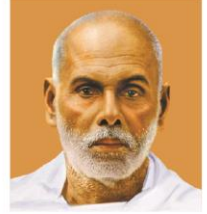
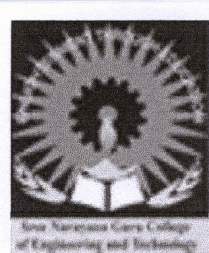


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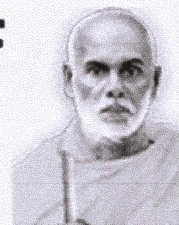
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PROOF FOR GAP FILLING- LECTURE TALK, WORKSHOPS Etc



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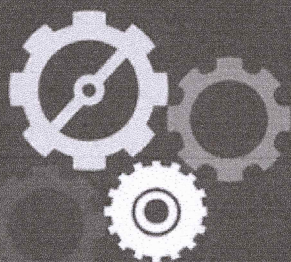
Korom, Chalakkode P.O., Payyanur, Kannur - 670307

Managed by Sree Bhakthi Samvardhini Yogam, Talap, Kannur

Affiliated to APJ Abdul Kalam Technological University and Approved by AICTE

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

A LECTURE TALK ON MOBILE OS



OPERATING
SYSTEM

VENUE
Smart Room
Department of CS

Leena
15/06/2023
3.00 PM - 4.00 PM

Dr. LEENA A V
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ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR



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CST 206 OPERATING SYSTEMS

GAP IN THE SYLLABUS – MOBILE OS

Mobile Operating System

Mobile operating systems, just like the OS for personal computers, are software interfaces to run all applications and basic functions of mobile devices. Devices where these mobile OSes are employed, include cell phones, smartphones, PDAs, tablet computers, etc.

With these specially designed mobile OSes, it is now very much possible to enjoy almost all the features of a computer's OS on small, handy devices with a touchscreen, Bluetooth, Wi-Fi, GPS navigation, camera, music player, voice search, and other perks of mobile phones.

An ideal mobile operating system is expected to meet the following criteria:

1. With catchy graphics, it should also be easy to use
2. It should provide a good useful app store
3. It should have a longer battery life
4. Should be good at managing data and network usage

One of the very important and distinctive features provided by mobile operating systems is a native modem and wireless service provider. This enables us to connect our mobile devices to the internet directly, without Ethernet, which is required in the case of computer operating systems.

Some mobile operating systems offer a wide range of in-built, native applications. For example, web browser applications, email applications, etc., most of the popular mobile operating systems, like iOS and Android, provide the feature of an app store. This enables users to either buy or freely download other applications as per the requirement of the user. This feature gives scope to enhance the in-built user interface and run different applications.

Nowadays, there are various options for mobile operating systems; below is a list of some examples for the same:

- Symbian OS
- Android OS
- iPhone OS (iOS) • BlackBerry Motion for its BlackBerry
- Windows Phone 7 (Windows Mobile)

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- Palm OS (Garnet OS)
- Palm WebOS
- Bada
- Maemo

Popular platforms of the Mobile OS

1. Android OS: The Android Operating System is the most popular Operating System today. It is a mobile OS based on the **Linux Kernel** and **open-source software**. The android operating system was developed by **Google**. The first Android device was launched in **2008**.

2. Bada (Samsung Electronics): Bada is a Samsung mobile operating system that was launched in 2010. The Samsung wave was the first mobile to use the bada operating system. The bada operating system offers many mobile features, such as 3-D graphics, application installation, and multipoint-touch.

3. BlackBerry OS: The BlackBerry Operating System is a mobile operating system developed by **Research In Motion (RIM)**. This operating system was designed specifically for BlackBerry handheld devices. This operating system is beneficial for the corporate users because it provides synchronization with Microsoft Exchange, Novell GroupWise email, Lotus Domino, and other business software when used with the BlackBerry Enterprise Server.

4. iPhone OS / iOS: The iOS was developed by the Apple inc for the use on its device. The iOS operating system is the most popular operating system today. It is a very secure operating system. The iOS operating system is not available for any other mobiles.

5. Symbian OS: Symbian operating system is a mobile operating system that provides a high-level of integration with communication. The Symbian operating system is based on the java language. It combines middleware of wireless communications and personal information management (PIM) functionality. The Symbian operating system was developed by **Symbian Ltd** in **1998** for the use of mobile phones. **Nokia** was the first company to release Symbian OS on its mobile phone at that time.

6. Windows Mobile OS: The window mobile OS is a mobile operating system that was developed by **Microsoft**. It was designed for the pocket PCs and smart mobiles.

7. Harmony OS: The harmony operating system is the latest mobile operating system that was developed by Huawei for the use of its devices. It is designed primarily for IoT devices.

8. Palm OS: The palm operating system is a mobile operating system that was developed by **Palm Ltd** for use on personal digital assistants (PADs). It was introduced in **1996**. Palm OS is also known as the **Garnet OS**.

9. WebOS (Palm/HP): The WebOS is a mobile operating system that was developed by **Palm**. It based on the **Linux Kernel**. The HP uses this operating system in its mobile and touchpads.

