



# Zack Robinson

LEAD ANDROID AND AMAZON APP DEVELOPER

## Contact

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**Innovative, Insightful, Resilient**

*A geek with a gift for gab*

*8 years in Software Development*

## Strengths

Mobile/TV App Development  
Software Engineering Principles  
Object-Oriented Programming (Java)  
Functional Programming (Kotlin)  
Refactoring to Design Patterns  
Data Structures and Algorithms  
Test-Driven Development  
Technical Communication  
Requirements Analysis  
Strategic Consulting

## Summary of Expertise

- Rapidly creates custom features for Android and Amazon applications using UI/UX requirements and mockups
- Particularly comfortable with video playback, location services, catalog management, authentication, payment processing, and user management features
- Expert at writing clean, re-usable Java and Kotlin code using SOLID principles and software design patterns
- Adept at reducing operational costs on projects by automating quality assurance tasks
- Knowledgeable on Android Architecture Components and test driven frameworks (MVVM, MVP, etc)
- Familiar with NFC (Near field communication) technology, Broadcast Receivers and Services, and 3G and Wi-Fi technology.
- Adept at storing JSON server responses as data models in device memory (shared preferences, external storage, SQL Lite DB, etc.)
- Maintains quality through rigorous code review and testing, and partnerships with QA teams.
- Excellent at communicating technical requirements to non-technical stakeholders.
- Comfortable working remotely or on-site

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## Technical Skills and Knowledge

**Languages:** Java, Kotlin, Bytecode, XML, SQL, JavaScript, HTML/CSS, Swift, Objective-C, MIPS Assembly, C++, Markdown

**UX/UI:** Adobe Creative Cloud, Material Design, Zeplin, Proto.io, Balsamiq, Bootstrap

**IDEs and Development Tools:** Android Studio 3.1.2, IntelliJ IDEA CE, Sublime Text 3, X-Code v9.2, Eclipse, Charles Proxy, DB Browser, iTerm, Understand

**Databases and Backend Systems:** AWS, SQL Lite, FirebaseDB, MySQL, MongoDB, GreenDAO

**Architecture & Software Design:** MVVM, MVP, MVC, Singleton, Builder, Factory, Command, Decorator, Observer, Visitor, Proxy, Block Chain, Reactor, Scheduler, Strategy, Facade

**Quality & Testing:** Test-Driven Development (TDD) and Unit Testing (Mockito, JUnit), Automated Testing (Espresso, Appium), Version Control (Git, GitHub, BitBucket, SourceTree, Subversion), Continuous Integration (Jenkins, Travis CI), Dependency Injection (Dagger 2, Android Annotations)

**Agile Methodology:** Kanban, Scrum, Xtreme, Paired Programming, Atlassian JIRA, Confluence

**Operating Systems:** Mac OSX, Windows, Ubuntu, Lollipop, Nougat, Marshmallow, Oreo

**Web Services:** REST, SOAP, XML, JSON, GSON, Retrofit, Volley, OkHTTP, Charles Proxy, Postman

**Concurrency:** Runnable, AsyncTask, Threads, Handlers, Pools, Executors, Loaders, Services, Reactive

**Android Native and Third-Party Frameworks & Libraries:** Activities, Services, Broadcast Receivers, Content Providers, Intents, Architectural Components and Jetpack, ViewModels, Lifecycles, LiveData, Room, Paging, Notifications, Navigation, Download Manager, Media & Playback, Permissions, Sharing, Slices, Palette, Layout, Fragment, Emoji, Test, Animations and Transitions, Google Play Services, RxJava, Certificate Pinning, Bluetooth Low Energy, AIDL, AndroidPay, ExoPlayer, Glide, Picasso, Butterknife, Samsung SDK, VidEffects, GSON, ORMLite, Push Notifications, Facebook Authentication, Twitter Authentication, Google Authentication, Espresso, Moshi, EventBus, Crashlytics, Mixpanel, AlertDialogs, JobScheduler, Google Cloud Messaging, LeakCanary, Timber, New Relic, Ensignten, Kochava, RecyclerView, ListView, GridView, GridLayout, CustomView, Tensorflow, Stetho, Flurry

