App Performance \ Stability Testing & Analysis

Status	Completed 🙌🏻

Testing resources that your app needs so that you can see on which devices it will work feasibly

Types of iOS Application Testing

Notes

Launch Time

```
func testLaunchPerformance() {
    if #available(macOS 10.15, iOS 13.0, tvOS 13.0, *) {
        // This measures how long it takes to launch your application.
        measure(metrics: [XCTOSSignpostMetric.applicationLaunch]) {
            XCUIApplication().launch()
        }
    }
}
```

Different Scenarios

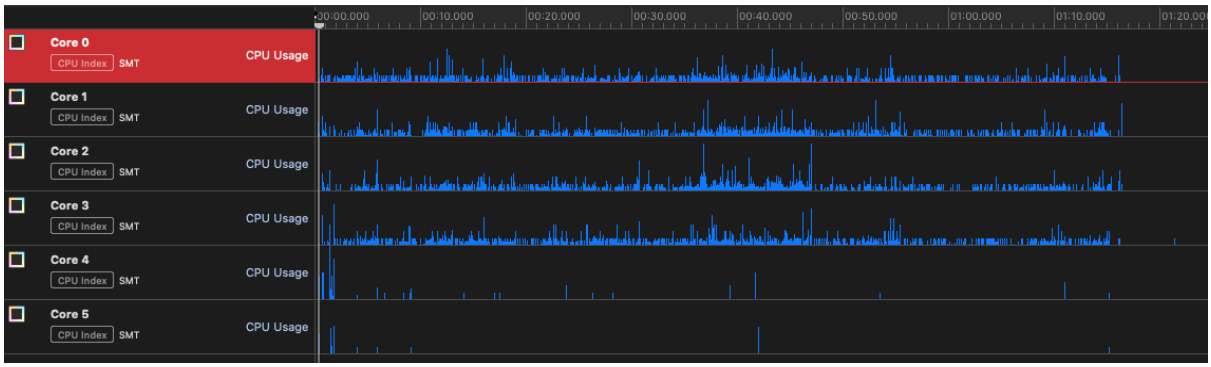
Aa Test Case	# Average	# Standard Deviation	# Relative Standard Deviation
Following average use of phone	1.3844814	0.08515262	6.15050663%
Having just turned phone on	1.33867838	0.06429875	4.80315177%
After force-quitting the app	1.2994922	0.03083163	2.37259064%
Having just used a large app	1.405625	0.10783603	7.67174936%

Aa Test Case	# Average	# Standard Deviation	# Relative Standard Deviation
With multiple other apps open	1.4683488	0.10773107	7.33688572%
With a few (5) other apps open	1.3972914	0.06209488	4.4439466%
With no other apps open	1.3226166	0.03140546	2.37449466%

