

Debugging Using the IDE and Flutter Tooling



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Overview



Choose and setup your IDE

- Productive development

Importance of debugging

Finding and fixing bugs quicker

Leverage Flutter tooling using Android Studio and VSCode

Advanced debugging using Dart Devtools

- Layout
- Performance
- CPU profiling
- Network and logs

Best practices



IDEs for Flutter Development



Editors with Official Flutter Support

Android Studio

Android Studio offers a complete, integrated IDE experience for Flutter

VS Code

Visual Studio Code is a lightweight editor with Flutter app execution and debug support

Emacs*

Emacs is a lightweight editor with support for Flutter and Dart

* <https://emacs-lsp.github.io/lsp-dart/>



Official Flutter/Dart Plugins



Code completion



Syntax highlighting



Widget editing assists



Run and debug support



Performance profiling



Android Studio/IntelliJ

Dart

<https://plugins.jetbrains.com/plugin/9212-flutter>

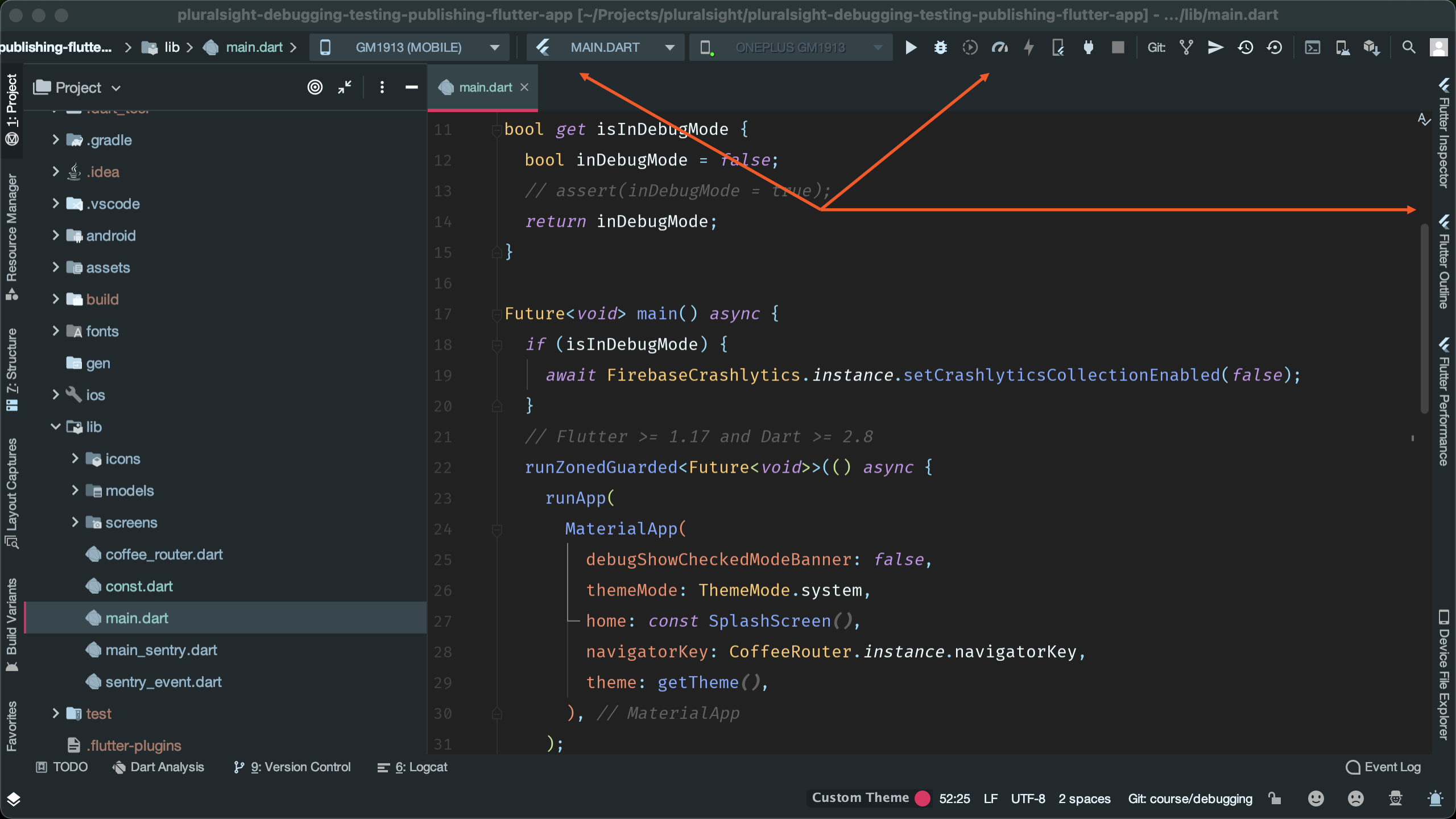
Flutter

<https://plugins.jetbrains.com/plugin/6351-dart>

More

<https://plugins.jetbrains.com/>





Visual Studio Code

Dart

<https://marketplace.visualstudio.com/items?itemName=Dart-Code.dart-code>

Flutter

<https://marketplace.visualstudio.com/items?itemName=Dart-Code.flutter>

More

<https://marketplace.visualstudio.com/>



Android Studio Integrated Debugging Tools



Demo



Run Flutter app in debug mode

Use integrated Dart debug tools in Android Studio

Use breakpoints

Inspect widgets from widget tree

Adjust layout from debug tools



VSCode Integrated Debugging Tools



Demo



Run Flutter app in debug mode

Use integrated debug tools in VSCode

Use breakpoints

Inspect widgets from widget tree

Adjust layout from debug tools



Dart DevTools



Demo



What is Dart DevTools?

Why is it important to know it?

How does Dart DevTools help?

- Inspection
- Performance
- CPU and memory profiling
- Network request
- Logs



Summary



Summary



Setup an IDE

- Android Studio and VSCode

Importance of debugging tools

Flutter debugging tools

- Android Studio
- VSCode

Dart DevTools

- Widget inspection
- Layout adjustments
- Performance and CPU profiling
- Network requests and logs

Speeding up finding bugs and solve them accurately

