



**OPERATING
SYSTEM**



**COMPUTER
AWARENESS**

EPISODE-8



Computer Awareness

Part 8

- Funsta Team

Lets Start





Computer Awareness



- Part 1 Intro/Generation/ Classification of Computers
- Part 2 Computer Architecture & Memory
- Part 3 Computer Hardware
- Part 4 Computer Software and System Utilities
- Part 5 Number System
- Part 6 Computer Codes & Logic Gates

Lets move on to
Next Part



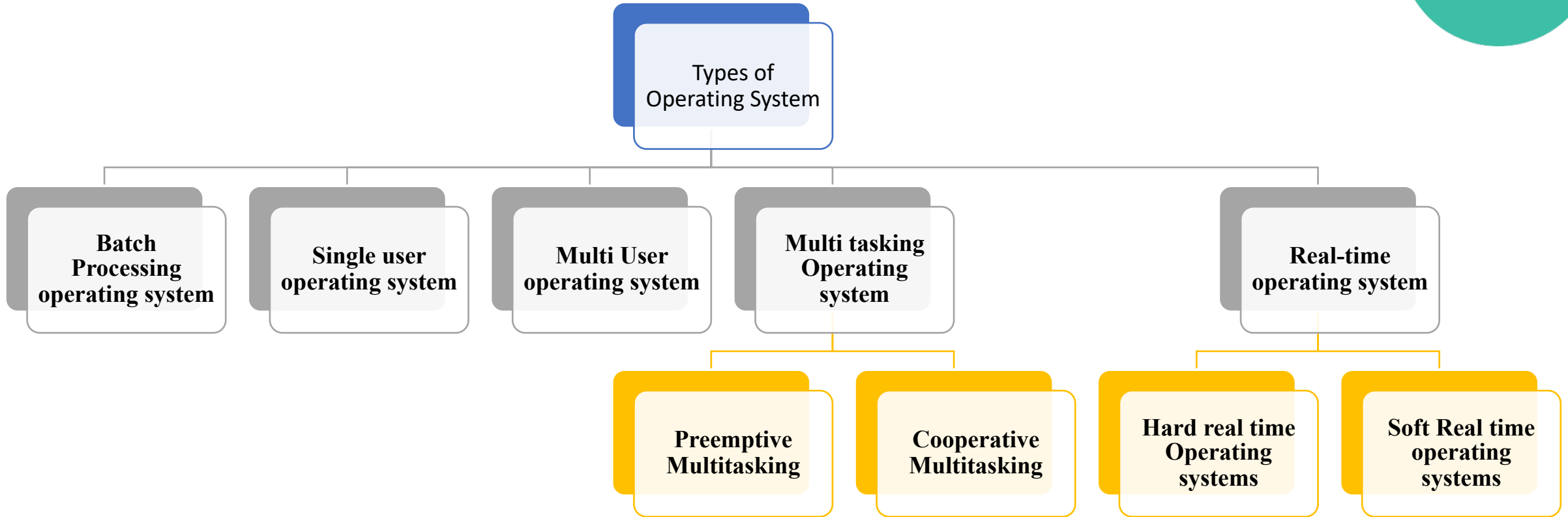


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Types of Operating system



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Batch Processing operating system



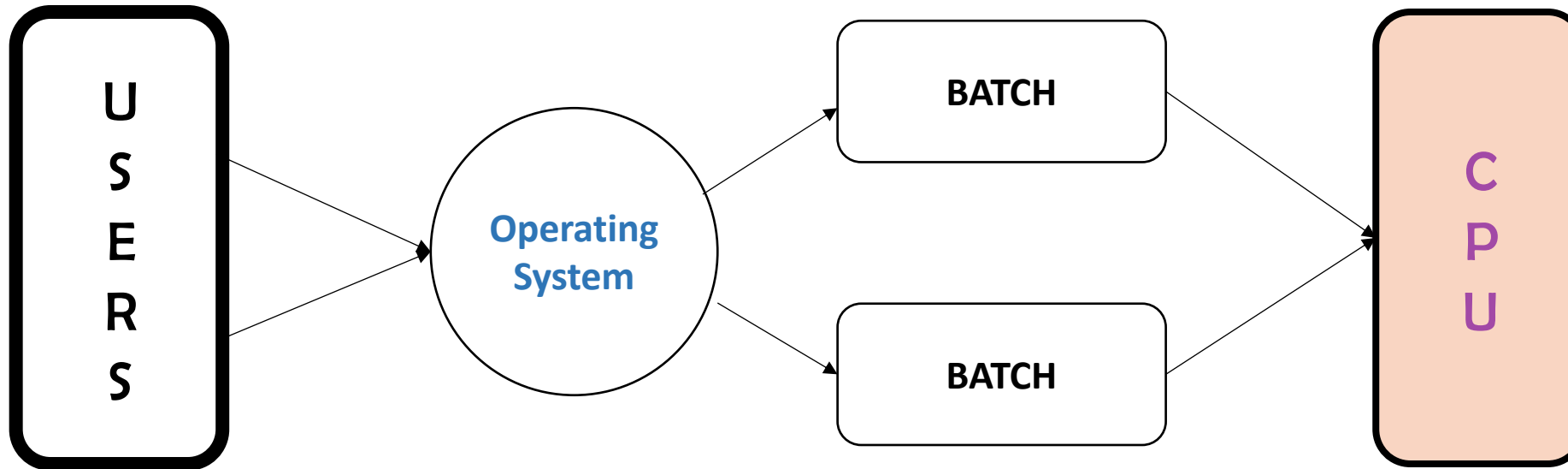
Jobs, together with input data, are fed into the system in a batch



