

We aspire to reach a state where `flutter run` has the following modes:

- `flutter run` : builds a debug version of the app and starts it in "hot reload" mode, then shows the console UI to manipulate the running instance.
- `flutter run --no-hot` : builds a debug version of the app and starts it directly, then shows the console UI to manipulate the running instance.
- `flutter run --profile` : builds a profile version of the app and starts it directly, then shows the console UI to manipulate the running instance.
- `flutter run --release` : builds a release version of the app and starts it directly, then shows the console UI to manipulate the running instance.

Adding `--machine` in any of the situations above spawns a [flutter daemon](#) which:

- changes the output to JSON so that it can be more easily consumed by IDEs, and
- allows the use of JSON commands to interact with the running application (e.g. stopping the application).

All of the commands above launch a Flutter application and do not return until that Flutter application exits. Adding

`--no-resident` in any of the situations causes the command to return immediately after the application has been launched rather than waiting until the application exits.