CDA601 TCA

**Q1- 01\_AndroidStudio**

What is Android Studio?

Which programming languages are used in Android Studio?

Recommended RAM for Android Studio 2.2 is?

Smartphone that doesn’t support Android?

By which platform Android Studio installation is supported?

Combination of which menu options creates project from existing code for Android Studio?

What is the role of Android Studio SDK Manager?

What is the role of Android Studio AVD Manager?

Does Android Studio 2 require installation of Java?

What is the role/content/purpose of Android Studio Menu Bar?

What is the role/content/purpose of Android Studio Toolbar?

What is the role/content/purpose of Android Studio Navigation Bar?

What is the role/content/purpose of Android Studio Editor Window?

What is the role/content/purpose of Android Studio Android Monitor?

What is the role/content/purpose of Android Studio Android Model?

What is the role/content/purpose of Android Studio Android Debug Bridge (ADB)?

What is the role/content/purpose of Android Studio Toolbar?

What is the role/content/purpose of Android Studio Run tool?

What is the role/content/purpose of Android Studio Event Log?

What is the role/content/purpose of Android Studio Terminal?

What is the role/content/purpose of Android Studio Gradle Console?

**Q2-02\_ActionBar**

What in the most basic form, the Action Bar displays?

What the Action View within the app bar (Action bar) provides?

What the SearchView widget implements?

What adding and handling actions the app bar (Action bar) allows to?

How widget is displayed if it is on the app bar (Action Bar)?

How widget is displayed if it is in the Action Bar overflow menu?

What do you need to declare when adding an up Action to app bar to support the up functionality in an activity?

What you should call to hide the app bar?

What are the key functions of the app bar known as the action bar are?

In order to add an action view how many attributes you should add to an <item> element?

What happened when the user interacts with the action view?

By calling of which static method you can get the action view's object reference?

What you should do for adding Action Buttons to the app bar?

Which method you should call in order to use the ActionBar utility methods?

Where are defined all action buttons and other items available in the action overflow?

What is the role/content/purpose of app:showAsAction= “ ifroom ” ?

How ActionBar and Toolbar behave depending on Android version?

When the action is listed in the overflow menu and not displayed in the app bar?

What is the role/content/purpose of app:showAsAction= “never”?

What you should specify within an <item> element, for each item if you want to appear as action button or if possible in the action bar?

**Q3- 03\_Activity\_Lifecycle**

What happens with the previous activity, when a new activity is started?

What happens when an activity is paused?

What happens/indicates when an activity is active or running?

Between which events(methods) the entire lifetime of an activity happens?

When an activity is no longer visible?

What happens to an activity when it is paused?

When the user selects your app icon from the Home screen, which method does the system call for the activity in your app that you've declared to be the "launcher" (or "main") activity?

Which is the activity's very last callback?

How many key loops there are in monitoring within an activity?

WHich part of an activity lifetime is between call to onStart() and corresponding call to onStop()?

Which method always follow onCreate() method in activity lifetime?

When a new activity is started, where in the stack it is placed?

When application process wiil be killed?

When the system calls onResume() method?

When the system can call onPause() method?

When the parent activity will receive as a result code RESULT\_CANCELED?

Which method is used for hiding the activity title?

Which method should be called first to display a dialog?

When the Toast() class is used?

What you need to add in order to apply a dialog theme to an activity, when you modify the <Activity> element in the AndroidMainfestxml file?

**Q4- 04\_ Fragments\_DynamicUI**

Can you combine multiple activities in a single fragment and/or combine multiple fragments in a single activity?

Which are essential properties of a fragment?

What the system calls when it's time for the fragment to draw its user interface for the first time?

What happens when an activity is paused?

When the system calls onCreate() method?

What the Preference Fragment displays?

What you need to use to manage the fragments in an activity?

How the lifecycle of an activity affects the fragment in which it lives?

When onDetach() method will be called?

Can you move a code from your activity's callback methods into the callback methods of your fragment?

What you need to implement when your fragment is a subclass of List Fragment?

How you can add a fragment to the activity layout?

How many ways there are to add a fragment to the activity layout?

Which is a way to provide an ID for a fragment?

What you can do with findFragmentbyTag()?

How multiple fragments can be used/added/removed?

Fragments have a few extra lifecycle callbacks. Which are Fragment's additional (comparing to activity lifecycle) callback methods?

How many Fragments does SensorListActivity use?