**Software Engineering:** Solid Principles, Object-Oriented Programming, Functional Programming, Software Design Patterns, Data Structures and Algorithms, Relational Modeling and Database Normalization, Embedded Systems, Computer Organization and Architecture, Concurrency and Parallel Processing, Regular Expressions

## Recent Work Experience

July 2020 – Present

SENIOR ANDROID DEVELOPER  
CVS/AETNA, INC. | HARTFORD, CT

ActiveHealth App

[https://play.google.com/store/apps/details?id=com.aetna.ahealth&hl=en\\_US&gl=US](https://play.google.com/store/apps/details?id=com.aetna.ahealth&hl=en_US&gl=US)

The ActiveHealth app incentivizes employees to participate in their health and wellness through health tracking integration, company-wide health competitions, and personalized coaching.

- Implemented a brand new design for dashboard using MVVM architecture
- Implemented a new hamburger menu and updated navigation between dashboard and other activities
- Translated designs from Zeplin and Figma to xml layouts, and requirements from Confluence into kotlin classes
- Implemented a welcome message and standardized other feature modals
- Implemented a challenges feature
- Implemented APIs designed in Postman into models/ view models using Retrofit
- Added detail views for recommended articles and recipes
- Reskinned the health tracker feature with new UI, and updated bottom navigation to match
- White-labeled splash screen, dashboard, and other features for client application.
- Implemented a trivia API and user interface
- Added user profiles feature, which manages bookmarked articles and recipes
- Implemented Lottie animations to show team progress in a fun way on Team Challenges feature
- Added unit tests to improve app quality assurance processes using Powermock and Mockito
- Improved group coaching feature with new designs and apis
- Added support for push notifications
- Improved on build deployment processes, including Circle CI, SonarCloud, AppCenter, and Google Play
- Provided accurate estimates for senior management using Rally and Confluence
- Reviewed code from 4 other Android developers in github
- Hosted weekly zoom meetings for demoing new features
- Fixed hundreds of accessibility bugs and defects

August 2020 – January 2021

SENIOR ANDROID DEVELOPER  
BELK, INC. | CHARLOTTE, NC

Belk App

<https://play.google.com/store/apps/details?id=com.belk.android.belk&hl=en>

The Belk app lets users review and purchase items within the Belk product catalog.

- Implemented geo fencing to refresh coupons when users are near a store
- Improved coupon feature UI with material design standards

- Expanded API on coupon feature to include flags for "Best Seller", "New", "Doorbuster", etc.
- Updated bottom navigation with material design standards
- Optimized product search algorithm and search function UI
- Improved card design for product catalog, and layout design for product detail screen
- Updated product cart and checkout to material design standards
- Implemented Same Day Delivery feature

December 2019 – April 2020

SENIOR ANDROID DEVELOPER  
IT'S NEVER TOO LATE (IN2L) | DENVER, CO

[FOCUS App](https://in2l.com/focus/)  
<https://in2l.com/focus/>

The Focus app helps senior care centers and rehab facilities engage residents in technology based activities.

- Implemented voice and face biometrics using the Voicelt API
- Implemented voice wake up and command words
- Improved Couchbase sync functionality (for distributing content across multiple devices)
- Wrote solutions in Java, Kotlin, and Android Annotations
- Added an Alarm broadcast receiver to handle a repeating failed s3 download
- Upgraded to Android X
- Added a utility for gathering remaining space on an sd card
- Fixed bugs caused by upgrading to Android 9
- Introduced standards and best practices for Android development.
- Contracted through Spotlight

December 2019 – April 2020

SENIOR ANDROID DEVELOPER  
CERTIFIED COLLATERAL CORPORATION (CCC) | CHICAGO, IL

[Crash Detection App](#)

CCC Crash Detection is a library that helps other apps determine when a user has been in an accident.

