Network Debugging Tools

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Introduction

“Debugging network problems is challenging because of the fundamental nature of networking.”

Apple

Proxy tools

Charles

Article 1
Article 2
Software

Proxyman

Article 1
Article 2
Software

Instrument

Article
Apple Forums

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Tasks

01

Project & Tools

Install the tool and get the starter project

02

Inspect the app

Use the proxy to show all the api calls

03

Debugging

Debug and find out how you can fix the issue

04

Advance Usage

Get to know how to use proxies in advance level

1- Project and Tools

01

Download

Open Discord and download the sample project

02

Proxy Tool

Setup a proxy tool to inspect APIs

03

Certificate

Trust a certificate to be able to see the secure connections

04

Finalizing

Make sure Proxy and starter project works as expected

2- Inspect the app

Run the app

Make sure you are able to run the app on simulator or device

Use Proxy

Make sure the proxy App shows the actual data by enabling the SSL Proxying

Proxy effect

See all the APIs on the proxy app

3- Debugging

- Find out what’s wrong
- Check the app with initial Json Contract
    - Using Mapping Tool
- Figure out where’s the bug
- Fix the bug on the app

2,592,000s

Network Debugging tools will save so much **time**

4- Advance Usage

Stack Trace

Use instruments to see where the api is called in the code

Mirroring funcs

Using Mirror you can save a response to disk

Breakpoints vs Mapping

In Charles you can manipulate data as you wish

Where to Go From Here?

Preventing Man-in-the-Middle Attacks with SSL Pinning

iOS / Android

Thanks!

Do you have any questions?

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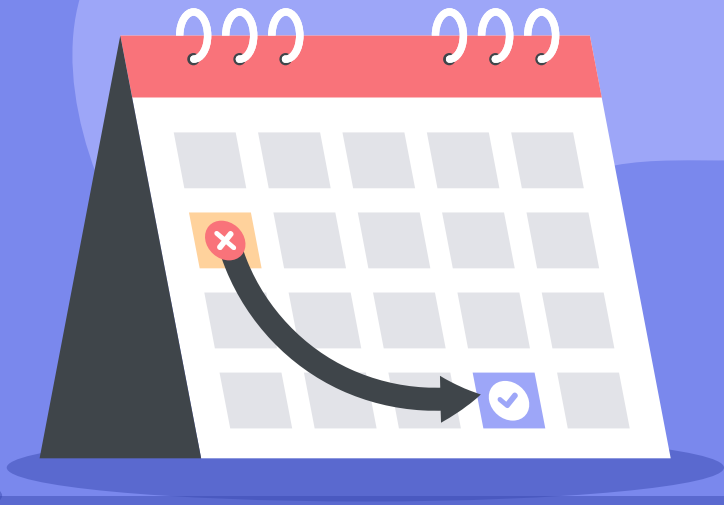
Special Thanks to my wife, Zamzam

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