Lecture notes on DSA-2017

### H1.1. General information

|  |  |
| --- | --- |
| Course title: Data Structures and Algorithms  Course length: 20 days (7 weeks)  Course website: TBA  Course github: TBA !!!!! | Instructor: Henry Tu  Email: tutrunghieu@gmail.com |

### H1.2. Topics and weeks

|  |  |  |
| --- | --- | --- |
| Introduction | Day 1 |  |
| List | Day 1 |  |
| Stack, Queue, Priority Queue | Day 2 |  |
| Recursion, Backtracking | Day 3 |  |
| Sorting | Day 4, Day 5 | Briefing A1 |
| Binary Tree | Day 6, Day 7, Day 8 | Grading A1 |
| **Review 1** | **Day 9** | **Reviewing A1** |
| String | Day 10, Day 11 | Briefing A2 |
| Graph | Day 12, Day 13 | Grading A2 |
| **Review 2** | **Day 14** | **Reviewing A2** |
| Closing | Day 15 |  |

### H1.3. Materials / references

**+ The book "Data Structures and Algorithms in Java, Second Edition" by Adam Drozdek**

**ISBN-13: 978-0534492526**

**ISBN-10: 0534492525**

[**https://www.amazon.com/Data-Structures-Algorithms-Java-Drozdek/dp/0534492525**](https://www.amazon.com/Data-Structures-Algorithms-Java-Drozdek/dp/0534492525)

(optional) MIT open course on computer science

<https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-0001-introduction-to-computer-science-and-programming-in-python-fall-2016/lecture-videos/index.htm>

(optional) MIT open course

<https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-046j-introduction-to-algorithms-sma-5503-fall-2005/video-lectures/>

### H1.4. How to pass?

+ attending 15 days (out of 20 days in total)

+ complete assignment 1 with grade (F, P, M, D)

+ complete assignment 2 with grade (F, P, M, D)

+ total point above (F, P, M, D)