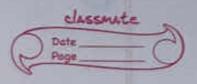
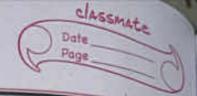
ANDROID Classmate NOTES Page



-	
*	Android : - In standard arms set +
_	Android is a mobile operating system based
	on a modified version of the Linux Kernel
	and other open source software, designed
	primarily for touchscreen mobile devices
	such as smartphones and tablets.
64	Paratria Amperonne Interes Instead
*	
	1. donut 8. kitkat
No.	2. eclair 9. lolipop
	3. froyo to marshmellow
St. C.	4. gingerbread 11. nought
Co	5. honeycomb 12. Oreo
	6. ice creams and wich 13. pie
13	7. jelly beans 14. 0510
100	contell board well bon sainpudile very
*	Android Architecture:
	· Android architecture contains different
	number of components to support any
	android device needs.
4	· Android software contains an open-source
18	Linux kernel having collection of number
	of c/c++ libraries which are exposed
	through an application framework services.

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The main components of android architecture are following: 1. Applications: top-layer - containing all applications like home, contact, gallery, camera. 2. Application framework: Content several important classes to develop applications. 3. Android Runtime: Android Runtime environment is one of the most important part of Android. It contains components like core libraries and the Dalvik Virtual Machine (DVM) 4. platform Libraries: The Platform libraries includes various clett core libraries and Java based libraries such as Media, Graphics, Surface Manager, OpenGL etc. to provide a support for android developement. 5. Linux kernel: This is like a heart of android architecture It contains security, memory management process management, network stack, driver model. (D CHO'SUS A Program

Software Required to develop Android Application: 1. java jaks or jaks 2. android sdk 3. eclips or android studio 4. Android Developement tools. s. and or android phone * Android Developer Tools: Android developer tools create interactive and powerful application. 1. SDK Tools : These are independent and no matter which android platform you working with. Stuck Territor Marken and 2. Platform Tools: Platform tools are customize to support the feature of the latest android platform. * List of Platform Tools: of a both brown of and drawn and 1. android debug bridge (ADB) Android Debug Bridge is a versatile command line tool that lets you communicate with la device partiame partiame 2. Android Interface Defination Language (AIDL) 3. adpt, dexdump and dex etc. @ Curious _ . Programmer



*	Lifecycle of Android Application:
	.iava file - java compiler (javac)class
	file - dex compiler (dx) - · dex file -
	packaging adpt - · aph file.

Dalvik Virtual Machine (DVM):

- > The Dalvik Virtual Machine is a register
 based virtual machine optimised for
 the mobile devices.
 - Tt optimize the virtual machine for memory, battery life and performance.

* Android Virtual Device:

- · An android virtual device is a configuration that defines the characteristics of an android phone tables, were as, android ty and automative as.
 - · The AVD manager is an interface you can launch from Android Studio that helps you to create and manage AVDs

* Emulator:

In Computing, an emulator is hardware or software that enables one computer system (called the host) to behave like another computer system.

- 1) Android Emulator is a application that represents a Virtual Device.
- 2) This provides all the android applications in one device.

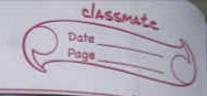
* Android Manifest:

The Android Manifest xml file contains information of your package, including components of the applications such as activities, services, broadcast receivers, content providers etc.

* Activity:

- · An activity represents a single screen with
- · For example, An Email application might have one activity that shows a list of new emails, another activity to compose an email and another activity for reading emails.
 - · If an application has more than one activity, then one of them should be marked as the activity that is presented when the application is launched.

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* Activity Life Cycle:

- 1. ACTIVITY LAUNCHED
- 2. on Create (): the activity enters in a
- 3. on Start (): this makes the activity visible to user.
- H. on Resume (): called when activity will start interacting with the user.
- s. on Pause (): called when activity is not visible to the user.
 - 6. on Stop (): called when activity is no longer visible to the user.
 - is destroyed.

* Services:

- · A service is an application component that can perform long running operations in the background and it does not provide a user interface.
 - · Another application component can star a service, and it continues to run in the background even if the user switches to another applications.

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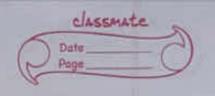


Types of Services: 6 stand with 1. Forground: · A foreground service platforms performs some operation that is noticeable to the user. · Ex: playing audio track in foreground. 2. Background: · A background service performs an operati ons that isn't directly noticed by the LUSET Alat separat metape and · Ex: app used a service to compact its storage and modern a source with 5. Bound : . A service is a bound when an application component binds to it by calling bindServices convers and return boild of stance * Services States: 1. Started: 1 Bhannanthalan 1 A service is started when an application component, such as an activity, starts it by colling start Service (). constant in IT hadrone of minne 2. Bound : The fact that the same of the s A service is bound when an application component binds to it by calling bind Service (). @ Curious _ . Programmer



I	*	Life Cycle of Services: UNBOUND SERVICE II bound
	1]	1. start Service (): This starts the service execution.
	10 to 2 to	2. bindService (): A service is bound when another component.
	2]	to Cook Office the Start Sant
100	THE STATE OF	The system invokes this method to perform one-time setup procedures when the service is initially created.
lo.	Shan	on bind (): The system invokes this method by calling bindservice () when another component wants to bind with the service.
	3]	on Start (ommand (): The system invokes this method by calling
	di set	start Service() when another component (such as an activity) requests that the service be started. If we implement this we must call stopself() or stopservice
-	nidas	to stop the service.

partles put to



on Unbind ():

the system calls this method when all clients have disconnected from a particular interface published by the service.

On Rebind ():

The system calls this method when new clients have connected to the service after it had previously been notified that all had disconnected in its on Unbind (Intent)

4) onDestroy ():

The system invokes this method when the service is no longer used and is being destroyed.

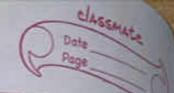
* CREATE A SERVICE:

- 1) start Service (new Intent (get Base Context (),
 Myservice · class));
- 2) stop Service (new Intent (getBase Context (),
 MyService · class));

Android Manifest:

<service android: name = ". Myservice " />

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* TOAST:

- · Toast is used to display information for a period of time. It contains a message to be displayed quickly and disappears after specified period of time.

 Toast is a subclass of Object class.
- . To ast notification in android always appears near the bottom of the screen

Toast makeText (Context context, charsequence text, int duration) -

> This method is used to initiate the Toast.

1. LENGTH - LONG :

It is used to display the Toast for a long period of long time.

2. LENGTH_ SHORT:

It is used to display the Toast for short period of short time.

* Broadcast Reciever:

- · Android apps can send or receive broadcast messages from the android system and other Android apps.
- . These broadcasts are sent when an event of interest occurs.