Andriod\_Session20\_Assignment2

a)What is null pointer Exception?

Thrown when an application attempts to use null in a case where an object is required. These include:

* Calling the instance method of a null object.
* Accessing or modifying the field of a null object.
* Taking the length of null as if it were an array.
* Accessing or modifying the slots of null as if it were an array.
* Throwing null as if it were a Throwable value.

Applications should throw instances of this class to indicate other illegal uses of the null object. NullPointerException objects may be constructed by the virtual machine as if [suppression were disabled and/or the stack trace was not writable](https://docs.oracle.com/javase/7/docs/api/java/lang/Throwable.html#Throwable(java.lang.String,%20java.lang.Throwable,%20boolean,%20boolean)).

b) When “Unable to add window to Activity…. Is your Activity running” error occurs?

This exception occurs when the app is trying to notify the user from the background thread (AsyncTask) by opening a Dialog.

If you are trying to modify the UI from background thread (usually from onPostExecute() of AsyncTask) and if the activity enters finishing stage i.e.) explicitly calling finish(), user pressing home or back button or activity clean up made by Android then you get this error.

c) What is ArrayIndexOutOfBound Exception?

Java supports the creation and manipulation of arrays, as a data structure. A bunch of Java data structures are implemented using arrays to store and expand their data. Thus, arrays are massively used in programming, as they provide a very fast and easy way to store and access pieces of data.

Each array consists of a concrete number of elements and thus, it has a fixed size. The index of an array is an integer value that resides in the interval [0, n-1], where *n* is the size of the matrix. If we request for an index that is either negative, or greater than or equal to the size of the array, an [ArrayIndexOutOfBoundsException](http://docs.oracle.com/javase/7/docs/api/java/lang/ArrayIndexOutOfBoundsException.html) is thrown.

The [ArrayIndexOutOfBoundsException](http://docs.oracle.com/javase/7/docs/api/java/lang/ArrayIndexOutOfBoundsException.html) is a [RuntimeException](http://docs.oracle.com/javase/7/docs/api/java/lang/RuntimeException.html) thrown only at runtime. The Java Compiler does not check for this error during the compilation of a program.Top of Form

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d) “Activity not found? Have you declared this activity in your manifest file”?

This exception is thrown when a call to [startActivity(Intent)](https://developer.android.com/reference/android/content/Context.html" \l "startActivity(android.content.Intent)) or one of its variants fails because an Activity can not be found to execute the given Intent.

Solution:

Be sure to declare your activity in the manifest.xml within the aplication:

e) No such method getColor() found?

Thrown if an application tries to call a specified method of a class (either static or instance), and that class no longer has a definition of that method.

Normally, this error is caught by the compiler; this error can only occur at run time if the definition of a class has incompatibly changed.