**Assignment 20.2**

1. What is NullPointerException?

Null Pointer Exception occurs when we try to call an instance method on an instance reference variable whose value is null, as each instance reference variable has default value of null.

Generally NullPointerException is something which comes when we call a function on something that is null.

For example

We create a database helper object dbhelper.

DBhelper dbherper;

Now we have to initialize this object.Without initializing it if we call a function on that object it will show null pointer exception.

Dbhelper.getalldetails(); //this will throw an error since dbhelper is not initialized.

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

when we create Dialog with an application context instead of Activity context we may get this exception.

When we are showing any dialog in another class that does not extend the Activity class so we may not get the context of that class that is extending the Activity. So to get the context inside our class where we are trying to show the dialog but not extending the Activity we can use the getParent() which returns you the context of that superior activity.

new Dialog(Activity.this);

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1. What is ArrayIndexOutOfBound Exception?

An ArrayIndexOutOfBoundsException is caused by trying to retrieve an element that does not exist, by passing an index that is higher than the index of last element or negative

When looping through an array, always the index we are retrieving should be strictly smaller than the length of the array. For instance:

for(int i=0;i<array.lenth;i++)

when we do

for(int i=0;i<=array.lenth;i++)

we are trying to access beyond the size of the array so it will show ArrayIndexOutOfBoundException.

Alternately we can use foreach loop

for(int value:array)

{

}

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

There are many reasons for this error to occur

1)The activity was not declared in the manifest file.

2)If the activities are in different packages the package names must be specified.

3)If by mistake we try to start a service as startActivity(servicename) instead of startService(servicename)

4) Multiple Application tags in Manifest can cause this as we have to be careful with package names.

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e) No such method getColor() found.

This method getColor() is deprecated.

We must use ContextCompat.getColor(context,R.color.color\_name) which is part of the Support V4 Library so it will work for all the previous API.

This will choose the Marshmallow two parameter method or the pre-Marshmallow method appropriately.

Starting in Marshmallow ,the returned color will be styled for the specified Context's theme.

if (Build.VERSION.SDK\_INT >= Build.VERSION\_CODES.M) {

yourTitle.setTextColor(getActivity().getResources().getColor(android.R.color.white, getActivity().getTheme()));

}else {

yourTitle.setTextColor(getActivity().getResources().getColor(android.R.color.white));

}