The jobs are then run one after another



Ex: Unix

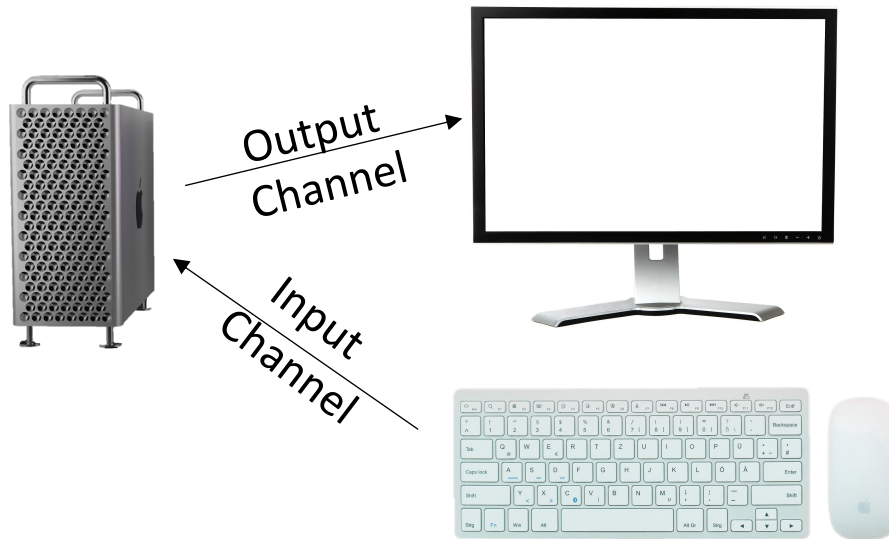


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Single user operating system



- ↔ An operating system allows only a single user to perform a task at a time.
- ↔ It is called as a Single user and single Task operating system.
- ↔ Ex: MS-DOS, Windows 9X



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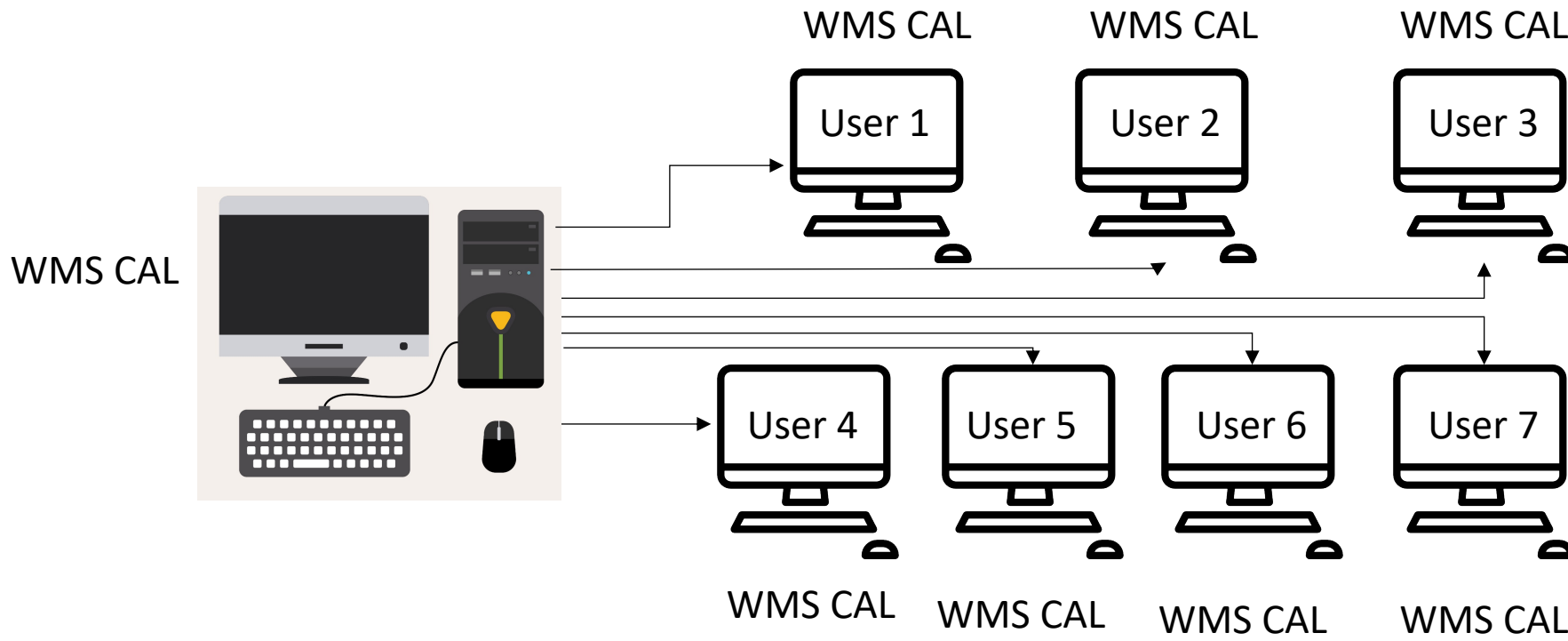
Multi User operating system



