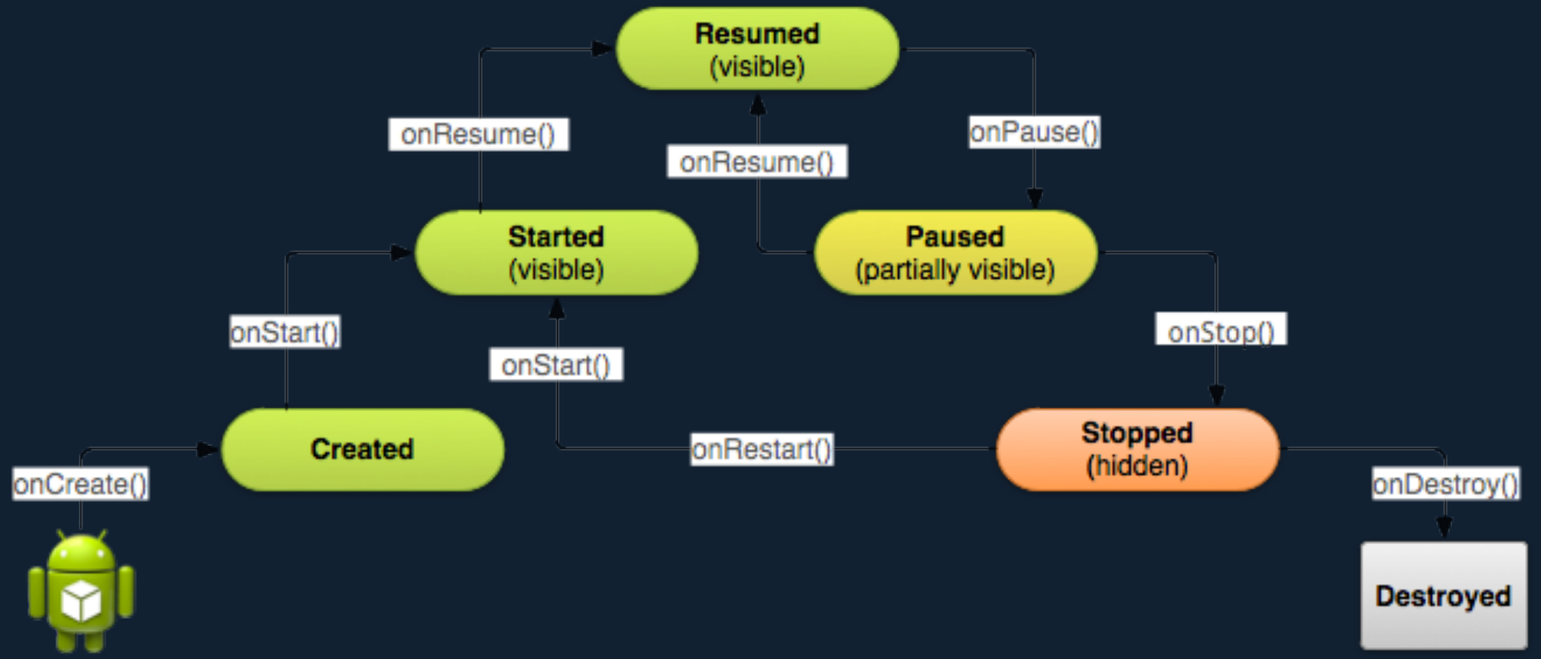
ACTIVITY LIFECYCLE AND INTENTS

STARTING AN ACTIVITY



Step pyramid that gives the developer access to the application before or after various states are achieved

