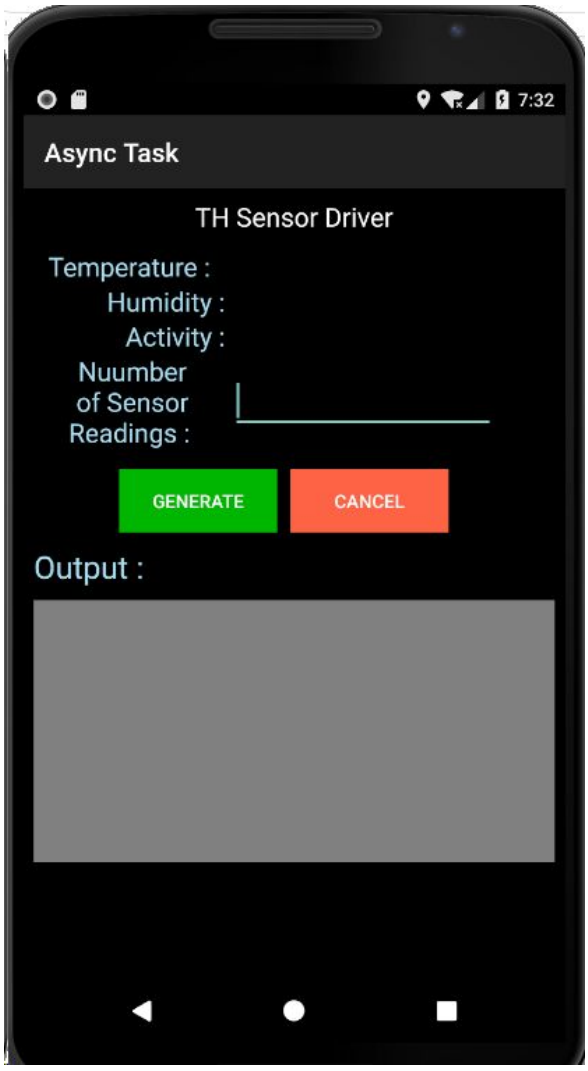
Assignment 5:Async Task

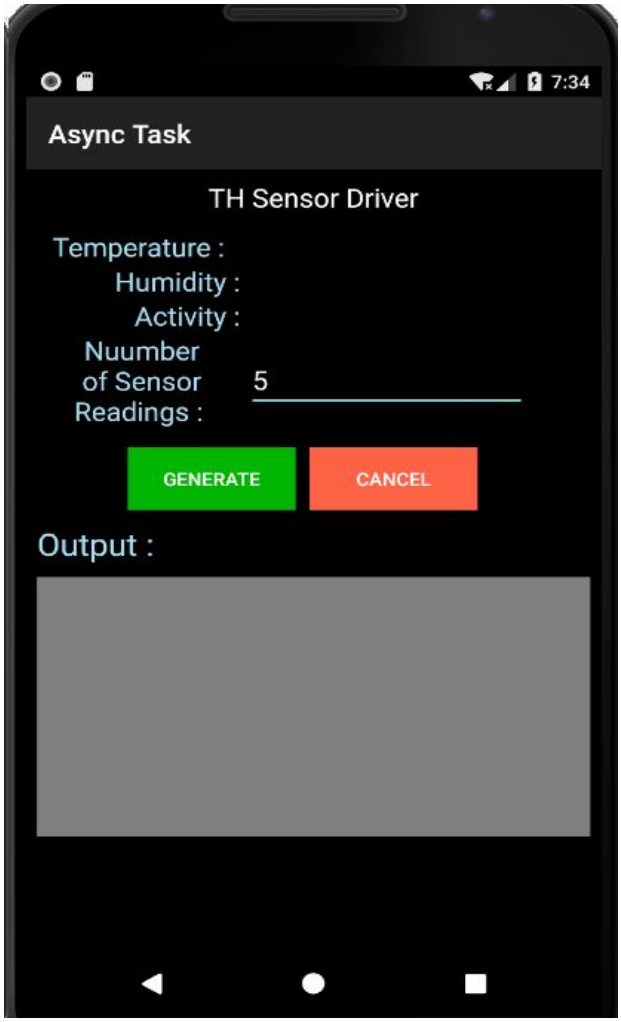
AsyncTask enables proper and easy use of the UI thread. This class allows to perform background operations and publish results on the UI thread without having to manipulate threads and/or handlers.An asynchronous task is defined by a computation that runs on a background thread and whose result is published on the UI thread.

