WIA1002 / WIB1002 Data Structures

Lectures, Tutorials and Labs

415	K1	HWL	Mon, 1 - 3 pm	DK1	
	K2	LIM	Mon, 1 - 3 pm	DK2	
60	T1	CCS	Wed, 9 - 12 pm	MM3	K1
50	T2	AD	Thu, 11 - 2 pm	MM1	
50	T3	OSY	Wed, 9 - 12 pm	MM1	
45	T4	Du'a Alsoudi	Wed, 9 - 12 pm	MM6	
35	T5	CCS	Thu, 11 - 2 pm	MM2	
35	T6	Hamza Altarturi	Wed, 9 - 12 pm	MM2	K2
50	T7	AD	Fri, 3 - 6 pm	MM1	
40	T8	Noman Mazhar	Wed, 9 - 12 pm	MS	
30	T9	OSY	Thu, 11 - 2 pm	ML	
30	T10	NRJ	Thu, 11 - 2 pm	MS	

What you will learn

- Generics
- Abstract Data Type
- Recursion
- Linked List
- Stacks
- Queue
- Searching and Sorting
- Binary Search Tree
- Graph

Assessments

- Final Examination (50%)
- Continuous Assessments (50%)
  - Lab Test (2 to 3) (10%)
  - Mid Term Test (20%) (tentatively 15 May)
  - Assignment (20%)

Tentative plan

Week	Date	Lecture (Monday)	Dates			Tut (Wed – Fri)	P/Holiday
1	13/03	Prog Fundamental	15/03	16/03	17/03	-	
2	20/03	Generics	22/03	23/03	24/03	OO Fundamental	
3	27/03	ADTs and Bags	29/03	30/03	31/03	Generics	
4	03/04	Linked List	05/04	06/04	07/04	ADTs and Bags	
5	10/04	Doubly-Linked List	12/04	13/04	14/04	Linked List	
6	17/04	Stack	19/04	20/04	21/04	Doubly-Linked List	
	24/04	break	26/04	27/04	28/04	break	
7	01/05	Queue	03/05	04/05	05/05	Stack	1/5 Labour day, 4/5 Wesak day
8	08/05	Problem Solving (S & Q)	10/05	11/05	12/05	Queue	
9	15/05	Mid term test	17/05	18/05	19/05	Priority Queue	
10	22/05	Graph	24/05	25/05	26/05	Graph	
11	29/05	Recursion	31/05	01/06	02/06	Recursion	
12	05/06	Search and sort	07/06	08/06	09/06	Search and sort	5/6 DYMM
13	12/06	Binary Search Tree	14/06	15/06	16/06	BST	
14	19/06	Revision (Discuss Test)	21/06	22/06	23/06	Assignment	

References

- Frank M. Carrano and Timothy Henry. 2019. Data Structures and Abstractions with Java, 5th Edition. Pearson.
- Michael T. Goodrich and Roberto Tamassia. 2014. Data Structures and Algorithms in Java. 6th Edition. Wiley.
- Y. Daniel Liang. 2020. Introduction to Java Programming and Data Structures, Comprehensive Version, 12th Edition. Pearson.
- Mark A. Weiss. 2012. Data Structures and Algorithm Analysis in Java, 3rd Edition. Pearson.