

Mobile and Embedded Computing

**Lecture 4. Debugging & Tools, State management
techniques**

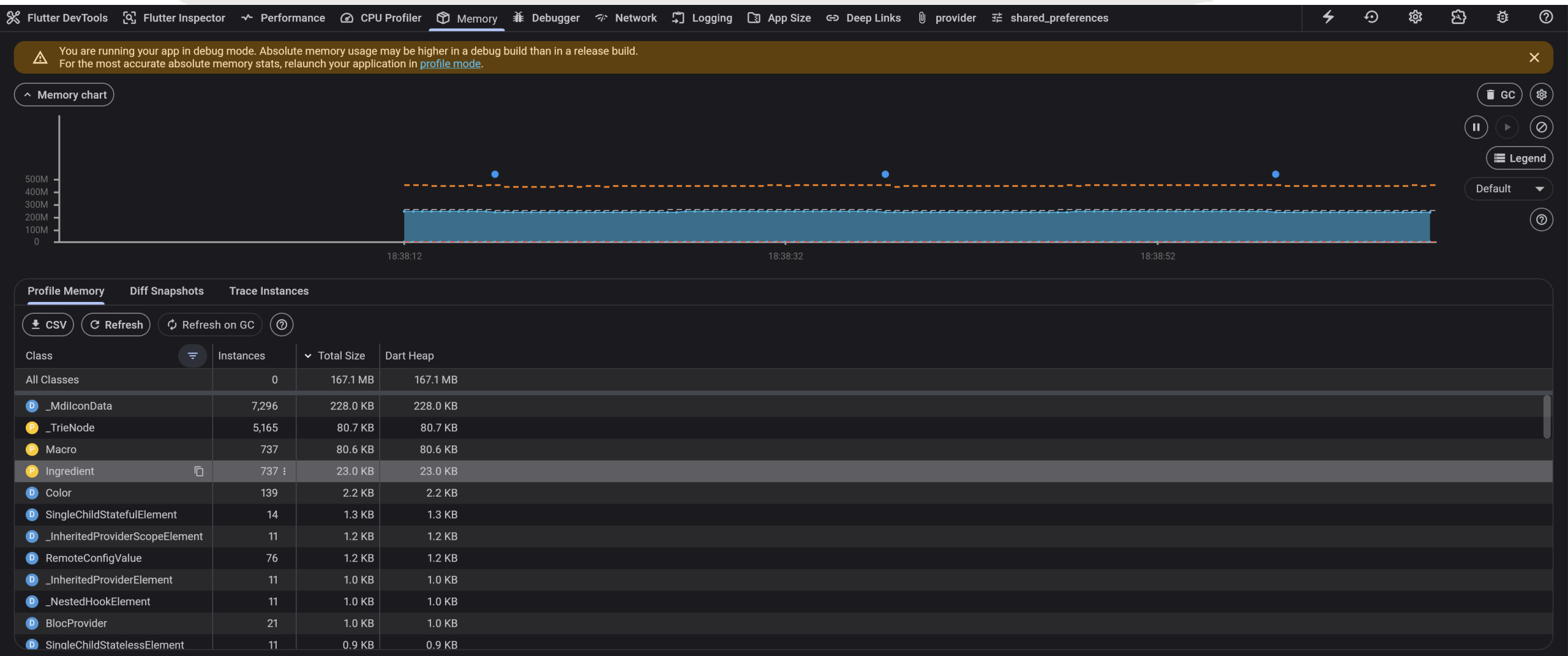
Flutter Dev Tools

- Usually on <http://127.0.0.1:9100/home>
- You will need this URL that is printed in the console:

