Data Structure
(자료구조)

김진현
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Sept 2019

This Class

- FIA 00015 (3 Points (3-0-0), but (3-1-2))
- Mon 8, 9 (Theory), Wed 9(Lab), Classroom: 816
- Open Office Hour: By appointment at mentoring time
- Textbook:
  - (English) Data Structures and Algorithms in Python, Michael T. Goodrich, Roberto Tamassia, Michael H. Goldwasser (Will be given in PDF) (**DSAP**)
  - (Korean) A Byte of Python (**ABP**)
  - (Korean) 파이썬과 함께하는 자료구조의 이해, 양성보 지음, 생능출판사 (**PWDS**)

This Class

- Programming training for software engineers, thus students needs **at least 8** hours, including classes, to complete classes and assignments.
- Some class will have pre-class by video and quiz
  - Students shall view a video and take a quiz before classes.
  - The quiz will be included to grade evaluation
- Wednesday class will be dedicated to programming
  - One or more programming assignments will be given and students should complete them by the end of the class or the day.
- Some programing assignments will need more days than one day.
- Some programming assignment will be a challenge problem that is a bonus credit for mid- and final exams.
- Everyone should be with computer (personal laptop or public desktop), without exception.

Grading

- Class Participation: 10%
- Assignments and Quiz: 30%
- Mid Exam: 20% - Programming
- Final Exam: 20% - - Programming
- Term: 15%

Homepage

- Class information, Lecture slides, Readings, Assignment descriptions, Schedules etc
  - http://jinkimh.github.io/ds
- Instant announcements, Questions, Assignment & Quiz submission:
  - Google Classroom: **rh3jhl**
  - Using this Google Classroom, the grade will be evaluated, so make is sure that you subscribe Google Classroom using above code

Lecture Plan

Week	Lecture Contents	Textbook	Assignments	
1	Introduction, Python Language 1	DSAP(~ Ch 1.4), ABP(~ Ch 7)		
2	Python Language 2	DSAP(~ Ch 1.12), ABP(~ Chap 7)		
3	Python Lab			No class on 16 Sep (?)
4	Algorithm Analysis, Recursion	DSAP(Ch 3, 4), PWDS(Ch 1)		
5	Array	DSAP(Ch 5)		
6	Linked List	DSAP(Ch 7),PWDS(Ch 2)		No class on 9 Oct (?)
7	Stack, Queue, Deque	DSAP(Ch 6), PWDS(Ch 3)		
8	Mid Exam			
9	Search Tree, Project Plan	DSPA(Ch 5), PWDS(Ch 11)		
10	Maps, Hash Tables	DSPA(Ch 10), PWDS(Ch 6)		
11	Sorting and Selection	DSPA(Ch 12), PWDS(Ch 7)		
12	Graph	DSPA(Ch 14), PWDS(Ch 8)		
13	Text Processing	DSPA(Ch 13)		
14	Project Lab			
15	Project Presentation			
16	Final Exam			