#### 15 - Manan kumar - Domadiya

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_1		What are the advantages of android development? Explain in detail.
- 0		Android Application development has following
	9	and it sometiment it was a state of the
	>	High Reach of SDK for all categories of
3.79		applications:
	al v	into, goods por la unidaisego
	300	Android SDK includes all the features.
		required for applications development using
		Maps Cops, Andio, Media, Network, Graphics
		etco i good's il godos instruccionos s
		Android being Open Source gives wide runge
- 12	er Con	of development:
	- 331	dies nt magaine any quachasse to me
	0	Android being opensource are not bound
		under any Restrictions. Any individuals.
_		is free to make any type of application
	- 2	asing all the resultances available. All the
	3	resources used by Android Development team
		are publically open to use in own applications.
-	>	Applications are not sand boxed.
		THE SAME BONCE
		Android applications are not restricted to
		their own domain. Any application can
A. C.		rise or access the Resurvey from other
		applications.

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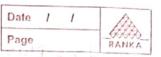
## 15 - Manun Warmar - Domadiya

+	This helps them us to stop the reinventing
	of wheel by allowing the rige of something
	that exists already. Some of the example.
	for this are: photo application from android
>	Application reach to audience is cheup:
	Android his been successfull in delivering
	Smartphones at very cheap rates to the
	people. The Levices using Android are
	cheap and easily affordable.
No. 1	the contract of the contract o
>	Development setup is cheap:
	Since Android is open source and 15 nd
	restricted to any proprietury it's development
	does n't require any purchase of licented
	software or any development machines in
	specific.
	the transfer of the state of th
>	Less Itassies from publishing plate torms
17	-uany 15 to los with the last and the said of
1.15	The publishing phiteforms for android APPS
	doesn't have to undergo any approval process.
	Thus app down't takes time to be available
	for public use.
1 .	the state of the s
	a the again was never because the second
	THE REAL PROPERTY OF THE PROPE

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	and the state of t
>	Can Handle Background Processes.
	Android SDK has Efficient components that can handle all buckground processes and thus help the application to make full use of it.
2.	Explain Directory Structure of android.
•	The Android project contains different type of app modules, source code files and Resource files. We will explore all the
	follows and files in android app.
	1 Monifest Folder 2 Java Folder 3 Res Cresmisses ) Folder
	> Doowable Folder > Layout Folder
	4 Crowdle Scripts
<u> </u>	Manifests Folder
	Hanifests folder Contains Android Hanifest: xml for our creating the android application.  This file contains information about our  application such as android ression, metadate.
	Scanned with CamScanner

# 15- Mananlanmar. Domadiya



	States packages for Java file and other
	application Components. It acts as an inter
	application Components. It acts as an inter mediator between android Os and our
	application
0-	son : Marie Decidios ( 5 ) at a to the last
>	Java Folder
	Java folder contains all the Java & kotling Scarce code Ciavas file which we create drawing the app development, including other Jest files, if we create any new projets. Using Java, by default class will be Main Activity java, it will be created automatically under the package name "com geekometer,"
	D. C. I.
	Resources (res) folder?
	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
	Resource folder is the most impostume
	to lar because it contins all the the
71 TO	non-code source like image, x ML Layour,
	Ul storings for our undroid application.
	in this different to
	-> res/drawable
*	Mohra stadion to
-51 -5 common 18-	It contains the different type of image
	used for the development of the application
tor I am	We greed to add off the image in
	drawable folder for the application development.
	or to these Control on Kales Cottes !

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#### Is Manankumar - Domadija

	-> res/layout
a part	Layout folder Contains all XML Layout
4.	files which we used to define the uses
400	Intex face of oux application. It contains
Solve	The activity main . xml file,
1	Lived I have see most otherwal sit has
	> res/mipmap
<u>- 1770 -</u>	delani podpoleco las las
	This folder Contains Lagracher xml file's
	to define icons which are used to show
- 1	on the home scan. It contains confains
	different density type of icons depends
	upon the size of the device such as.
1	hdpi, mdpi, xhdpi
0- M7 5	when the section from the file following
	-> Pres / values.
	to a single of the single of t
	ivakes foldes contains a number of
	Aml files likerangen
1 3	
	Staings.
	(0)083,
en mercial	Land dimens,
	( sourstyles milandian land and and
	The state of the s
	One of the most important file it string-xml
	files which contains the storing Resources

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Crockle Scripts Folder
Croudle means arromated build system a
and it contains namber of files which
are used to define a build configuration
which can be apply to all modules progins
and implementations are used to build
Configurations that can be applied to
all our application modals
die one apprecine movales
No to be a serial desides possi a la cul-
Explain android architecture in detail.
The source of the state of the
Android is an opensource, finax-based
Software stuck Created for a wide array of
devices and from factors The following diagram.
Show the major components of the
android platinform.
MILLAND TRIBITATION OF THE STATE OF THE STAT
I-1 hers Five Components.
The state of the s
System Apps
Java APJ framework
Notive c/c+ Libraries + Android Rantine
Hardware Abstraction later (HAL)
Linux leernel.
and the tenders of the mi
was the product all arithme in not write

