

2018

Week 23
155-210

4.8.2020

JUNE

Monday

04

REAL-TIME SYSTEMS

9 TAUGHT BY

10 • prof. deepak gangadhran

11

COURSE TOPICS

12

1. Real-time systems

1

• introduction and concepts

2

• modeling real-time systems

3

2. commonly used approaches to real-time scheduling

5

• clock driven approach

6

• weighted round robin approach

7

• priority driven approach

• dynamic & static systems

• offline vs online scheduling

• preemptive vs non-preemptive

JUL
2018

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JULY

AUGUST

3. clock driven scheduling

9

- scheduling aperiodic and sporadic jobs

10

- schedulability test

11

4. priority driven scheduling

1

- static priority

2

- rate monotonic and deadline monotonic algorithms.

3

- dynamic priority

4

- EDF algorithm

5

- schedulability tests

6

5. Scheduling aperiodic and sporadic jobs in priority driven systems

7

- deferrable server

- sporadic server

- constant utilization server

- total bandwidth server

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2018

Week 23
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4-8.2020
3 JUNE

Wednesday,

06

• weighted fair queuing server

5. multiprocessor scheduling

6. resources and resource access control.

TEXT BOOKS

1. real-time systems; liv.

2. hard real-time computing systems: predictable scheduling algorithms and applications; buttazo.

3. real time systems; krishna.