STARTUP STEPS

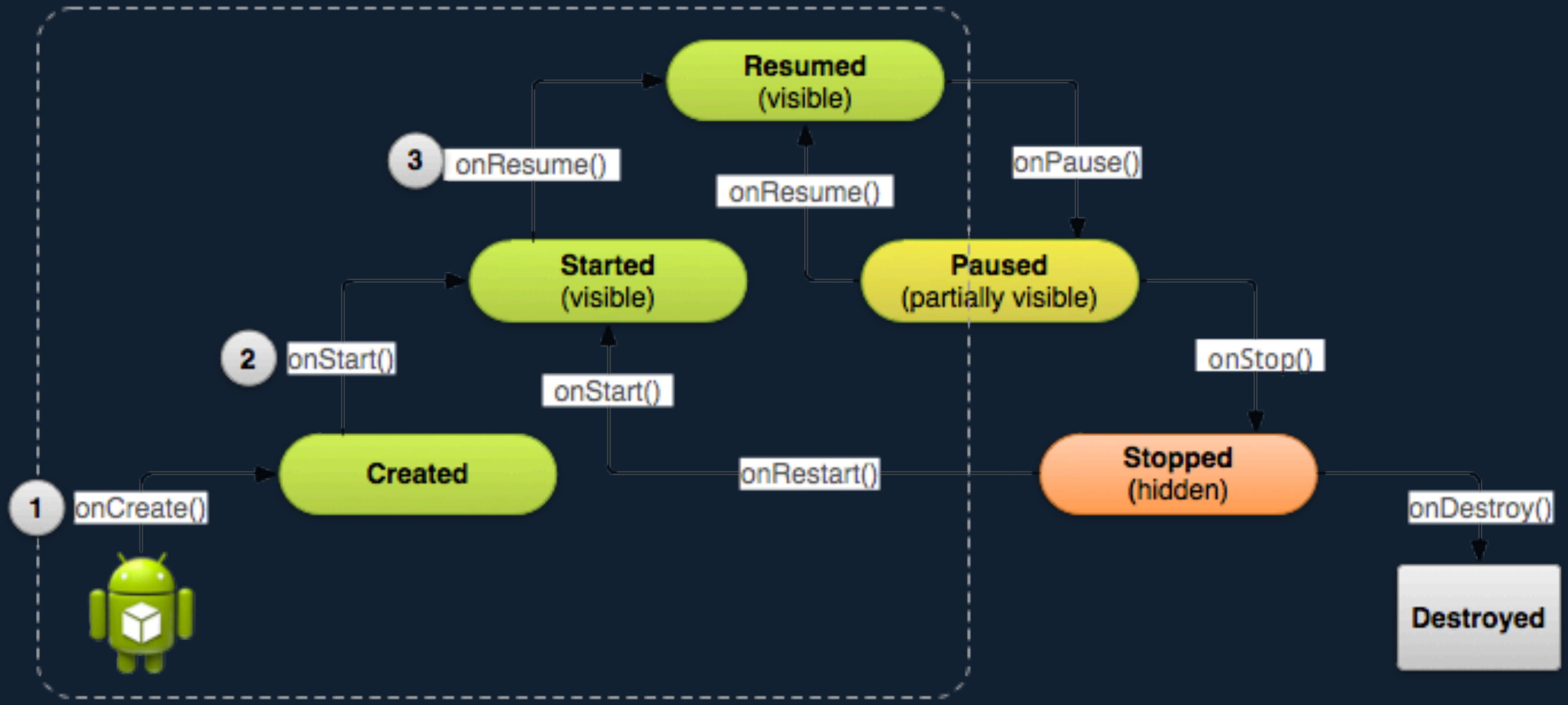
» onCreate() - Application startup logic that should happen only once for the lifetime of the Activity. Often defining UI, Define Member Variables

» onStart() - Called Everytime your activity becomes visible

» onRestart() - Only called if Activity is started from the stopped state. Restoration work that occurs only if the Activity were previously stopped.

» onResume() - Called when the Activity is resumed

TEARING DOWN AN ACTIVITY



TEARDOWN STEPS

» onPause() - Prior to stopping the Activity is in a paused state (ex. when another activity's view partially covers) Should persist data / stop actions (ex. video). Release system resources

» onStop() - Heavy load shutdown operations

» onDestroy() - Last callback before Activity is destroyed. Should kill any background threads or long running processes.

EXPLICIT INTENTS

ACTIVITY MANAGER

» startActivity(...) Method is passed from the Activity sublcass to the Activity Manager

» Android OS class responsible for starting Activities

» Activity Manager checks manifest for the Activity specified in the Intent and starts the Activity

» Key idea that makes it possible for intents to work between applications

EXTRAS

» Key Value Pairs to carry extra data on intents

» Use putExtra() methods to add extras

» should use constants for extra keys. ex. public static final String EXTRA_GIGAWATTS = "com.example.EXTRA_GIGAWATTS";

CODE

LAUNCHING INTENT WITH EXTRA

```
Intent intent = new Intent(MadLibActivity.this, MadLibStoryActivity.class);
                    intent.putExtra(SOME_CONSTANT, someObject);
startActivity(intent);
```

GETTING EXTRA FROM LAUNCHED ACTIVITY

```
@Override
  protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      Intent intent = getIntent();
      Object someObject = intent.getStringExtra(SOME_CONSTANT); //assuming extra is a string

      ....
}
```