It allows same data and applications to be accessed by multiple users at the same time.



Ex: VMS



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Multi tasking Operating system



It allows more than one program to be running at the time



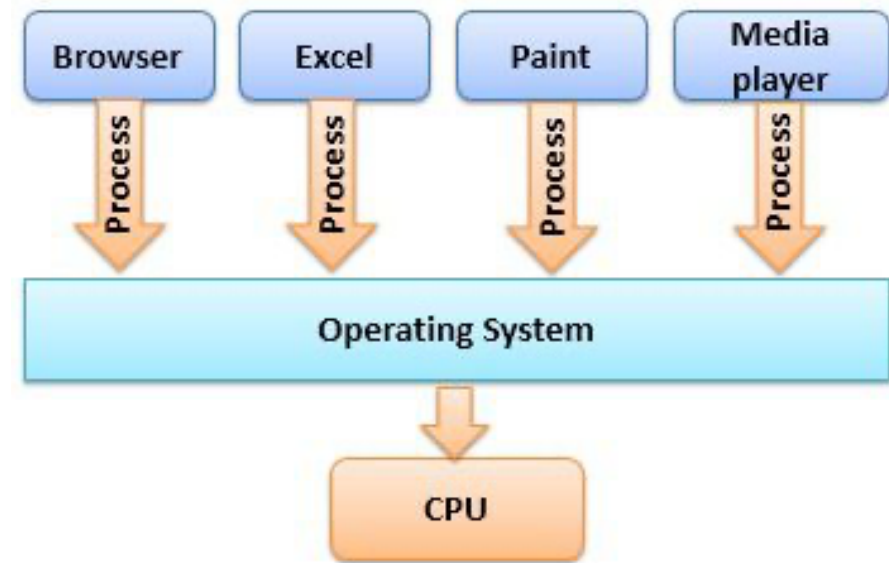
It has two types



Preemptive Multitasking



Cooperative Multitasking



Multitasking

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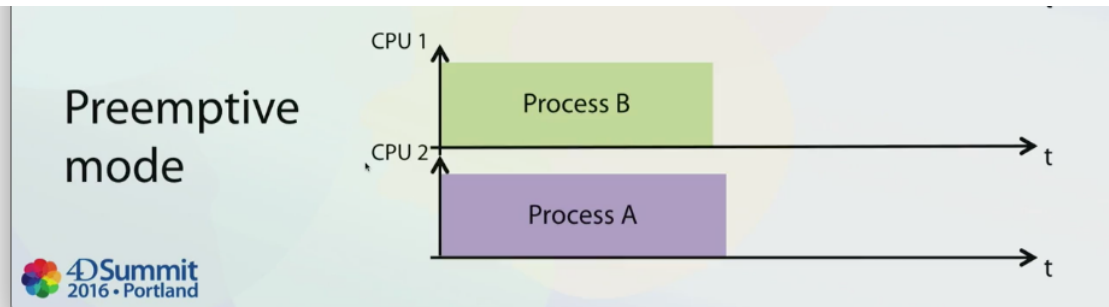
Preemptive Multitasking