	15 - Manan kamar Domadija, o Pago RANKA
	System Apps.
- 1-11	Diglez Email Calender
	Content providers  Activity, Location, pur large,
	View Systems Notification, Rosalsse, Window
,	Native C/C++ Librari Android Runtime
-	Mcdiaframe OpenCil Androw Ryntime (ART)  Mcdiaframe OpenCil Core libraries
	Azidio Bluetooth Comercy Sensors
	Linex kernel  Drivers
,	Azilio Binder(ip() Display leaped Bluetouth Camera shared Memory USB Wifi
	Power Management

### 15 - Main am Hamar - Domadija

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>	The Linux Kernel
	The formulation of android plateform is Librar
	Kernel. For example, The Androld Runtime (ART)
	relies on the lineax kernel for underlying.
	franctionalities such as threading and low-level
	me mon manage ment.
No.	granition by policy of the contraction of the contr
0 1000	Using a timux kernel allows Android to take
	advantage of key security feature and allows
	device manufacturers to develop hardware
	drivers for a well known kernal
>	Hardware Abstraction Layer CHAL)
	- Indiana - Japanes - James Indiana -
591	The hardware Abstraction Layer CHAW provide
	Standard interfaces that exposes device
	hardware capabilities to the higher-level
	Java API framwork. The HAL consists of multi-
-	ple library modules each of which implements
	an interfere for a specific type of hardure
	module. When a freemework API makes a
3	call to access device hardware, the Android
	System loads loads the library module for
	that hardware component:
	servición directardo de la como de
	1714 See Demon Description of
	transport to
*	

### 15-Mangnkumur - Domaliega

files to more compact machine code.  > Better de bugging support , including a  dedicard sampling profiler detailed  diagnostic exceptions and crash	>	Android Runtime
Some of the major features of ART include following:  > Alreal of time (AUT) and Trust-in-time (JIT) compilation > Optimized garbage (ollection (Crc) > On Android of (API (evel 28) and higher, conversation of an app package's Dalvik Exceedible format (DEX) files to more compact machine code. > Better de bugging support, including a dedicated sampling profiler, detailed diagnostic exceptions and crash	HIMI HIMI	For devices running Android version 5.0  (API Level 27) Or higher, each app runs in its own process and with its own instant of Androic Runtime (ART). ART is written to nun multiple viotual machiner on low- memory devices by executing dex files, a byterade formal designed specifically for Android that's optimized for minimal memory footprim Buillools, such as de decompile
catchpoint to monitor specific fields.	J. (T. ()	Some of the major features of ART include following:  7 Ahead of time (AOT) and Trust-in-time (JIT) compilation  8 Optimized garage collection (CTC)  9 On Android of (API level 28) and higher, conversation of an app package's Dalvik Executable format CDEXD files to more compact machine code.  8 Better debugging support, including a dedicated sampling profiler, detailed diagnostic exceptions and crash  Reporting, and the ability to set

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>	Native C/CH Libraries
5	Many Core Android System Components and
AAL	Services, such as ART and HAL o are built
	from native code that require native liabrang
	written in a and off. The android plateform
-	provides Java framework APIs to expose
	the functionalities of some of this for libraris
	to apps Fox example you can access OpenGL
(8)	El through the androw framework's Tara
15X	openal API to suppose for drawing and
	munipulating 20 and 3D graphic in your
`	app. moditily with anti-
	acyv
* 5 p 2 3	If you are developing an app that recivity
	Cor Cto code, you can use the Android Wil
a basa da serena da se	to access some of these native platform
10	libraries from your native codes
	Kilolija (TITA
<u> </u>	Java APJ Framework
	Los Company of their respective on
	The entire feature set of the androld Os is
	available to you throwingh ADTS written in July
7	language These Apjs from bailding blocks
	you need to create Android app s' by
	simplifying the rouse of color, modular
	system components and services, which
	includes the blowing.
	and of the property of the first of the first
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	> A dich and extensible View system you
7631	can use to ball'd an and Ul, including
	1ists, goids, text, boxes, button, and even
	and embedidable ueb browser
- 4/1	> A resource Manager, providing access to
-21-	non-code resources such as localized string
13 1	gouphics, and layout files
	S A notification Manages that anabler 411
	apps to display custom alerts in the status
	par
	> An Activity Manager that manages the
	liftery cle of apps and provide common
	navigation back stack
	I Content Providers that enables apps to
	access doity from other apps, such as the
	contacts app, or to share their own duty
	( ) No. (
>	System Apps
	Λ 1 -11
	Android comes with a set of Core apps
	from emails, &MS, calendar, internet Browsing
	contacts & more. Apps included with plateton
	the use chooses to install. So a third purp
	Copp Lan be come the user's default to b
	browsers SMC messenger, or even the
	de faith leat board come paceptions apply
	such as cystem settings app)
	se ing sie ing a pp

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	The apps functions both as apps for
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	They are some they own and
	for example it your app would like to deliver un sms package, you don't heed
	deliger in SMS package, you don't heed
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	1. DI COM MCTECH MADE 120 CONTICH EUCO SMS 940
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	to the reciepion you specify.
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