# CSGE602055 Operating Systems
# CSF2600505 Sistem Operasi
# Mingggu 09

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http://rms46.vlsm.org/2/207.html

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# Agenda

# Week 09: File dan Storage System

- Reference: (OSCE2e ch9/10/11) (UCB 17A/18/19) (UDA P4L2 P4L2) (OLD 07 08 09)
- File System Interface
- File Attribute
- File Operation
- Disk Stucture and Organization
- File Systen Types
- Directory
- FS Mounting vs. Volume Based System
- FS Structure and Implementation
- File Control Block
- FS In Memory Structure
- VFS
- Directory Implementation

# File Systems

- File System Layers
    - Application Programs
    - Logical File Systems
    - File-Organization Module
    - Basic File Systems
    - I/O Control
    - Hardware Device
- Allocation Method
    - Contiguous
    - Linked
    - Indexed
    - Combined Scheme
- Cache
- STREAMS

# Mass Storage Systems

- Mass Storage Structure
- Solid State Disk
- Storage Array
- SAN
- NAS
- Scheduling: FCFS, SSTF, SCAN, C-SCAN, C-LOOK.
- Disk Management
- RAID
- the /dev/ directory
    - /etc/fstab
    - Device Major and Minor Numbers
    - UUID - Universally Unique IDentifier (128 bits)
    - practically is NOT guaranteed unique
    - FUSE: Filesystem in Userspace
- Lab
    - Visit http://os162.vlsm.org/

- This is the end of the presentation.