



Breathe ideas.

M3 – Debugging Techniques

Android Logcat

- The most common technique used to analyze and fix issues
- adb logcat
- Log structure:
 - PRIORITY TAG : Message
- Different priorities: V,I,W,D,E

CallStack

- Provides mechanism to analyze execution flow
- Analyzes interrupts and crashes
- CallStack class
- addr2line tool

GDB Debugger

- Advanced tool used to locate and fix issues
- GDB The GNU Project Debugger from Linux

ANR and Unresponsive Applications

- Application that implement some user interface can become unresponsive if user interaction is not handled in specific amount of time
- This state is called ANR – Application Not Responding
- ANRs are only reported for User applications on Android
- am monitor tool

Exercise 1

- Implement exercises from practicum

Upload to Canvas:

- Source code of HelloLog and screenshot of logcat output showing it is functional.
- Source code of callstack executable which will print addresses of functions executed, screenshots of logcat output and addr2line output
- Source code of gdbexample executable with fixes and screenshots showing gdb is connected and example is functional.

Exercise 2

- Implement exercises from practicum

Upload to Canvas:

- Text description about reason for ANR and how to fix it with screenshots showing ANR.

NIT

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Contact us

Institute for information technologies NIT

Radnicka 30a, 21000 Novi Sad, Serbia

info@nit-institute.com

www.nit-institute.com

+381 64 01 64 724