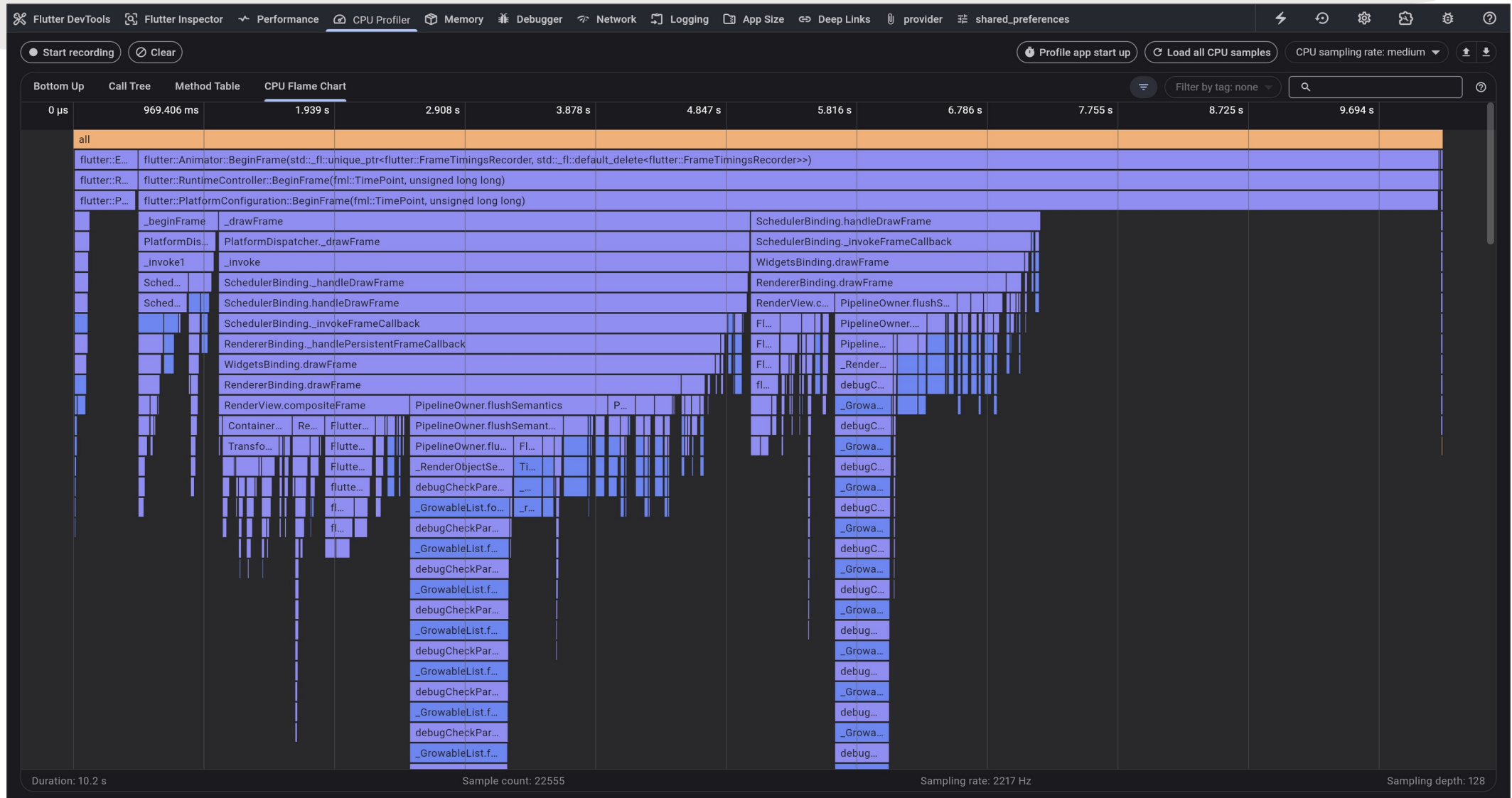


```
App (Pixel 9a) x
Console
D/FlutterJNI(16715): Beginning load of flutter...
D/FlutterJNI(16715): flutter (null) was loaded normally!
I/flutter (16715): [IMPORTANT:flutter/shell/platform/android/android_context_gl_impeller
I/WindowExtensionsImpl(16715): Initializing Window Extensions, vendor API level=9, activ
Debug service listening on ws://127.0.0.1:60336/jFp9ew5_rNE=/ws
Syncing files to device sdk gphone64 arm64...
I/scanneralimente(16715): Compiler allocated 5111KB to compile void android.view.ViewRoc
D/WindowLayoutComponentImpl(16715): Register WindowLayoutInfoListener on Context=com.coc
```

