Working with Android Tools and Testing

WORKING WITH THE CORE TOOLS AND FEATURES

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What to Expect from This Module

Android Studio Overview

Developer Productivity

Program Execution and Debugging

Instant Run

Resolving Unhandled Exceptions

Logcat

Android Studio

Primary Android development tool

Handles installing the things we need
- Android SDK
- JDK
- Other Android development tools

Built on IntelliJ IDEA technology

Android Studio

- Code development & UI design
- Developer productivity
- Code deployment and execution
- Debugging
- Build system
- Testing

Logcat

- System for recording log information

Log class

- Provides methods for writing to logcat
- Includes a tag with each message
  - Commonly use class name as tag

Android Studio

- Messages displayed in Logcat tab
- Searchable
- Filterable

Messages are organized into levels

- Indicates relative severity

Log class

- Provides methods for each level

Viewing messages

- Messages are labeled with level

- Can limit which levels are displayed

- Shows messages >= selected severity

Logcat Levels

Summary

Android Studio

- Central tool for Android development

Developor Productivity

- Refactoring

- Code generation

- Customizable to developer style

Summary

Program execution and debugging

- Handles installing and running app
- Breakpoints and code stepping
- Viewing variables
- On-the-fly statement evaluation

Instant Run

- Accelerates deploying code changes
- Does just enough to apply changes
- Often allows app to keep running

Summary

Resolving unhandled exceptions

- Crash information in Android Monitor
- Shows exception and call stack
- Provides links to app source code lines

Logcat

- System for recording log information
- Written to with Log class
- Viewable in Android Monitor