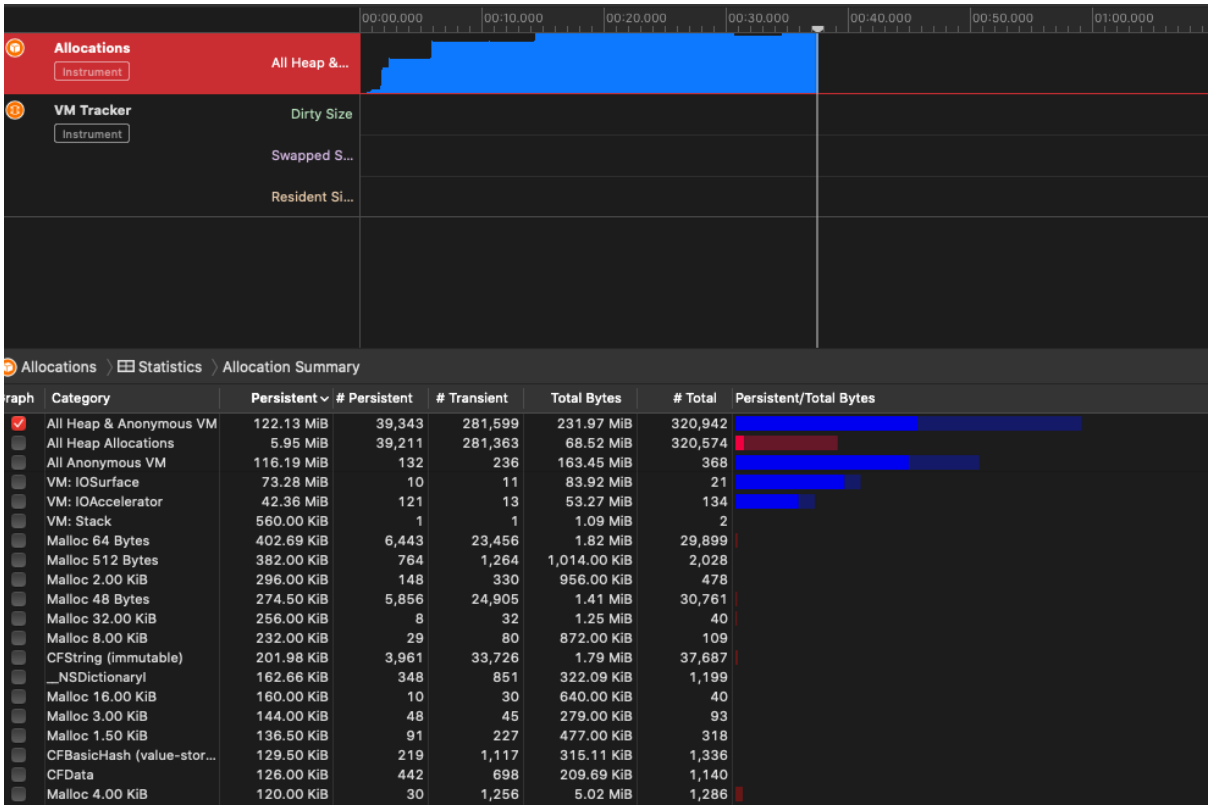
CPU and Thread Usage

Thread Usage: single thread - large amount on the main thread can make the UI unresponsive or slow, but peak usage didn't rise over 10% other than right at the beginning

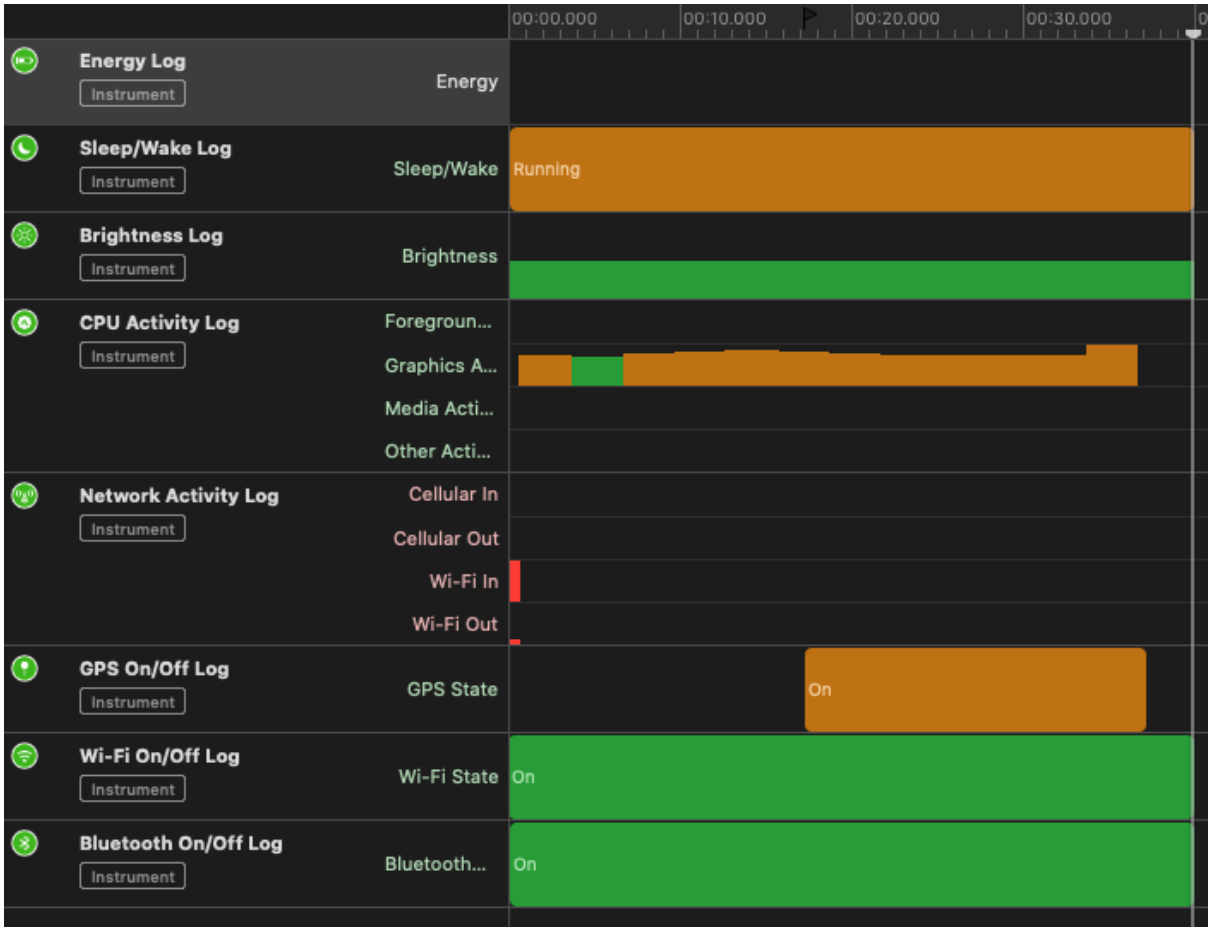
CPU Usage: load is mainly distributed over cores 0 to 3, with even distributions over these 4. This suggests good optimisation.



Memory Usage



Energy Usage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00:10.000
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Energy Log
Instrument
Energy
Sleep/Wake Log
Instrument
Sleep/Wake
Running
Brightness Log
Instrument
Brightness
CPU Activity Log
Instrument
Foregroun...
Graphics A...
Media Acti...
Other Acti...
Network Activity Log
Instrument
Cellular In
Cellular Out
Wi-Fi In
Wi-Fi Out
GPS On/Off Log
Instrument
GPS State
On
Wi-Fi On/Off Log
Instrument
Wi-Fi State
On
Bluetooth On/Off Log
Instrument
Bluetooth...
On