HW3 - State Management

There are seven states of an Activity Lifecycle, the application remains in one of these states:

- **onCreate():**
  This method is called when the activity is created for the first time.
  When the user clicks on the app icon from the Home screen to start that app, the system calls the onCreate() method of that particular page.

- **onStart():**
  The onStart() method is called when the activity is started, i.e. after onCreate() method. It is also called If the user clicks the Back button to navigate to the previous screen.

- **onRestart():**
  This method is called when the stopped activity is started again.

- **onPause():**
  If the user goes to the home screen or launches a different app, onPause() method is called. The application runs in the background, but it is not completely stopped. So, the user can retain the state and data he left while leaving the app. The activity is visible but another activity has the focus.

- **onResume():**
  If the application is in the pause state and the user comes back to the application after navigating other tasks in the phone, then onResume() method is called.

- **onStop():**
  The onStop() method is called when the activity is no longer visible to the user. i.e., Some other activity has resumed or taken the screen.

- **onDestroy():**
  This method is called before the activity is destroyed or ended.

The various states that you must consider for your app, why you must consider it, and what must happen in each state: (Lifestyle Management App)

- **onCreate():**
  First time when the user opens the app, the onCreate() method of the Login Page would be called. If the user has already logged-in then the Landing Page's onCreate() method will be called. For each new page that user navigates to has a different onCreate() method.

- **onPause():**
  If some other apps dialog box/notification arrives on the screen, then the Lifestyle Management app will go in pause state. As soon as user returns to the screen again, the data will be retained from where the user left the app. For eg: If the user enters the login data and hits the home button, the data will be as it is when the user comes back to the screen.

- **onResume():**
  As the user comes back from the other app/activity, The user will be able to continue with the task on our Lifestyle management app. For eg: If users suddenly gets a call and then they return to the Edit breaks page, they will be able to continue where they left. The data will not be removed.

- The other activity states are not mandatory for our app, as the in-built Alarm Manager Class will help us to perform time-based operations outside the lifetime of our application to alert the users regarding breaks via Alarm/Notification.