- Refactored data sensor collection logic out of activities and UI classes
- Improved life of battery when using detection services by 7% over an hour
- Improved read/write operations on externally stored files

- Improved network use by reducing the number of web services requests during anomaly detection
- Implemented Activity Recognition and Activity Transition sdks to determine when the user is IN\_VEHICLE
- Implemented redesign of test app for end-user distribution
- Implemented analytics and logs for crashlytics and Firebase
- Refactored data collection services into a library that can be consumed a gradle dependency through bintray.
- Contracted through Teksystems

December 2019 – March 2020

SENIOR ANDROID DEVELOPER  
JJ KELLER & ASSOCIATES, INC. | APPLETON, WI

[Encompass App](#)

[https://play.google.com/store/apps/details?id=com.jjkeller.kmb&hl=en\\_US](https://play.google.com/store/apps/details?id=com.jjkeller.kmb&hl=en_US)

The Encompass app helps truck drivers automate their driving logs.

- Improved Bluetooth connection rate to engine logging device (ELD) by 20%
- Introduced new UI flow for Bluetooth connection, reducing calls to the call center by 40%
- Removed 5000 lines (in a 240k line codebase) of duplicate and unnecessary code using code inspection and Java 8 features
- Refactored duplicate logic for Fused Location Services out of related activities and fragments and into its own controller
- Introduced standards and best practices for Android development, saving thousands of hours over the life of the project.
- Improved the UI of Help and Roadside Inspection layouts
- Added a feature for automatically finding a user's location
- Coded in Java and Kotlin
- Contracted through Teksystems

September 2018 – August 2019

ANDROID AND AMAZON DEVELOPER  
STARZ, INC. | ENGLEWOOD, CO

[STARZ and Pantaya Apps](#)

[https://play.google.com/store/apps/details?id=com.bydeluxe.d3.android.program.starz&hl=en\\_US](https://play.google.com/store/apps/details?id=com.bydeluxe.d3.android.program.starz&hl=en_US)

[https://play.google.com/store/apps/details?id=com.lionsgate.pantaya&hl=en\\_US](https://play.google.com/store/apps/details?id=com.lionsgate.pantaya&hl=en_US)

The STARZ and Pantaya apps offer video playback and catalog services for affiliate and OTT users.

Implemented or maintained the following features on mobile and tv platforms:

- Home, Movies, Series, Featured, Search, Settings, Log In, and Sign Up pages on all platforms
- Block Architecture for Editorial banner, Featured banner, Popular/Recommended swimlanes, Home carousel (allows backend to control which views show on the page)
- Profiles for both platforms
- Redesign of Settings
- Filter Drawer and several components of the Search/Browse feature
- ChromeCast support
- Camera feature to support Profiles avatar - mobile only
- Custom keyboards for Android and Amazon television platforms
- Age check for rated content
- Support for API version 18 and forward
- International variants for Starz and Pantaya
- Translatable services
- Free/New/Locked Content badges
- Focus solutions for Oculus Rift
- Optimizely A/B testing platform
- Tealium and Mixpanel analytics platforms
- Bandwidth meter for debugging video playback
- Skip-To-Credits feature for streamlining quality assurance
- Environments feature for streamlining quality assurance
- AndroidX MVVM refactor (ViewModel and Live Data Architectural Components)
- Custom views for grids, list, swimlanes, carousels, buttons, radio groups, text views, dialogs, drawers, drawables, progress bars, toolbars, RecyclerViews, Grid Layouts, Coordinator Layout, AppBarLayout, Scroll Views, Relative and Linear Layouts, Frame Layouts, Activities, Fragments, Animation, Glide image loading
- Android Studio and SourceTree/Bitbucket for code management, JIRA/Confluence for reqs
- Breakpoints/debugger, logcat, layout inspector, network proxies (Charles), Crashlytics for diagnostics

December 2017 – September 2018

SENIOR ANDROID DEVELOPER  
MCDONALD'S, INC. | OAKBROOK, IL

[McDonald's App](#)

[https://play.google.com/store/apps/details?id=com.mcdonalds.app&hl=en\\_US](https://play.google.com/store/apps/details?id=com.mcdonalds.app&hl=en_US)

The McDonald's App offers mobile ordering, offers and a full product catalog with nutritional information and customization.

