OPERATING SYSTEMS

Course Code : SWE3001   Slot : F2+TF2

Digital Assignment - 2

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Tech Talk on Recent developments in Operating Systems.

Youtube Video Link : https://youtu.be/nOZrEgP1PhQ

Operating Systems

SWE3001

Digital Assignment - II

Tech Talk on Recent developments in Operating Systems

Name : S.Deepan

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Operating System

- An operating system is a type of software interface between the user and the device hardware.

- It allows users to communicate with the device and perform the desired functions.

Basic functions of an operating system include:

1. Booting

2. Memory management

3. Data security

4. Loading and execution and many more

Linux 5.16 Operating System

- Looking into the significant features that give Linux a special look and value

- Linux OS have a Hierarchical file system, a standard structure in which system files and user files are organized.

- Linux uses the Bash shell to execute commands of the operating system.

- The most significant outlook of Linux is its security, it provides user security using authentication with passwords, controls the access to specific files.

Linux 5.16 Features

- Numerous drivers have been updated and new ones added to offer you the best possible hardware support for your GNU

- Distros Embracing Flatpak for Distributing Apps

- Light and Dark Styles Becoming the Norm

- PipeWire Simplifies Multimedia Production
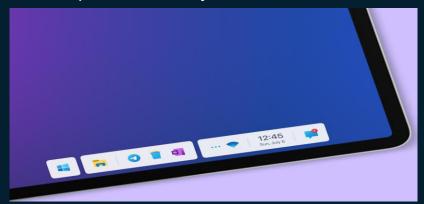
- Steam Deck Improves Linux Gaming

Windows 11 Operating System

- Windows 11 does bring some changes to the operating system's user interface (UI)
- Microsoft has also integrated Teams into Windows 11
- The new Microsoft Store allows developers to use third-party commerce systems and keep 100% of the revenue they get from their apps and services.
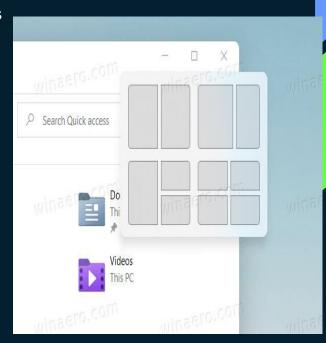
Windows 11 Operating System

- While Windows 11 is a free update for "supported" PCs, only those with at least 4 GB memory are compatible with it.
- It also made TPM, a security feature that protects sensitive data, mandatory.
- The biggest change to Windows 11 is its more stringent hardware requirements.
- The new taskbar keeps clutter at bay

Windows 11 Features

- Windows handles windows even better

- Smartphone aesthetics and accessibility options

- The new taskbar keeps clutter at bay

- Xbox features on your PC

- The app store finally makes senseTaskbar,
  Start Menu, and File Explorer

- Widgets in Windows 11

- Notifications and Quick Settings

Windows 11 Pros and Cons

Pros :

- Beautiful, more consistent new design

- Great window layout options

- New performance-improving features

- Planned support for Android apps

- Better multi-monitor functionality

Cons :