Task in which a computer operating system uses to decide for how long to execute a task before giving another task to use the operating system



Ex: UNIX, Windows 95, Windows NT



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Multi tasking OS



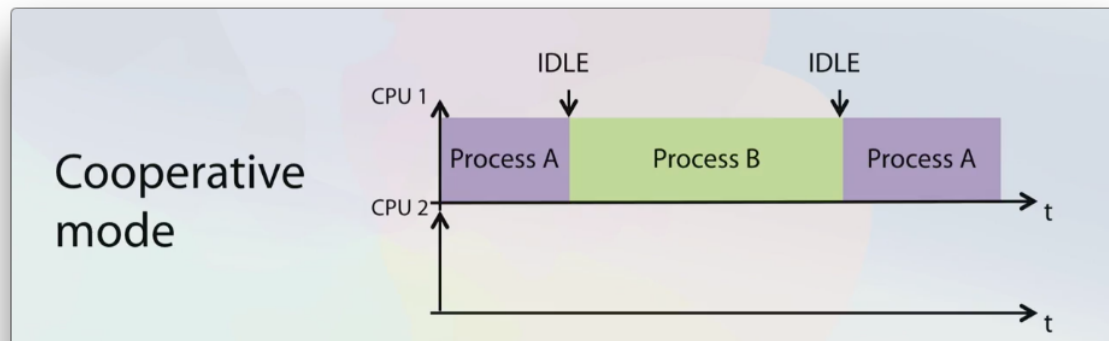
Cooperative Multitasking



Type of computer multitasking in which the operating system never initiates a context switch from a running process to another process.



Ex: Macintosh OS version 8.0 – 9.2.2 and Windows 3.x



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Back to Multi tasking OS



Real-time operating system



It is an operating system intended to serve real-time applications that process data as it comes in, typically without buffer delays.



Processing time requirements are measured in tenths of seconds or shorter increments of time.



It has 2 types



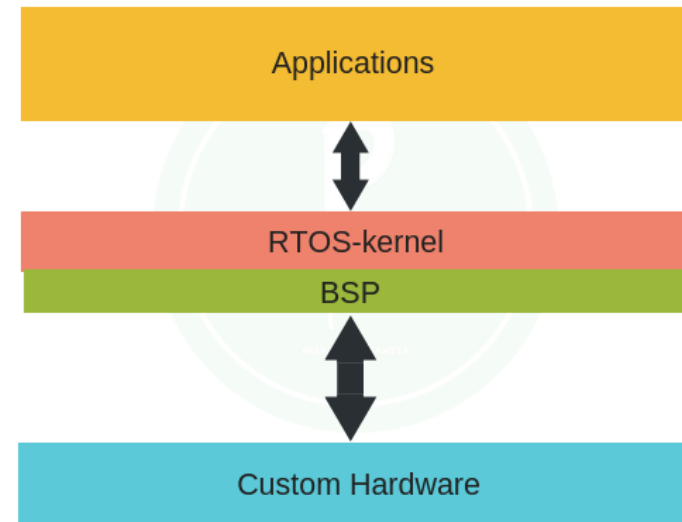
Hard real time Operating systems



Soft Real time operating systems



Real-Time Operating System



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Hard real time Operating systems



It has time critical deadlines that must be met; otherwise a catastrophic system failure can occur



Ex: Flight control systems, Vehicle subsystems control, Nuclear power plant control



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of OS

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Real-time OS

Soft Real time operating systems



It is considered undesirable, but not catastrophic, if deadlines are occasionally missed



It is also known as “best effort” systems



Ex: Multimedia transmission and reception, Networking, telecom networks, Web sites and services Computer game



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Real-time OS



User Interface



User interface is one of the significant feature in Operating System



The only way that user can make interaction with a computer



It has two types



Graphical User Interface(GUI)