Features of Mobile Operating System

1. Easy to use

- The graphics should be attractive.
- The buttons and features should be easy to use. Moreover, the functionalities should not be very complicated.
- Features should be powerful and useful.

2. Good app store

- An app is one of the basic part of an OS.
- Good and useful apps forms an important part of an OS.
- The apps should be simple and interactive.

3. Good battery life

- Power is one of the main requirement of a smartphone.
- They require power for processors sensors etc. Therefore, the battery holds a very important role.
- Smartphones power usage keeps on increasing therefore, a good battery backup is very essential.

4. Data usage and organization

- An operating system should focus on controlling the data and network usage. It should keep the limit and requirement in focus.
- Secondly, the organization of data related to to-do lists, calendars, alarms, reminders etc is very important. A good OS should keep this data in a very organized and safe manner. Moreover, the data should be readily and easily available.

Function of a Mobile Operating System

here are various functions of mobile operating system, some of them are listed below:

1. OS keeps track of various apps or tasks, as well as the number of people who perform them. This is useful for determining the number of users and the frequency with which the programme is used. As a result, storage can be allotted to the device for programmes with higher demand. This aids in the tracking of the user as well as numerous processes that consume device storage.
2. OS assists the user in identifying hardware and/or software issues and making necessary device modifications.
3. The operating system is used to load and execute the programmes.

4. Device performance gets improved by the operating system. It keeps track of how long it takes the device to respond to a request. If there is a significant change in the time, the operating system analyses the device's performance and alerts the user. Any virus infection can cause a lot of variation or very little change. The user is notified when modifications are required.
5. The operating system protects user data and prevents illegal access. Giving the password to the files can protect data. When an unknown user views the files, the operating system prompts for the password, protecting the data. A password is required to access the device. This aids in the identification of those who use the system.
6. All the processes are scheduled with the help of operating system. It determines the duration of each processor-assigned process as well as the order in which the processor is accessed. Operating system is in charge of all process management tasks. It also keeps track of the status of each process.
7. Operating system divides the file system into folders so that files may be found and used quickly. Other folders and files exist within the directories. Operating system monitors and logs information about the files, user access details and settings, and the running condition of each file.

Components of a Mobile Operating System

The components of a mobile OS are same as a basic OS. The components are as follows:

1. Kernel

A kernel is the core/heart of an OS. It contains all the functions and operations to manage the working of OS.

2. Process Execution

The OS executes various process so that the statements will execute and connect the application program to the hardware. Whenever a process executes it uses memory, space and other resources as well.

3. Interrupt

Interrupts are basically used by the hardware devices to communicate with the CPU. It is basically a signal which the device generates to request the CPU. Moreover, whenever an interrupt occurs the CPU temporarily stops executing its current process.

4. Memory Management

It is the management of the main or primary memory. Furthermore, whatever program is executed, it has to be present in the main memory. Therefore, there can be more than one program present at a time. Hence, it is required to manage the memory.

The operating system:

- Allocates and deallocates the memory.
- Keeps a record of which part of primary memory is used by whom and how much.
- Distributes the memory while multiprocessing.

5. Multitasking

It is performing more than one tasks at a time. The OS allows the user to work with more than one process at a time without any problem.

6. Security

The OS keeps the system and programs safe and secure through authentication. A user id and password decide the authenticity of the user.

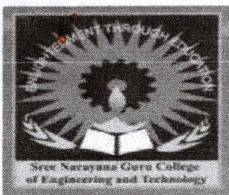
7. User Interface

GUI stands for Graphical User Interface. As the name suggests, it provides a graphical interface for the user to interact with the computer. It uses icons, menus, etc. to interact with the user. Moreover, the user can easily interact by just clicking these items. Therefore, it is very user friendly and there is no need to remember any commands.

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CST 206 OPERATING SYSTEMS

GAP IN THE SYLLABUS – MOBILE OS


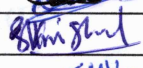
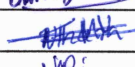




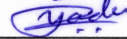
Mode of Execution: *Lecture talk*

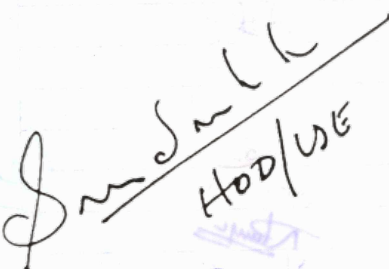
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Date of Execution: 15/06/2023