- Some useful tools going away, like Timeline and certain tablet gestures

- Some interface changes may take getting used to

- Requires a recent CPU

MacOS Monterey developments

- FaceTime and SharePlay

- Messages - Shared with You

- Shortcuts App

- Safari - Tab Groups

- Maps

- Privacy Updates

- Universal Control

- AirPlay

- Visual Lookup

MacOS Monterey Features

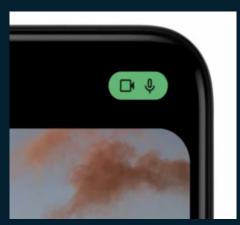- Finder

- Low Power Mode

- Erase All Contents and Settings

- Memoji

- Automatic Window Resizing

- Apple Card

- Improved Display Support

Android 12 OS developments

- App hibernation

- Game Mode APIs

- Multi-channel audio

- Picture-in-picture improvements

- Microphone and camera indicators

Android 12 OS Features

- Easier Wi-Fi sharing

- One-handed mode

- Rich content insertion

- Audio selection in the media player

- Universal splash screens

- Privacy Dashboard

- Approximate location
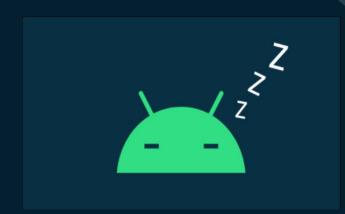
- Smaller security updates

Android 12 OS Pros and Cons

Pros :

- Make icons large for one-handed use.

- Improved gaming API optimization.

- Better customization features.

- Redesigned all UI elements.

Cons :

- Android 12 update will come later on older phones.

- Some phones may not be compatible with this new operating system.

- Users will take some time to settle into the new interface.

- Fragmented problem of uncertain application.

IOS 15 developments

- Notifications have been redesigned in iOS 15

- Safari features a completely new design

- Focus is a new feature that can filter notifications and apps based on what a user wishes to focus on at a certain time.

- The Maps app now offers a new 3D view in cities

- iOS 15 brings voice isolation and Spatial Audio to FaceTime calls

- The Weather app has been redesigned in iOS 15

IOS 15 Features

- Apple Wallet

- Privacy

- FaceTime

- Live Text

- Spotlight

- iCloud+

- Accessibility

- Widgets

IOS 15 Pros and Cons

Pros :

- 3D touch enabled
- Raise to Wake
- Improved Siri app
- Redesigned Apple Music is also very intuitive.
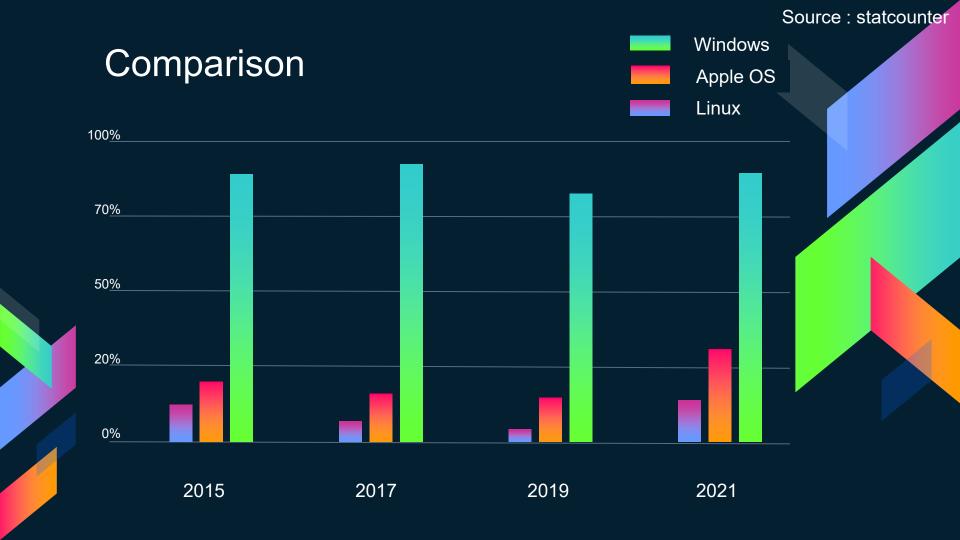
Cons :

- Lot of bugs
- Risk of losing the data
- Upgrade a jailbroken device
- Third-party app

Web development comparison between the OS

Windows > **Apple OS** > **Linux** >

Comparison of Mobile OS

	Android	Apple IOS
Market Share	75%	25%
App Downloads	118 Billion	29 Billion
Updates	Easy	Difficult
Revenue	27 Billion	34 Billion
OS Family	Linux	OS X, Unix

Thank You