Character User Interface(CUI)

```

C:\Users\rkeskiva>dir
2016-09-27 13:49 <DIR>          .
2016-09-27 13:49 <DIR>          ..
2016-09-27 13:49 <DIR>          Studies and stuff
                0 File(s)          0 bytes
                3 Dir(s)    64,261,156,864 bytes free

C:\Users\rkeskiva\Documents>cd "Studies and stuff"

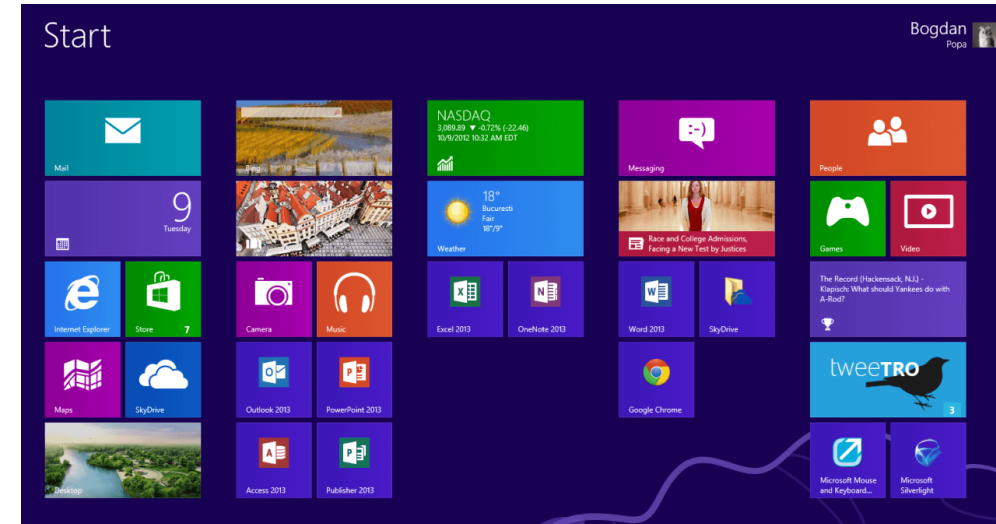
C:\Users\rkeskiva\Documents\Studies and stuff>dir
Volume in drive C has no label.
Volume Serial Number is 4C6B-E081

Directory of C:\Users\rkeskiva\Documents\Studies and stuff

2016-09-27 13:49 <DIR>          .
2016-09-27 13:49 <DIR>          ..
2016-09-27 13:46                644,874 Scenery.JPG
2016-09-27 13:45                1,011,255 Study plan.docx
                2 File(s)          1,656,129 bytes
                2 Dir(s)    64,261,021,696 bytes free

C:\Users\rkeskiva\Documents\Studies and stuff>

```



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Documents

File Home Share View

< > << This ... > Documents

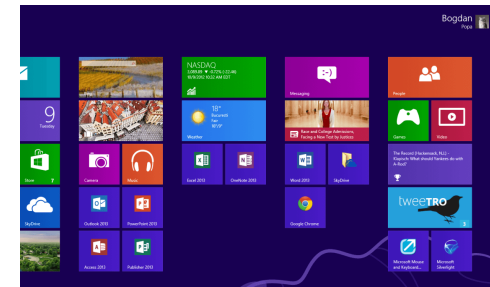
Search Documents

Date modified Ty

- Folder
- Shortcut
- Microsoft Access Database
- Bitmap image
- Contact
- Microsoft Word Document
- Microsoft Access Database
- Microsoft PowerPoint Presentation
- Microsoft Publisher Document
- Rich Text Format
- Text Document
- Microsoft Excel Worksheet
- Compressed (zipped) Folder

- View >
- Sort by >
- Group by >
- Refresh >
- Customize this folder...
- Paste
- Paste shortcut
- Undo Delete Ctrl+Z
- Share with >
- New >
- Properties

0 items



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```
C:\> Command Prompt
2016-09-27 13:49 <DIR> .
2016-09-27 13:49 <DIR> ..
2016-09-27 13:49 <DIR> Studies and stuff
                0 File(s)          0 bytes
                3 Dir(s) 64,261,156,864 bytes free

C:\Users\rkeskiva\Documents>cd "Studies and stuff"

C:\Users\rkeskiva\Documents\Studies and stuff>dir
Volume in drive C has no label.
Volume Serial Number is 4C6B-E081

Directory of C:\Users\rkeskiva\Documents\Studies and stuff

2016-09-27 13:49 <DIR> .
2016-09-27 13:49 <DIR> ..
2016-09-27 13:46          644,874 Scenery.JPG
2016-09-27 13:45      1,011,255 Study plan.docx
                2 File(s)      1,656,129 bytes
                2 Dir(s) 64,261,021,696 bytes free

