1. The various states that an app can enter on your platform of choice:

Various States an Android application can enter are:

- 1. <u>onCreate()</u> The onCreate() method helps us to create an activity for an application. On activity creation, the activity sets itself in the created stage. It also allows performing basic application startup that happens only once when the application gets started.
- 2. **onStart()** the onStart method is invoked when the system enters the started state. This activity enables the application to be visible to the user. Eventually, the activity enables the application to enter the foreground and become available to the end user. One use case of this method could be where the applications the code that handles the UI component.
- 3. **onResume()-**When this method is invoked the activity enters the resumed state and comes to the foreground. While the method is invoked in the application, it awaits instructions from the end user. This state is persistent unless the application gets diverted to different activity such as receiving a phone call or device screen turning off or the user going to another application.
- 4. **onPause()** The application system invokes onPause() when the user navigates to another activity. This implies the activity is no longer in the foreground. This can be used to pause or change activity that is currently not in scope while the scope is resumed shortly.
- 5. **onStop()** While the activity is not visible to the end user, this method is invoked by the system. This can occur in instances when the activity has completed its execution and is about to be terminated.

6. **onDestroy()** - The method <u>onDestroy()</u> is invoked prior to the termination of the activity. The system calls this method when the activity is being completed (due to the user completely dismissing the activity or due to <u>finish()</u> being called on the activity) or when the system is temporarily terminating an activity due to a configuration change by the user (like device rotation)

2. The various states that you must consider for your app, why you must consider them, and what must happen in each state.

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- When the application launches the first time, it enters Created state where the system takes the user name & phone details and redirects them to the home page.
- Then the application enters into the Started state, where the application should be able to load the UI screens properly.
- After that when the application enters the Resumed state, it comes to the foreground. the user would be able to see all the services which are provided and will be able to select the desired services.
- When the application enters the Paused State, the activity is no longer in the foreground. The user should be able to come back to the application without having to log in again and should be able to see their selected services, bookings, and other user details.
- When the application comes to Stopped State, the current activity is no longer visible to the user. But the login credentials should be saved in the background even after the application has entered the Stopped state.