

Explain different types of OS with examples of each ?

There are various types of operating systems (OS) that exist, each with its own characteristics and features.

Some of the common types of operating systems are as follows:

1. Real-Time Operating System (RTOS)
2. Network Operating System (NOS)
3. Mobile Operating System
4. Distributed Operating System
5. Time-sharing Operating System
6. Embedded Operating System
7. Virtualization Operating System

## 1. Real-Time Operating System (RTOS):

A real-time operating system is designed for systems that require a rapid and predictable response time. It is commonly used in embedded systems, such as automotive systems, medical equipment, and industrial control systems. Examples of RTOS are VxWorks and QNX.

## 2. Network Operating System (NOS):

A network operating system is designed to manage and control network resources. It is commonly used in organizations that require a centralized management of resources, such as file servers, printers, and databases. Examples of NOS are Windows Server and Novell NetWare.

Explain different types of OS with examples of each ?

### 3. Mobile Operating System:

A mobile operating system is designed for smartphones, tablets, and other mobile devices. It provides features such as touch screen support, mobile application management, and mobile device management. Examples of mobile operating systems are Android and iOS.

### 4. Distributed Operating System:

A distributed operating system is designed to manage and coordinate the activities of a distributed system. It provides a transparent view of the system to users and applications, as if it were a single entity. Examples of distributed operating systems are Amoeba and Inferno.

### 5. Time-sharing Operating System:

A time-sharing operating system is designed to provide multiple users with concurrent access to the computer system. It uses a scheduling algorithm to allocate CPU time to different processes. Examples of time-sharing operating systems are UNIX and Linux.

### 6. Embedded Operating System:

An embedded operating system is designed for small-scale systems with limited resources, such as microcontrollers, sensors, and small-scale devices. It provides features such as low power consumption, small size, and fast boot times. Examples of embedded operating systems are FreeRTOS and TinyOS.

### 7. Virtualization Operating System:

A virtualization operating system is designed to run multiple operating systems on a single

Explain different types of OS with examples of each ?

physical machine. It provides features such as virtual machine management, resource allocation, and isolation. Examples of virtualization operating systems are VMware and Microsoft Hyper-V.

### Related Posts:

1. Operating System: A List of Video Lectures RGPV Notes
2. GATE, Context switch calculation in SRTF algorithm | Prof. Jayesh Umre
3. Introduction to Operating Systems
4. Different Types of OS
5. Characteristics and features of an OS
6. Operating systems services
7. System Calls in OS
8. File Systems
9. How many page faults
10. Process State Diagram
11. Operating System Scheduler
12. FIFO page replacement algorithm
13. LRU page replacement algorithms
14. Optimal page replacement algorithm
15. SRTF shortest remaining time first
16. OS 4
17. OS 3
18. Os 2
19. Os 1
20. CBSE NET 2004 38
21. Cbse net 2004 37

Explain different types of OS with examples of each ?

22. Cbse net 2004
23. CBSE Net 2017
24. Ugc net 2017 solved
25. NET 4
26. NET 1
27. Net 28
28. Net 26
29. Net 50
30. Net 49
31. Net 48
32. Net 46
33. Net 44
34. Net 40
35. Net 39
36. GATE, Longest Remaining Time First Algorithm | Prof. Jayesh Umre
37. GATE SRTF | What is the total waiting time for process P2?
38. GATE Calculate Total Waiting Time SRTF algorithm | Prof. Jayesh Umre
39. Memory management
40. Concept of Threads
41. Process concept
42. Directory Structure OS
43. Contiguous disk space allocation method
44. File systems
45. Types of os
46. Evolution of os
47. Functions of os
48. Why is operating system a mandatory software?

Explain different types of OS with examples of each ?

49. Bankers algorithm problems
50. Diploma Linux Unit 3
51. RGPV Diploma Linnux Unit 2
52. Program to print string in reverse order
53. Program to implement while loop in Linux
54. Program to implement for loop using sequence keyword in Liux
55. Program to implement different types of increment in Linux
56. For loop without in keyword in Linux
57. Program to implement for loop using in keyword in Linux
58. Multiple Processor Scheduling
59. What do you mean by Virtual Memory? Write down its advantages?
60. Compare Paging and Segmentation?
61. What is Process Scheduling, CPU Scheduling, Disk Scheduling? Explain Short, Medium and Long term Scheduler?
62. Explain concept of a process with its components ?
63. Explain the following in brief Contiguous and Linked list allocation for implementing file system?
64. Explain various Disk scheduling algorithms with Illustrations ?
65. Define process and thread. What is PCB ? Explain its various entries with their usefulness ?
66. Discuss advantages and disadvantages of the Buffer cache ?
67. What is an Operating System? Write down its desirable characteristics ?
68. Define a deadlock ? Write down the conditions responsible for deadlock? How can we recover from deadlock ?
69. What are the various services provided by Operating system ?
70. What do you mean by PCB? Where is it used? What are its contents? Explain.
71. What is Binary and Counting semaphores ?

Explain different types of OS with examples of each ?

72. What is File? What are the different File attribute and operations?
73. What are System call? Explain briefly about various types of system call provided by an Operating System?
74. Describe necessary conditions for deadlocks situation to arise.
75. What are points to be consider in file system design? Explain linked list allocation in detail?
76. Write a Semaphore solution for dining Philosopher's problem?
77. Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5.  
How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFO b) LRU
78. Explain CPU schedulers in operating system?
79. Write the different state of a process with the help of Process state deagram?
80. What is Mutex in operating system?
81. Explain Network operating system?
82. What do you mean by paging in operating system ?