Operating Systems COM301T

Faculty - B Sivaselvan

Schedule

- Monday 2.00 - 2.50 pm
- Tuesday 12.00 - 12.50 pm
- Thursday 11.00 - 11.50 pm

TAs

- Santosh Kumar - coe18d005
- Mercy Faustina - coe19d006

Lecture	Topic	PDF	Video
Session-1 (03/08/2020)	Intro session	Slides	Lecture 1
Session-2 (04/08/2020)	Operating system overview-1	Slides	Lecture 2
Session-3 (06/08/2020)	Operating system overview-2	Slides	Lecture 3
Session-4 (10/08/2020)	Operating system overview-3	Slides	Lecture 4
Session-5 (11/08/2020)	OS features , Process concept 1	Slides	Lecture 5
Session-6 (13/08/2020)	Process concept 2	Slides	Lecture 6
Session-7 (17/08/2020)	Process concept 3	Slides	Lecture 7
Session-8 (18/08/2020)	Linux system calls , Fork intro	Slides	Lecture 8
Session-9 (20/08/2020)	Process state transition	Slides	Lecture 9
Session-10 (24/08/2020)	Process state transition contd , Fork 1	Slides	Lecture 10
Session-11 (25/08/2020)	Fork 2	Slides	Lecture 11

Lecture	Topic	PDF	Video
Session-12 (27/08/2020)	Fork 3	Slides	Lecture 12
Session-13 (31/08/2020)	Fork 4 , Exec 1 , Wait	Slides	Lecture 13
Session-14 (01/09/2020)	Wait	Slides	Lecture 14
Session-15 (03/09/2020)	Exec variants	Slides	Lecture 15
Session-16 (07/09/2020)	Exec variants , Fork output questions	Slides	Lecture 16
Session-17 (08/09/2020)	CPU scheduling algo	Slides	Lecture 17
Session-18 (10/09/2020)	CPU scheduling algo , FCFS trace	Slides	Lecture 18
Session-19 (14/09/2020)	FCFS , SJF	Slides	Lecture 19
Session-20 (15/09/2020)	SRT (SJF PE) , Priority NPE	Slides	Lecture 20
Session-21 (17/09/2020)	Priority PE , Round Robin	Slides	Lecture 21
Session-22 (21/09/2020)	HRRN , Numericals on RR , IO	Slides	Lecture 22
Session-23 (22/09/2020)	IO , Multiprocessor example , IPC 1	Slides	Lecture 23
Session-24 (24/09/2020)	IPC 2	Slides	Lecture 24
Session-25 (28/09/2020)	IPC 3 ,Pipes 1	Slides	Lecture 25
Session-26 (29/09/2020)	Pipes 2 , Pipes exercises	Slides	Lecture 26
Session-27 (01/10/2020)	dup and Pipes example LS	Slides	Lecture 27
Session-28 (12/10/2020)	Multithreading intro	Slides	Lecture 28
Session-29 (13/10/2020)	Multithreading benefits challenges models	Slides	Lecture 29

Lecture	Topic	PDF	Video
Session-30 (14/10/2020)	Pthreads example	Slides	Lecture 30
Session-31(19/10/2020)	Matrix mult	Slides	Lecture 31
Session-32(20/10/2020)	Matrix mult and Amdahl's law	Slides	Lecture 32
Session-33 (22/10/2020)	Amdahl's law, Thread pool	Slides	Lecture 33
Session-34 (26/10/2020)	Thread level scheduling,Signal handling	Slides	Lecture 34
Session-35 (27/10/2020)	Signal handling	Slides	Lecture 35
Session-36 (29/10/2020)	Sending signals and addnl features	Slides	Lecture 36
Session-37(02/11/2020)	Synchronization	Slides	Lecture 37
Session-38(03/11/2020)	Critical Section problem, Peterson's solution	Slides	Lecture 38
Session-39(05/11/2020)	Lock instruction, Bounded-waiting mutual exclusion	Slides	Lecture 39
Session-40 (09/11/2020)	Mutex locks for CSP,Semaphore limitations,Deadlock & Starvation problems	Slides	Lecture 40
Session-41 (10/11/2020)	Dining philosopher problem	Slides	Lecture 41
Session-42 (12/11/2020)	Dining philosopher,Reader Writer problem	Slides	Lecture 42
Session-43 (16/11/2020)	Reader writer,prod cons,Deadlocks	Slides	Lecture 43
Session-44 (17/11/2020)	handling deadlocks,prevention,avoidance-Bankers algo	Slides	Lecture 44
Session-45 (18/11/2020)	Deadlock detection,Recovery from deadlock	Slides	Lecture 45

Resources

- Add links to materials you found useful while preparing

- Refer https://classroom.google.com/c/MTQyMDQ0ODE5NzMw/m/MjMxNzU0MjkxMzE4/details for full notes
- Nice intro to Semaphores - https://en.wikibooks.org/wiki/Operating_System_Design/Processes/Semaphores
- For semaphore based problems - http://greenteapress.com/semaphores/LittleBookOfSemaphores.pdf Ch-4 and 5