Teach students the basics of software development written in Java.
- Teach and enable students to think algorithmically, to enable them to solve real-life problem and implement these steps in Java.
- Improve OOP skills.
- Recognize and use basic and advanced data structures.
- Learn to write, compile, build and debug program using an IDE (Netbeans/Eclipse/IntelliJ IDEA).

Course description

- Strengthen basic programming knowledge with Java (basic syntax, basic and advanced data structure, object-oriented programming, etc.).
- Provides foundation knowledge and other Java technologies such as Java IO, Multithreaded Programming, exception handling, Swing, JDBC, Network programming, etc..
- Gain hands-on experience in building a complete application at a simple/medium level by combining Java technologies learned in a systematic and methodical way.

Course outcomes [1]

[1] Knowledge

- Explain fundamental concepts used in Java.
- Summarize knowledge about basic and advanced data structures
- Explain and give examples for each basic Java syntax.
- Solve simple problems and implement them in Java.
- Analyze and break down a problem into tasks and implement them in Java.
- Improve experience with developing and debugging software in an IDE such as Netbeans, Eclipse, IntelliJ, Visual Studio Code, etc.

Course outcomes [2]

[2] Skill

- Critical thinking
- Analyzing
- Problem-solving
- Presentation
- OOP Programming

[3] Study Attitude

- Active learning in class
- Active research/reading at home
- Opportunity to improve problem-solving skills
- Opportunity to improve analyzing & critical thinking skills

References

- **Herbert Schildt. (2019). Java: A Beginner's Guide, 8th Edition, McGraw-Hill Education.**
- Herbert Schildt. (2019). Java: The Complete Reference, 11th Edition. McGraw-Hill Education.
- https://docs.oracle.com/javase/tutorial/
- Any other Java MOOC courses, forum, etc.

Grading

- In-class Participation/Exercises 20%
- Project 40%
- Final exam 40%

- Volunteer 5%

- *Grading criteria can be changed by instructors and will be announced to students (before instructors apply the new grading criteria)*

Course details

Week	Content
1	Course introduction, Java Overview Data type, operators
2	Program control statements
3	OOP
4	Exception handling
5	Java IO
6	Generic, Collection
7	Swing
8	Multithreaded programming
9	JDBC
10	Network programming
11	JUnit, Java Ant, Revision

Course Requirements

- Students are encouraged to ask questions in class, via forum, email, or in-person
- Late submission policy
  - Late submissions are not allowed
  - Exceptions are given for certain cases, e.g., illness

Academic integrity policies

- Student may not be absence in 30% of number of sessions. If so, he/she will be prohibited from test or exam.
- Be punctual to come and leave the class.
- No cheating
  - Students are prohibited from copying from classmates, friends even if allowed; from the Internet without proper citation
  - Students are prohibited from allowing others to copy

➔ 0 point for the whole course

Question ?