After which API level FragmentActivity is provided in the Support Library to handle fragments?

What happens when you remove or replace a fragment and add the transaction to the back stack?

How you should call getActivity() when you need a Context object within your Fragment?

**Q5-** **05\_DataPersistance**

What SharedPreferences store?

What Internal Storage stores?

What External Storage stores?

What SQLite Databases stores?

What Network Connection stores?

Where files are saved by default?

When device is low on internal storage space Android may delete what?

What are essential characteristics of external storage?

We use Shared Preferences to save what kind of data?

In which formats can be saved Shared Preferences?

What method do you use if you need multiple preferences files identified by name?

What method do you use if you need only one preferences file for your Activity?

What should you call to check whether the media is available?

To hide your files from the Media Scanner you include an empty file, in your external files directory. Hoe this file should be named?

What allows the general framework provided by SharedPreferences class?

What access could be to a SharedPreferences file managed by the SharedPreferences framework?

What is the role of the public abstract class PreferenceActivity?

What is the role of the public interface SharedPreferences?

How modifications to the preferences must be done?

What returns getSharedPreferencesName?

**Q6-** **06\_Android\_Files**

How many file storage areas are available for all Android devices?

Which are the storage areas in Android devices?

Which storage area can be removable?

Which storage for Android devices is always available?

Which category of files you can save in external storage?

What should be considered for private files saved in the external storage?

If you want a file to be accessible by only your app where it should be stored?

If you want a file to be accessible with other apps where it should be stored?

What is the role of File object?

What is the purpose and scope of File API?

Which method used for requesting permission from the application to store on external storage?

What is the method used for requesting permission from the application to use the internal storage?

What method you use to provide the current available and total space in the storage volume?

The most straightforward way to remove a file is to have the opened file reference call to which method?

What method do you use when a file, you want to delete, is saved on the internal storage?

When you call getExternalStorageState(), what is the positive returned state equal to?

What does the getFilesDir() method do?

What does the fileList() method do?

What does the deleteFile() method do?

What does the getDir() method do?

**Q7-** **07\_Databases\_SQLite**

What does SQL stands for?

What is one of the main principles of SQL databases?

Is the SQLite open-source or closed-source?

Which platforms are compatible with SQLite?

What is SQLite?

Who can access databases create with SQLite?

What SQLite Databases store?

What applies for SQLite databases privacy?

A contract class is a container for constants that define names for what?

What SQLite Database Schema is?

What you can do by passing a ContentValues object to the insert() method?

Which is correct for public interface Cursor?

Where the results of the query are returned?

What SQL Helper is?

What is the role of SQLiteDatabase getWritableDatabase()?

Which method you should use to read from SQLite database?

Where of the calling Activity life cycle is typically optimal to close the database?

What SQLite Contract definition is?

Which is a good way to organize a database contract class?

What you need to provide to delete rows from a database table?

**Q8-** **08\_Applications\_Interacctions**

How declarations differ for explicit and implicit intents?

What will happen if you invoke intent and there is no app available on the device that can handle the intent?

What is the role of Component name contained in an Intent?

What is the role of intent for Applications Interactions?

What Explicit intent does?

What Implicit intent does?

Do implicit intents declare the class name of the component to start?

How to start an activity using Intent?

What Implicit intents declare?

How you can allow other apps to start your activity?

When the system may send a given Intent to an activity?

Which of sending and receiving Intents activities should have permission for the type of action to be performed?

What does the Intent createChooser()?

Which type of intent should use your activity to ensure that is secure, when starting a Service?

In which cases a pending intent can be used?

Which aspect of intent and intent filters is compared by Intent Resolution?

How to verify whether there is an activity available that can respond to the intent?

What are the roles of RESULT\_OK, RESULT\_CANCELED, CATEGORY\_DEFAULT and <intent-filter> in the manifest file?

What you should do to decide what action to take in your activity, when the Intent that was used to start it. Then when your activity starts, which method you should call to retrieve the Intent that started the activity?

If you want to return a result to the activity that invoked yours, which method you should call to specify the result code and result Intent. Then, when your operation is done, and the user should return to the original activity, which method you should call to close (and destroy) your activity?

**Q9-** **09\_Data\_Sharing**

What an application uses for sending and receiving simple data?

AN INTENT

In which data type browser app can share URL of the currently-displayed page with any application?

TEXT

What you need to do to send data to another activity?