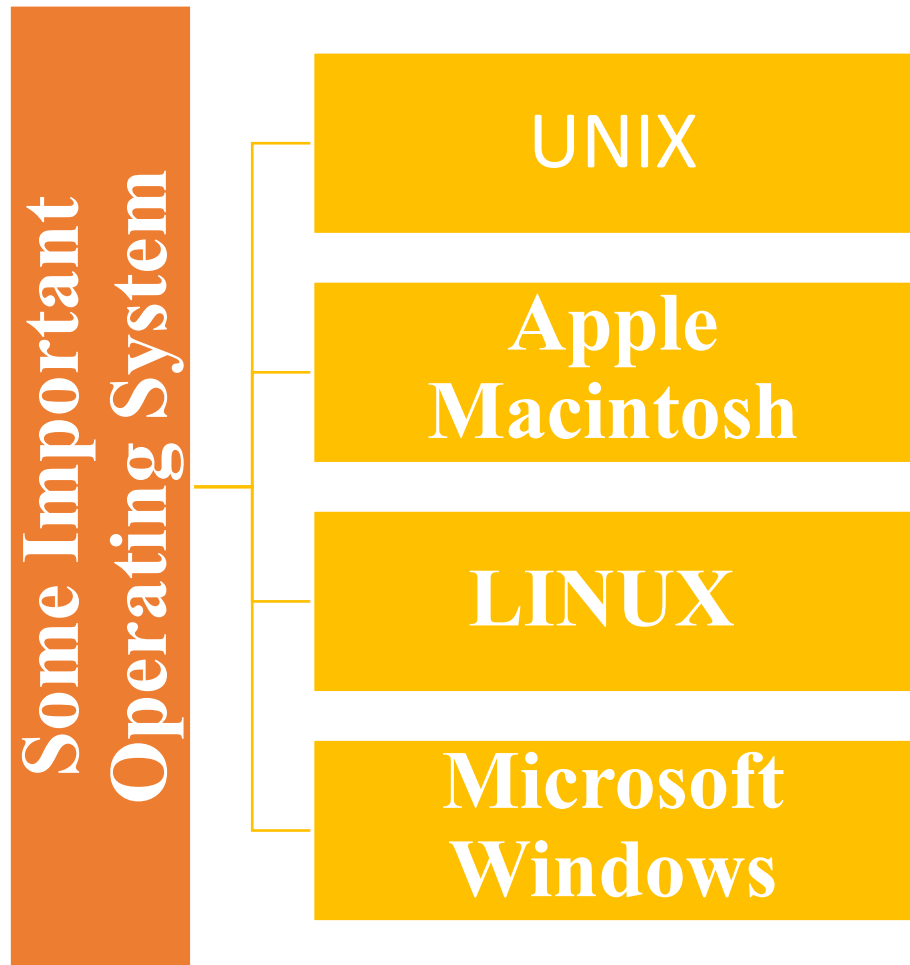
C:\Users\rkeskiva\Documents\Studies and stuff>_
```

issues

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Interface



Some Important Operating System

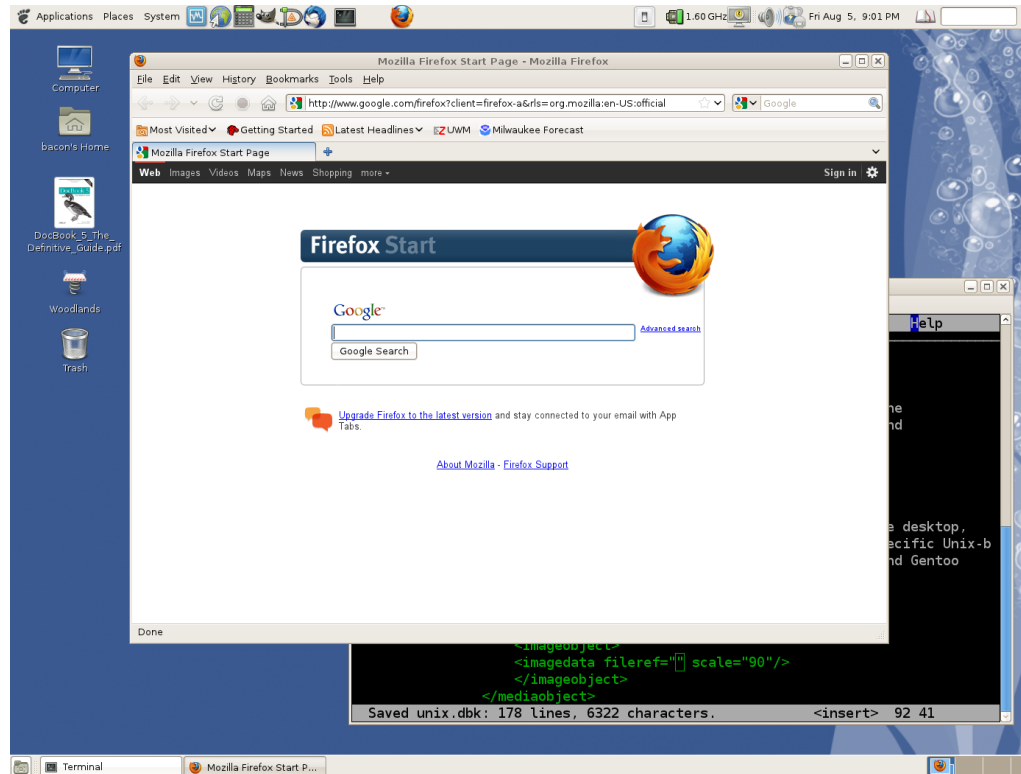


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UNIX



It is a family of multitasking, multi-user operating systems that derive originally from AT&T Bell Labs, where the development began in the 1970s by Ken Thompson and Dennis Ritchie.

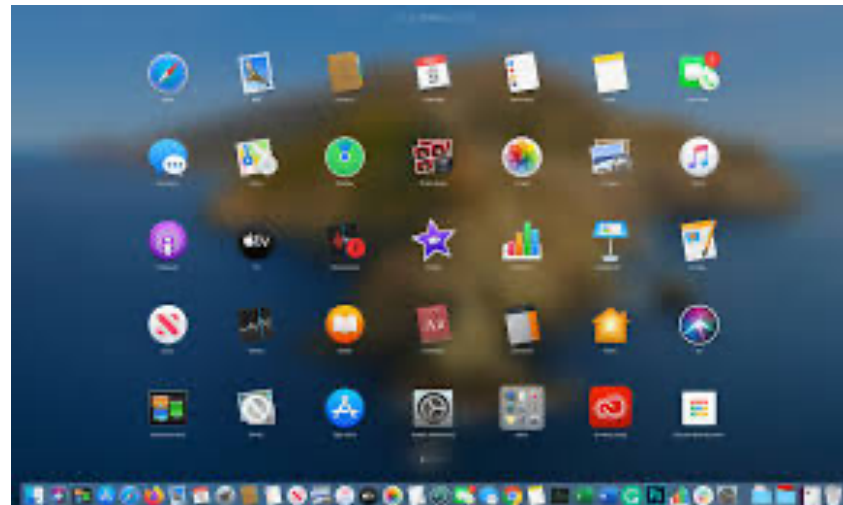


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Operating System



Apple Macintosh

- The **Macintosh** is a family of personal computers designed, manufactured, and sold by **Apple Inc.** since January 1984.
- The original **Macintosh** is the first successful mass-market personal computer to have featured a graphical user interface, built-in screen, and mouse.
- It was later renamed as Mac OS



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LINUX



It is a family of open source Unix-like operating systems based on the Linux kernel, an operating system kernel first released on September 17, 1991, by Linus Torvalds.



It is typically packaged in a Linux distribution



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Microsoft Windows



It is a family of proprietary operating systems designed by Microsoft Corporation and primarily targeted to Intel and AMD architecture based computers.



