

The various states an app can enter on Android:

1. Active State - occurs when the app is in the foreground and currently being used by the user
2. Paused State - occurs when the app is no longer in focus, but may still be visible to the user
3. Stopped State - occurs when the app is no longer visible to the user
4. Destroyed State - occurs when the app is about to be terminated, either by the system or by the user

Various states that must be considered for our app, why it must be considered, and what must happen in each state:

1. Active State - Necessary for full functioning of the app, this state is the primary method by which the user interacts with the app. In this state, the nyoom app must actively interact with user input, poll accurate user geographical location, and communicate with both the internet or custom database for restaurant suggestions, and any other app for directions, such as google maps.
2. Paused State - If a user has another app overlay the nyoom app, it is necessary to handle the behavior with a paused state. The app should retain any user inputted information, as well as any changes during normal activity, to be able to resume quickly. Network or inter app communication may be paused to conserve resources.
3. Stopped State - If a user has navigated away from the app but has not yet closed it, the nyoom app should be put into a stopped state to conserve resources. When the app is stopped, resources should be released, and the state data should be saved for restoration when the user navigates back.
4. Destroyed State - All resources and processes should be released, and some critical data should be saved to facilitate a quick launch when the app is started again. Critical data in this case would include whether or not the user has set up an account or preferences yet, and what those preferences are, to be able to load directly to the suggestion page.