Below is the implementation of TH sensor using Async Task:

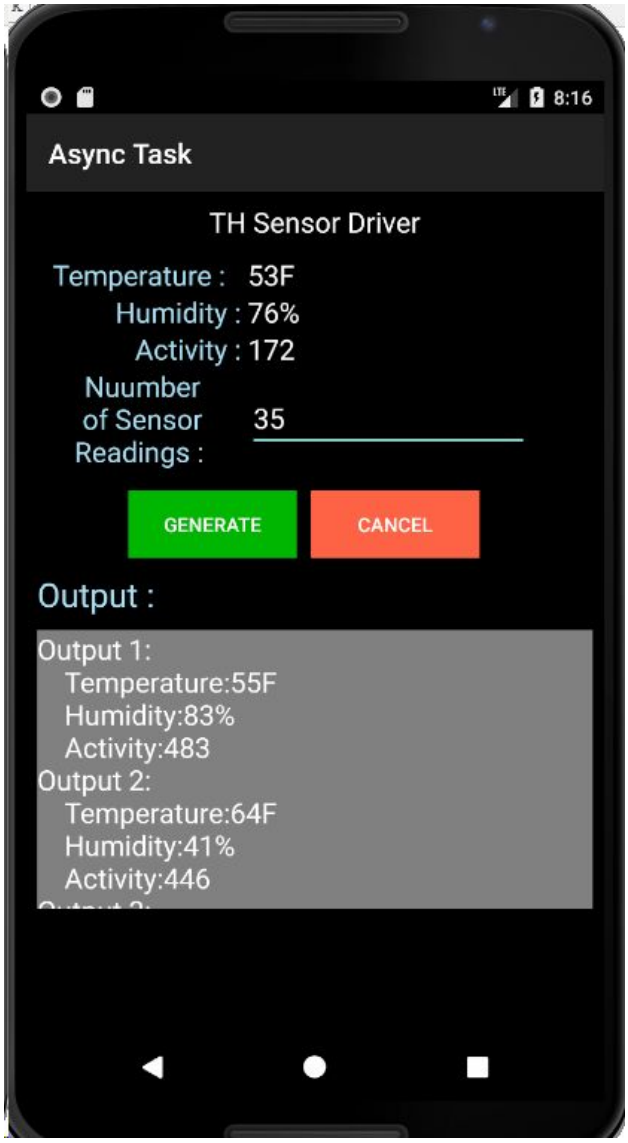
1. Created user friendly UI as shown below



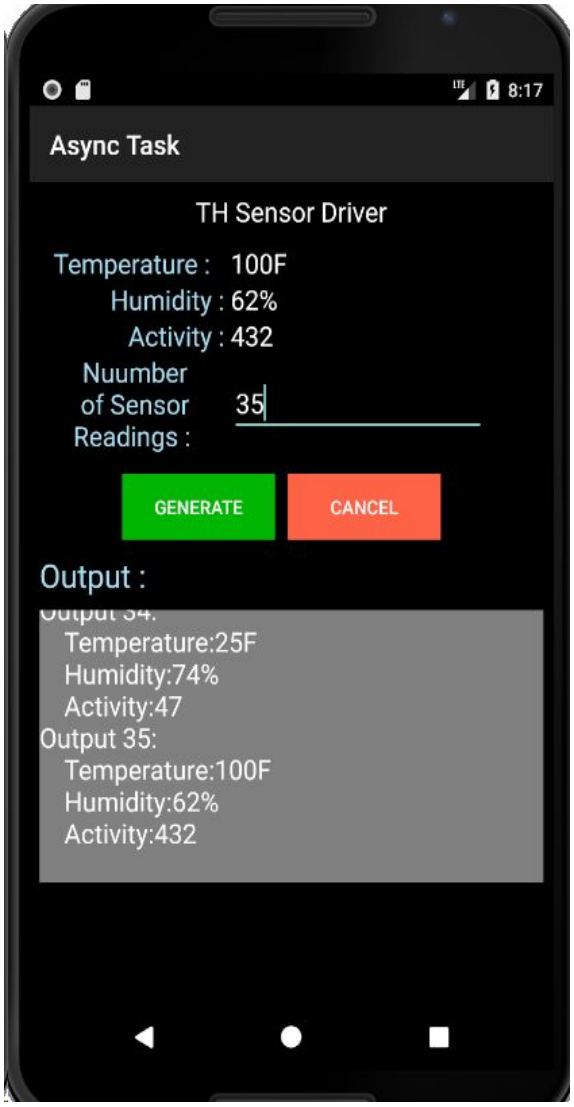
2. UI takes the input of number of random sensor readings to generate.



3. On click of “Generate” button, readings will be generated by creating an async task.Random values for components like temperature,humidity,activity will be generated in the background and will be published to show that as progress on UI.Bottom scrollview represents the complete random output generated.Meanwhile each random output calculated by async thread will be displayed in the UI on its respective field.Later thread sleep is induced for 1000ms.



4. Switched to some other app, and came back but still the values will be generated in the backend



5. On click of the cancel button,app closes.