- Implemented REST APIs with Volley, Charles Proxy, Postman and JSON parsing libraries for communicating with McDonald's backend services.
- Integrated Barclaycard, a third party payment processing system.
- Developed a store locator using Google location services.
- Implemented a data analytics feature to align Google Analytics, Kochava Analytics, and Ensign SDKs with General Data Protection Regulations (GDPR).
- Implemented a text localization feature for iOS and Android using PhraseApp.
- Wrote custom app configurations for the UK, Australia, and US markets.
- Added 3 new flows for automating user checkin and checkout using MVP and MVVM architecture.
- Implemented a feature for showing disclaimers on iOS and Android in accordance with UK's sugar tax.
- Integrated the Facebook API SDK for authentication.
- Worked closely with the UI/UX team to select and implement new colors, shapes and style combinations.
- Wrote unit tests for presentation logic using JUnit and Mockito.
- Improved the scrollable views manager by implementing ListViews in Android adapters to load data onto lists at runtime.
- Implemented the Glide library for image downloading, caching and rendering to UI.
- Extensive use of support libraries to ensure backward compatibility with older Android versions.
- Used advanced networking, multithreading, and image loading libraries for efficient communication.
- Implemented recycler view and grid layout for displaying product catalog items more efficiently.
- Gained experience with Android performance profiling, memory and power management, and optimizations.
- Created Compound Views in Android for a more attractive and efficient design.
- Supported multiple screen resolutions to provide resizing across multiple Android devices.
- Made use of several data structures including maps, lists, arrays, and conditional statements.
- Suggested and developed an implementation of Observer pattern-driven development using RxJava
- Implemented smooth and constant scrolling with the CoordinatorLayout and AppBarLayout in catalog detail views.



- Implemented LeakCanary to detect memory leaks in early debugging and production builds.
- Automated quality assurance testing using Appium, Espresso and the builder pattern.
- Used animations targeted to API 21 to transition between activities and fragments.
- Implemented animations based on the Material Design guidelines like rotation, fading, and translation.
- Constructed early prototypes of the User Interface integrating the latest Material Design guidelines
- Implemented layouts using the latest RecyclerView and CardView combinations to improve the User Interface.
- Managed the look and feel consistency in both portrait and landscape views using fragments and a master-detail view.
- Implemented an SQL Lite database on the device to store persistent data.
- Analyzed the app for defects using DB Browser for SQL Lite, Understand, and SonarCube.
- Monitored Mixpanel, Crashlytics, and New Relic reporting tools to find and fix NPE's and other bugs.
- Owned the central Git repository for our team, managing pull requests and performance for 2 junior developers using Stash and Bitbucket.
- Implemented a Git branching strategy for managing concurrent feature releases.
- Managed continuous integration and build automation using Jenkins and Hockeyapp.
- Documented work in Confluence and JIRA using the Kanban agile methodology.
- Was in charge of the publishing of the application in the Google Play Store and Amazon App Store.
- Communicated across international teams using Slack, Hipchat, Skype, Join.me, AnyDesk, and email correspondence
- Wrote clean applications code in Android Studio 3.0, IntelliJ Idea, X-Code, and Sublime Text 3

## Education

INDIANA UNIVERSITY OF PENNSYLVANIA

Bachelor of Science in Technical Communications (Summa Cum Laude), Minor in Computer Science

## Honors and Volunteerism

BOY SCOUTS OF AMERICA (BSA) and ORDER OF THE ARROW (National Honor Society for the BSA)  
Eagle Scout and Vigil Honoree