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Operating System

Mobile Operating system



A **Mobile Operating System** is an operating system for mobile phones, tablets, smartwatches, 2-in-1 PCs, smart speaker or other mobile devices



It has two types



Android



Symbian



iOS - iPhone OS



BlackBerry

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Android



Android is a mobile operating system developed by Google in 2007 , based on Linux and designed primarily for touch screen mobile devices such as smart phones and tablets.



The latest version - Pie



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Mobile
OS



Symbian

- ⏪⋯⏩ It is a discontinued mobile operating system and computing platform designed for smartphones.
- ⏪⋯⏩ Symbian was originally developed as a Proprietary software OS for PDAs in 1998 by the Symbian Ltd. Consortium
- ⏪⋯⏩ The latest version - Nokia Belle



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Mobile
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iOS - iPhone OS



It is a mobile Operating System created and developed by Apple Inc., exclusively for its hardware.



It is the Operating System that presently powers many of the company's mobile devices, including the iPhone, iPad and iPod Touch.



It is the second most popular mobile Operating System globally after Android



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Mobile
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BlackBerry



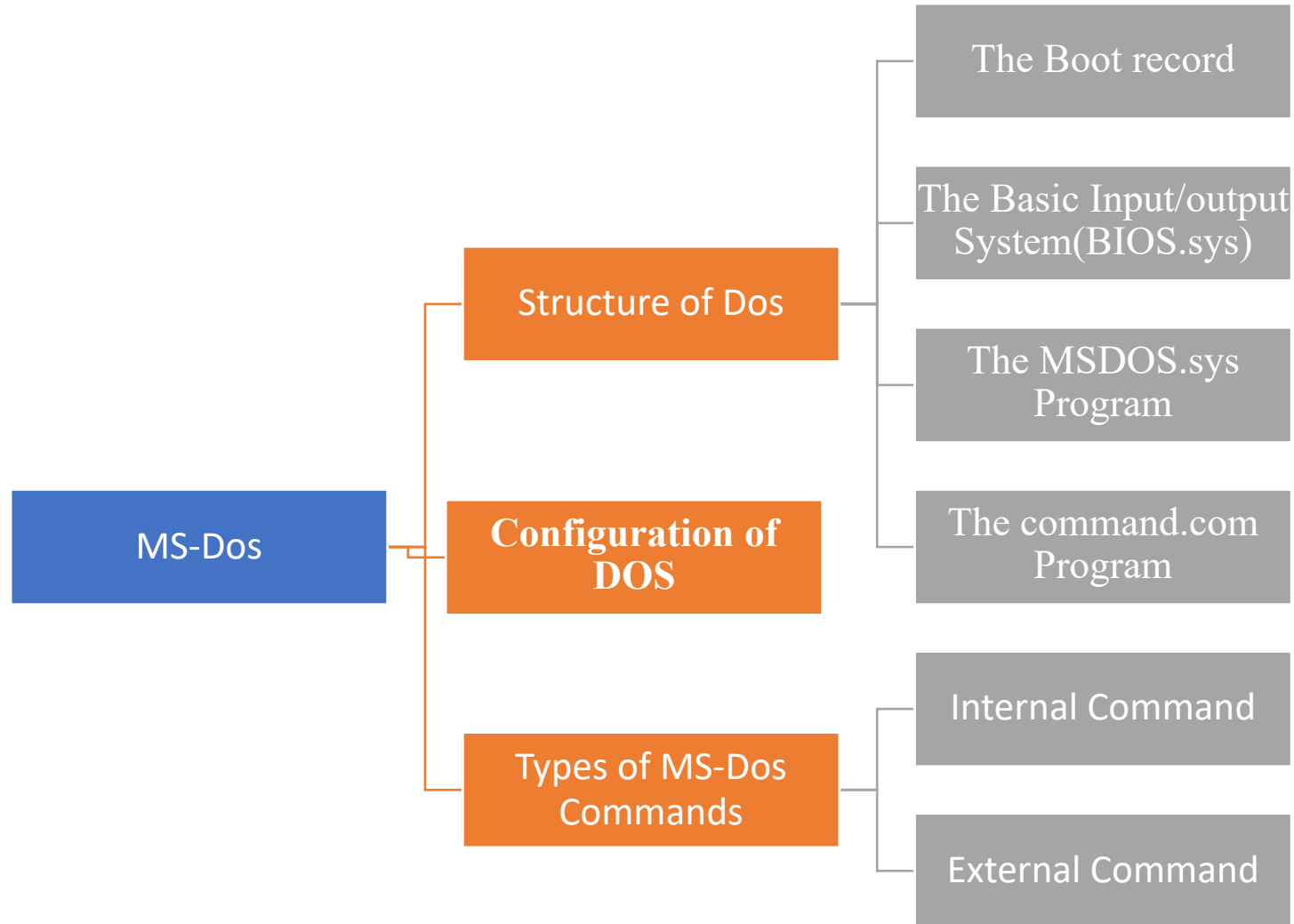
- It is a proprietary mobile operating system developed by Canadian company BlackBerry Limited for its BlackBerry line of smartphone handheld devices.
- The operating system also supports WAP 1.2.
- Latest Version : Blackberry OS 10.3.3



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MS-DOS



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MS-DOS



- ↔ MS-DOS is acronym for **Microsoft Disk Operating System**
- ↔ It is an operating system for x86-based personal computers mostly developed by Microsoft.
- ↔ It is loaded in the main memory of the computer using a single disk

```
Starting MS-DOS...  
C:\>_
```

```
Starting MS-DOS...  
HIMEM is testing extended memory...done.  
C:\>C:\DOS\SMARTDRV.EXE /X  
C:\>dir  
  
Volume in drive C is MS-DOS.6  
Volume Serial Number is 4077-00E0  
Directory of C:\  
  
DOS             <DIR>          11-23-17  12:07a  
COMMAND.COM    54,645 05-31-94  6:22a  
HIMEM28       386      9,349 05-31-94  6:22a  
CONFIG.SYS     71 11-23-17  12:07a  
AUTOEXEC.BAT   78 11-23-17  12:07a  
5 file(s)      64,143 bytes  
517,021,096 bytes free  
  
C:\>_
```

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'Hurrah!'

We completed this section.



Next Section

Coming
Soon...

