

1.What are loaders and how do we implement loaders?

****help threaded work,, cope with activity life skills****

Loaders help threaded work correctly cope with the activity life cycle.

The loader manager manages one or more loader instances within a fragment activity or fragment. There is ONLY one loader manager per activity.

Typically **initialize a loader** within the **activity's onCreate method**.

The `initLoader()` method takes a **unique id** that identifies the loader, optional arguments.

To use a loader our application must include-

- A `FragmentManager` or `fragment`,
- An Instance of `Loader manager`,
- A `CursorLoader` to load data backed by `Content provider` or implement our own subclass of `loader` or `AsyncTaskLoader` to load data from another source.
- `LoaderManager.LoaderCallbacks`. Here we create new loaders and manage references to existing loaders.
- `SimpleCursorAdapter` as a way to display the loaders data
- a data source

SUB) What types of loader are there?

`AsyncTaskLoader` and `CursorLoader`, customizable loader/

SUB) why Use Loaders?

****executes tasks off thread,,loadermanager handles config changes,,users dont have to wait for data****

SUB) What is a Loader Manager??

****A class,, manages all loaders in activity,,**

SUB) what is `initLoader()`?

****creates & starts loaders,, reuses existing one**

2. What is an AsyncTaskLoader?

****abstract loader,,provides `AsyncTask`,, perform load operations separate thread****

An `AsyncTask loader` is an abstract loader that provides an `AsyncTask` to perform load operations on a separate thread.

3. What is a Handler Thread for?

SUB) What is a handler?

****android system framework,, managing threads,,allows send and process message,, communicate with UI thread****

`Handler` is part of the **android system framework** for managing threads. A handler allows us to **communicate** back with the **UI thread** from other background thread. A handler allows us to **send and process message** and runnable objects associated with a threads message queue

SUB) What are in the Handler architecture?

****Message, thread, looper, handler****

SUB.) What is a message?

****object containing description and/ data ,,can be sent to handler****

SUB.) How do you send Message objects?

sendMessage(), sendMessageDelayed(), sendEmptyMessage()

4. What are some common threading restrictions in android?

Do Not Block The UI thread

Do Not access the Android UI toolkit from the outside the UI thread

You Cannot update the UI from any other thread other than the UI/main thread.

5. What are thread pools and thread pool executors?

SUB.) what are thread pool executors?

****Takes Task from Queue,,runs it on the thread****

Thread pool executor takes a task from the queue and runs it on the thread.