SERGEI MAKHINOV

Android Developer

Work Experience

Yandex April 2024 - Present

Android Developer

Moscow, Russia

- Stack: Kotlin, Coroutines, Exoplayer, Mockito+Robolectric;
- Features: Video player development based on Exoplayer, multi-module architecture;
- Developing and maintaining short video feed SDK, as well as the basic video player library;
- Implemented a multi-platform network bandwidth calculation solution, which reduced video loading interruptions by 5-30%, and improved accuracy and stability of measurements;
- Added the ability to disable audio preloading for silent videos, thereby reducing traffic consumption by 5-10%.
- Added asynchronous initialization capability for short video feed SDK, and laid the foundation for freeing the main application thread from the player, which will improve performance in the future;
- Modified the player SDK architecture to **speed up video startup** by reusing the same player;
- Maintain and improve the demo application for more efficient testing of short video feeds, as well as for use by other

SberDevices March 2023 - April 2024

Android Developer

Moscow, Russia

- Stack: Kotlin, Dagger, Coroutines+Flow, Mockk+Robolectric;
- Features: Multi-module architecture, working with system applications;
- Developed system services and applications for SalyutOS (Android-based);
- Wrote services and APIs/SDKs for various interactions remote control input, open application tracker, detection of specific applications in the system;
- Used inter-process communications (AIDL) when working with services, studied the nuances of their operation and features of backward compatibility implementation;
- Optimized parsing of **JSON** config files for system applications, accelerated processing from 4 seconds to 200ms;
- Researched Android source code to understand the operation of system network settings;
- Wrote Unit tests for my own and others' code using Mockk, increased coverage of one module of 2000+ lines from 40% to 80%+;
- Automated coverage measurement of projects with Unit tests using Kover, which allowed any developer to quickly assess code coverage;
- Created rules for the static code analysis tool Detekt, including one that prevents outputting verbose messages to logs.

PROJECTS

VK App | Kotlin, Jetpack Compose

Jan. 2024 - Feb. 2024

⋄ Github | Minimal VK client in Material3 style

- Stack Kotlin, Jetpack Compose, Flow, Glide;
- Implemented infinite scroll for user wall/feed with loading;
- Customized scroll mechanism to compress profile header into an AppBar-like element:

TECHNICAL SKILLS

Programming Languages: Kotlin, Java, Go, JavaScript;

Technologies: Dagger, Retrofit, OkHttp, Room, Mockk, Mockito;

Frameworks: Jetpack Compose;

Tools: Gradle, Git, Jira, Bitbucket, Gitlab;

EDUCATION

MIREA - Russian Technological University

2021 - 2025