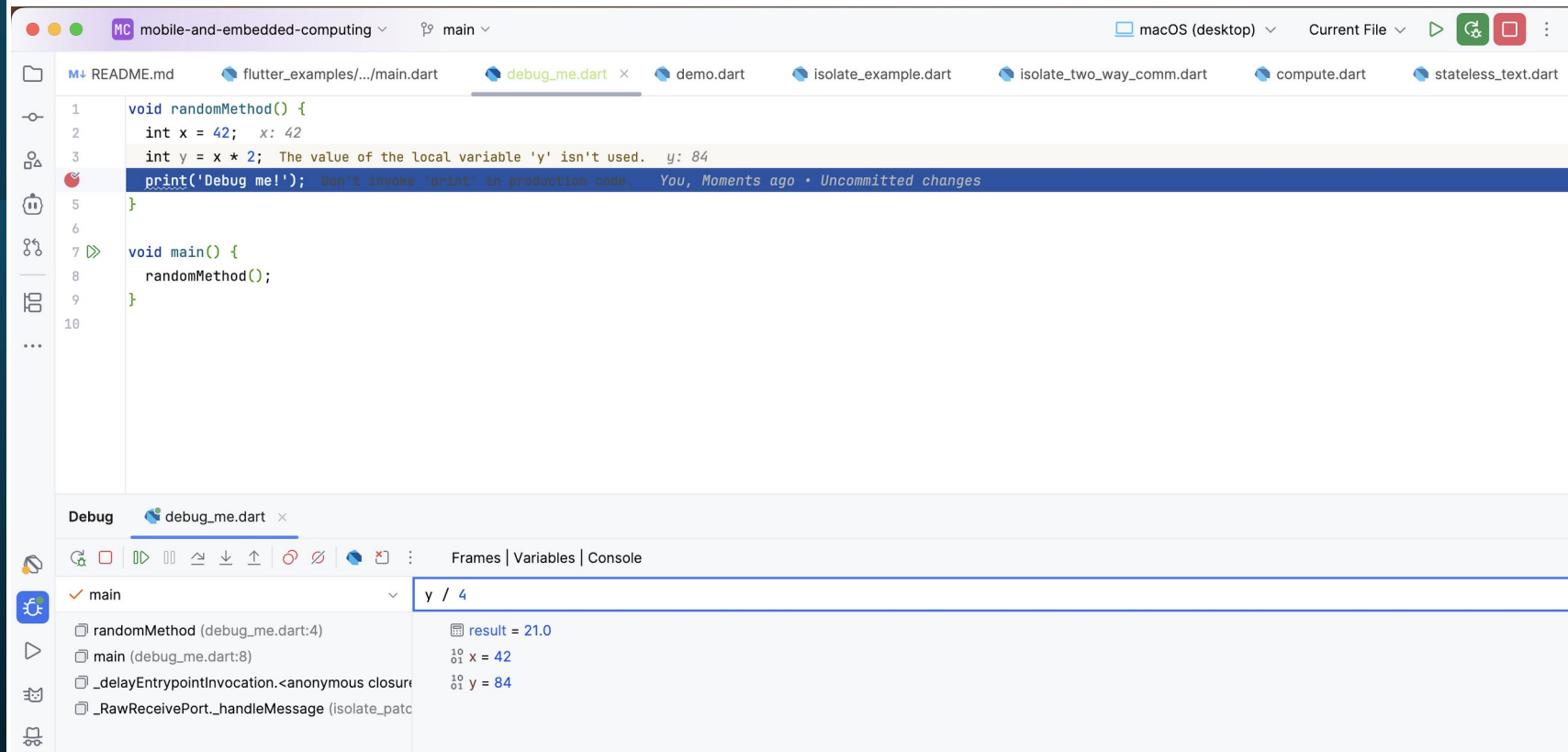
Flutter Dev Tools



Flutter Dev Tools



Using a debugger



Step Over –
Moves line by
line without
entering in any
method

```
1 void randomMethod() {
2   int x = 42;   x: 42
3   int y = x * 2; The value of the local variable 'y' isn't used.
4   anotherRandomMethod();
5   print('Debug me!'); Don't invoke 'print' in production code.
6 }
7
8 void anotherRandomMethod() {
9   String message = "Hello, Debugging!";
10  print(message); Don't invoke 'print' in production code.
11 }
12
13 void main() {
14   randomMethod();
15 }
16
```

Debug debug_me.dart

Step Over F8

main

randomMethod (debug_me.dart:5)

main (debug_me.dart:14)

_delayEntrypointInvocation.<anonymous closure>

Evaluate expression (⇧) or add

$\begin{smallmatrix} 10 \\ 01 \end{smallmatrix} x = 42$

$\begin{smallmatrix} 10 \\ 01 \end{smallmatrix} y = 84$

Step Into – If applied on a method, the debugger will move into that method

```
2      int x = 42;    x: 42
3      int y = x * 2; The value of the local variable x is 42
4      anotherRandomMethod(); You, 6 minutes ago
5      print('Debug me!'); Don't invoke 'print' in production
6  }
7
8  void anotherRandomMethod() {
9      String message = "Hello, Debugging!";
10     print(message); Don't invoke 'print' in production
11 }
12
13 >> void main() {
14     randomMethod();
15 }
16
```

Debug debug_me.dart x

main

randomMethod (debug_me.dart:4)

main (debug_me.dart:14)

_delayEntrypointInvocation.<anonymous closure>

_RawReceivePort._handleMessage (isolate_patch.dart:280)

Step Into F7

Evaluate expression

10 x = 42

10 y = 84

Step Out – Goes out of a method back to the previous one

```
1 void randomMethod() {
2   int x = 42;   x: 42
3   int y = x * 2; The value of the local variable 'y' isn't used.   y: 84
4   anotherRandomMethod();
5   print('Debug me!'); Don't invoke 'print' in production code.   You, 4 minutes
6 }
7
8 void anotherRandomMethod() {
9   String message = "Hello, Debugging!";
10  print(message); Don't invoke 'print' in production code.
11 }
12
13 void main() {
14   randomMethod();
15 }
```

debug debug_me.dart x

Frames | Variables | Console

main Step Out ⌘F8 Evaluate expression (⌘E) or add a watch (⌘W)

randomMethod (debug_me.dart:5)	$\frac{10}{01}$ x = 42
main (debug_me.dart:14)	$\frac{10}{01}$ y = 84
_delayEntrypointInvocation.<anonymous closure>	
_RawReceivePort._handleMessage (isolate_patch.dart:288)	