INTENT WITH ACTION\_SEND ACTION DECLARED

When you construct intent for Sending Simple Data to Other Apps, you must specify the action you want the intent to trigger. Which one?

ACTION\_SEND

Which action should be specified within the intent for sharing Binary data, Text content and Multiple data?

ACTION\_SEND\_MULTIPLE

For which Android API Level and abouve ShareActionProvider is available?

API LEVEL 14

Where intent filters should be specified?

MANIFEST FILE

What type of content you can send as Simple Data to Other Apps?

TEXT AND IMAGES

Does the receiving application need permission to access the simple data to which, the Uri points to?

YES

What for is responsible 'public class ShareActionProvider'?

CREATING VIEWS THAT ENABLE DATA SHARING AND TO SHOW A SUB MENU WITH SHARING ACTIVITIES IF THE HOSTING ITEM IS PLACED ON THE OVERFLOW MENU.

Do you need to specify within the Intent a MIME (Multipurpose Internet Mail Extensions) type for sharing simple date?

YES

What you must provide to make Functioning ShareActionProvider?

A SHARE INTENT

What handles an ActionProvider, once attached to a menu item in the action bar?

THE APPEARANCE AND BEHAVIOR OF THE ITEM

Which is the best way to add a share action item to an ActionBar?

USE SHAREACTIONPROVIDER

Where you should define android:actionProviderClass attribute for the corresponding <item> to get started with ShareActionProviders?

MENU RESOURCE FILE

What you need to specify if you want your application to accept shared simple data from other application?

INTENT FILTERS

How intent filter would look like (whole code) if your application handles receiving text content?

    <intent-filter>  
        <action android:name="android.intent.action.SEND" />  
        <category android:name="android.intent.category.DEFAULT" />  
        <data android:mimeType="text/plain" />  
    </intent-filter>

How intent filter would look like (whole code) if your application handles receiving single image of any type?

<activity android:name=".ui.MyActivity" >  
    <intent-filter>  
        <action android:name="android.intent.action.SEND" />  
        <category android:name="android.intent.category.DEFAULT" />  
        <data android:mimeType="image/\*" />

How intent filter would look like (whole code) if your application handles receiving multiple images of any type?

    <intent-filter>  
        <action android:name="android.intent.action.SEND\_MULTIPLE" />  
        <category android:name="android.intent.category.DEFAULT" />  
        <data android:mimeType="image/\*" />

How intent filter would look like (whole code) if your application handles receiving any file of any type?

**Q10-** **10\_File\_Sharing**

What client app should call to request a shared file from the server app?

What and applications should specify to offer files to share?

What you should specify for sharing files?

What is the permissions duration for shared files access?

Which is the Android component that generates content URIs for files, based on specifications provided in XML?

Which item of the Android Support Libraries (within the SDK manager) is required to be set for FileProvider class?

Where should be specified the directories that contain the files you want to share?

What your app should provide to receive requests for files from client apps and respond with content URI?

Where should be specified the Android FileProvider component which generates content URIs for files?

Where is required an entry for defining a FileProvider?

How files sharing provide secure access to a file associated with an application?

What you can do (with your app) when you set up you app to Share Files?

When the client app calls startActivityForResult(), what the server app will return?

What you should do when a user selects a shared file and your application determined what file was selected?

How could be granted permission for access to shared file?

What you need to configure so that your app (1) can offer a secure handle to the file from other app and (2) to offer securely a file from your app to another app?

What retrieves and returns ContentReslover.getType() method?

What are the steps to request a shared file from the server app?

What are relations between FileProvider and ContentProvider?

What are relations between Grant Permissions for File sharing?

**Q11-** **11\_NFC**

What does NFC stand for?

How many operation models do Android powered devices with NFC support?

Which are the NFC documents that are used in Android?

What does NFC allow you?

What is the required distance for NFC to initiate a connection?

What does Android Beam file transfer do?

P2P mode allows the NFC device to?

For which Android version and above is available Android Beam file transfer for large files?

Which is simple uses-feature statement that will show your app uses NFC.

What you need to do to transfer one or more files to another NFC-enabled device?

What you must request in your app manifest to allow your app to use Android Beam file transfer to send files from external storage using NFC?

What you will achieve by calling PackageManager.hasSystemFeature() with the argument FEATURE\_NFC?

Which FileUriCallback code will do a callback that Android Beam file transfer calls to get files to share?

