Software Architecture and Design

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- Course Name: **Software Architecture and Design**

- Course Code: **SWD391**

- No of credits: **3**

- Degree Level: **Bachelor**

- Time Allocation

  - Class hours   : **30 slots** of 1.5 hour

    - Lectures   : 13 slots

    - Tutorials: : 17 Slots

  - Home study   : **60 slots**

- Students must attend more than 80% of contact sessions in order to be accepted to the final examination.

- Student is responsible to do all assigned exercises given by instructor in class or at home and submit on time.

- Use laptop in class only for learning purpose.

- Promptly access to the FPTU CT LMS at http://lmscantho.fpt.edu.vn for up-to-date course information.

- Only submissions are **allowed through LMS**, any other submission will **get 0 points**.

- Attendance will be conducted after start time about 10 minutes.

- Late submission will be **deducted 50%** of total points.

- Any forms of **cheating** will **get 0 point**.

- Main books/resources:
  - Main text book: Software Architecture and Design Illuminated
  - FPTU slides
- Tools:
  - NetBeans IDE
  - Visual Studio
  - …

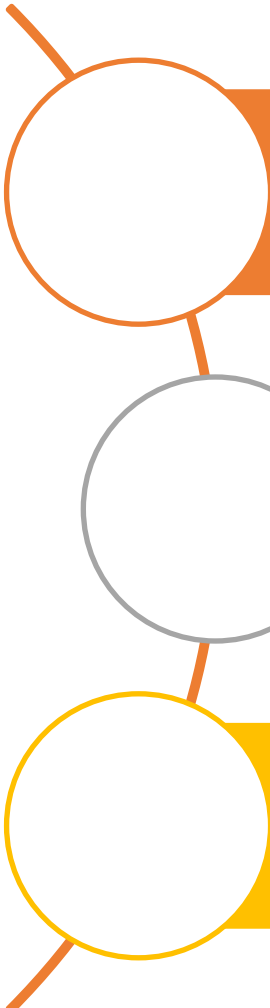- On-going Assessment: 60%
  - 03 progress tests   : 30%
  - 02 Assignment   : 30%
- Final exam: 40%
- Final Result: 100%

Completion Criteria:
1. Every on-going assessment component > 0
2. Final Exam Score >= 4 & Final Result >= 5

- Student Teaching.

- Researcher – Mentor.

- One or two groups will present for theory slot.

- If any group does not prepare or present theory, 20% points of assignment will be deducted.

- If any group is deducted 3 times, it will be considered a failure.

- Using Zalo/Facebook/Discord app.
- All subject-related discussions and announcements will be discussed here.

1. Map the software system requirements into architecture design: apply various design strategies to divide and conquer the complexities of an application domain and resolve software architecture.

2. Model the system and assess its quality so the the improvements can be made before the software goes into the production phase

3. Describe (document) the elements of system, the modules, that compose each element and the detailed information of each modules

Reading and Research

- Read the text book to get the general concept
- Research the reference, study, collection from anywhere else (internet, your classmate, forum …)

Attend lectures

- Listens, understand, then make your own notes
- Give your explanation about some topic in lectures
- Ask questions
- Give some examples that are not existed in your book
- Practice all the exercises, demo to make your sense

After classes

- Discuss your classmate in directly, on forum or outside class
- Analyze, design and implement workshops and assignment. **Write reports** to your notebook.
- Build your teams in yourselves to support together in studying

- Text book: Software Architecture and Design Illuminated
- FPTU slides
- MS.c Luong Hoang Huong's SWD391 Slides