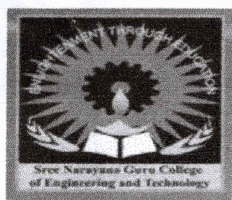
SL.NO:	REGISTER NO	NAME	SIGNATURE
1	SNC21CS001	ABHINAV DHARMARAJ	<i>Abhinav</i>
2	SNC21CS002	ABHINAV K	<i>Abin</i>
3	SNC21CS003	ABHINAV K	<i>Abin</i>
4	SNC21CS004	ABHISREE ASHOKAN	<i>Abhisree</i>
5	SNC21CS005	ABIRAM SUNIL	<i>Abiram</i>
6	SNC21CS006	ADARSH CHANDRAN K V	<i>Adarsh</i>
7	SNC21CS007	ADARSH KV	<i>Adarsh</i>
8	SNC21CS008	ADHITHYA JITHESH	<i>Adhithya</i>
9	SNC21CS009	ADWAITH S NIRANJ	<i>Adwaith</i>
10	SNC21CS010	AKSHAY P K	<i>Akshay</i>
11	SNC21CS011	AMINA FIZA K V	<i>Amina</i>
12	SNC21CS012	ANUDEEP K	<i>Anudeep</i>
13	SNC21CS013	ANUPAM K V	<i>Anupam</i>
14	SNC21CS014	ARATHI T V	<i>Arathi</i>
15	SNC21CS015	ARJUN P P	<i>Arjun</i>
16	SNC21CS016	ARJUN K V	<i>Arjun</i>
17	SNC21CS017	ASWATHI A V	<i>Aswathi</i>
18	SNC21CS018	ASWATHI K V	<i>Aswathi</i>
19	SNC21CS019	ATHIRA K V	<i>Athira</i>
20	SNC21CS020	ATHUL PAVITHRAN	<i>Athul</i>
21	SNC21CS021	B SREYAS KRISHNAN	<i>B Sreyas</i>
22	SNC21CS022	FADI ASLAM P V	<i>Fadi</i>
23	SNC21CS023	FATHIMATH THANSEEHA	<i>Fathimath</i>
24	SNC21CS024	HAIFA C	<i>Haifa</i>
25	SNC21CS025	HIBA T K	<i>Hiba</i>
26	SNC21CS027	JERLITT VISAL	<i>Jerlitt</i>
27	SNC21CS028	JISHNU K R	<i>Jishnu</i>
28	SNC21CS029	KEERTHANA K	<i>Keerthana</i>
29	SNC21CS030	M MOHAMMED FIDAN	<i>Fidan</i>
30	SNC21CS031	MOHAMMED ZAHRAN P V	<i>Zafran</i>
31	SNC21CS032	MUHAMMED ADNAN E M	<i>Adnan</i>
32	SNC21CS033	MOHAMMED AMEN NAJEEB	<i>Amen</i>
33	SNC21CS034	MUHAMMED SHEHZAD SIDHIK	<i>Shehzad</i>
34	SNC21CS035	MUHAMMED THAJUDHEEN	<i>Thajudheen</i>
35	SNC21CS036	NANDANA M	<i>Nandana</i>
36	SNC21CS037	NAVYA P	<i>Navya</i>
37	SNC21CS038	NEERAJ RAVI P V	<i>Neeraj</i>
38	SNC21CS040	RAIHANA T P	<i>Raihana</i>
39	SNC21CS041	SARANG V	<i>Sarang</i>

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40	SNC21CS042	SHAHEEM A V	
41	SNC21CS043	SREYAS KRISHNAN	
42	SNC21CS044	UTHARA M V	
43	SNC21CS045	VAISHNAV K P	
44	SNC21CS046	VISHAK K R	
45	SNC21CS047	VISHAL V V	
46	SNC21CS048	VYSHAK UMESHAN	
47	SNC21CS049	YADUKRISHNAN K V	


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CST 206 OPERATING SYSTEMS

GAP IN THE SYLLABUS – MOBILE OS

Mode of Execution: Lecture talk

Venu: Smart Room, Dept. of CSE

Date of Evaluation: 19/6/2023

SL.NO:	REGISTER NO	NAME	MARKS (10)
1	SNC21CS001	ABHINAV DHARMARAJ	8
2	SNC21CS002	ABHINAV K	8
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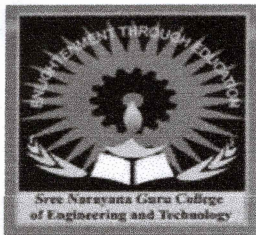
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EVALUATION OF GAP IN THE SYLLABUS

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b) Linux
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d) macOS
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a) Java
b) Objective-C
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5. What is the default web browser on Android devices?
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6. Which mobile operating system is known for its customization options and open-source nature?
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7. What is the virtual assistant developed by Apple for iOS devices called?
a) Siri
b) Cortana
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8. Which mobile operating system is commonly associated with Samsung smartphones?
a) iOS
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10
10

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9. What is the main purpose of an app store in a mobile operating system?

- a) Managing system updates
- b) Providing a platform for developers to distribute applications
- c) Optimizing device performance
- d) Enhancing device security

10. Which mobile operating system is known for its strong emphasis on privacy and security?

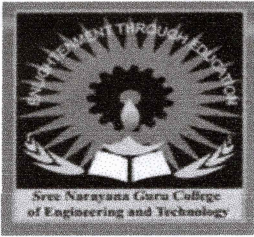
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5/10

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10. Which mobile operating system is known for its strong emphasis on privacy and security?

- a) Android
- b) iOS
- c) Windows Phone
- d) BlackBerry OS

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