What is NFC Basics?

Do you need to request write permission to copy a file transferred via Android Beam file transfer to your internal storage area?

Where must reside the files you want to transfer using Android Beam file transfer?

What is the simple code which add an intent filter that triggers the activity com.example.android.nfctransfer.ViewActivity?

    <activity  
        android:name="com.example.android.nfctransfer.ViewActivity"  
        android:label="Android Beam Viewer" >  
        ...  
        <intent-filter>  
            <action android:name="android.intent.action.VIEW"/>  
            <category android:name="android.intent.category.DEFAULT"/>  
            ...  
        </intent-filter>  
    </activity>

What you should do If the statement

if (!PackageManager.hasSystemFeature(PackageManager.FEATURE\_NFC))

returns TRUE?

What does it mean If the statement

if (Build.VERSION.SDK\_INT < Build.VERSION\_CODES.JELLY\_BEAN)

returns TRUE?

What does it mean If the statement

if(!nfcAdapter.isEnabled())

returns TRUE?

**Q12-** **12\_WiFi**

In the context of Android wireless services what does NSD stand for?

NETWORK SERVICE DISCOVERY

What an adding NSD to your app will allow your users to?

GIVES YOUR APP ACCESS TO SERVICES THAT OTHER DEVICES PROVIDE ON A LOCAL NETWORK. DEVICES THAT SUPPORT NSD INCLUDE PRINTERS, WEBCAMS, HTTPS SERVERS AND OTHER MOBILE DEVICES.

What is the first thing to do to register your WiFi service on the local network?

CREATE A NsdServiceInfo Object

What kind of information NsdServiceInfo object provides?

INFORMATION THAT OTHER DEVICES ON THE NETWORK USE WHEN THEYRE DECIDED WHETHER TO CONNECT TO YOUR SERVICE

What Wi-Fi peer-to-peer (P2P) allows to?

CONNECT TO DEVICES WITHOUT INTERMEDIATE ACCESS POINT

What Android uses to notify your application for available Wi-Fi services?

CALLBACK METHODS

In the context of Android connectivity what does DNS stand for?

DOMAIN NAME SYSTEM

What does P2P stand for?

PEER TO PEER

Which method you should call to start searching for nearby devices with Wi-Fi P2P?

discoverPeers()

Creating P2P Connections with Wi-Fi requires to Set Up a Broadcast Receiver. Where is the best section of Activity Life Cycle to add the code to register the intent filter and broadcast receiver?

onResume() Method

What Indicates WIFI\_P2P\_CONNECTION\_CHANGED\_ACTION?

INDICATES THE STATE OF WI-FI P2P CONNECTIVITY HAS CHANGED

What Indicates WIFI\_P2P\_STATE\_CHANGED\_ACTION?

WHETHER WI-FI P2P IS ENABLED

What Indicates WIFI\_P2P\_PEERS\_CHANGED\_ACTION?

THE AVAILABLE PEER LIST HAS CHANGED

What Indicates WIFI\_P2P\_THIS\_DEVICE\_CHANGED\_ACTION?

THE DEVICES CONFIGURATION DETAILS HAS CHANGED

What is the role of public class WifiP2pManager?

MANAGES WI-FI PEER TO PEER CONNECTIVITY

Creating P2P Connections with Wi-Fi requires to Set Up a Broadcast Receiver. Where is the best section of Activity Life Cycle to add the code to unregister the intent filter and broadcast receiver?

onPause() Method

Do you need to retrieve the password when connecting to a group of Wi-Fi connected devices?

IF EACH OF THE DEVICES IN YORU GROUP SUPPORTS WI-FI DIRECT YOU DON’T NEED TO EXPLICITY ASKF RO THE GROUPS PASSWORD WHEN CONNECTING

What does Wi-Fi P2P allow your application?

ALLOWS YOUR APPLICATION TO QUICKLY FIND AND INTERACT WITH NEARBY DEVICES AT A RANGE BEYOND THE CAPABILITIES OF BLUETOOTH

What you should add in order to use Wi-Fi P2P?

IN ORDER TO USE WI-FI P2P, ADD THE ACCESS\_COARSE\_LOCATION, CHANGE\_WIFI\_STATE, ACCESS\_WIFI\_STATE, AND INTERNET PERMISSIONS TO YOUR MANIFEST.

In order to use Wi-Fi P2P do you need to add permissions?

YES