Daniel Covault

**(315) 497-6351 | New York, NY 10029**

**covaultdaniel8@gmail.com**

[**Daniel Covault | LinkedIn**](https://www.linkedin.com/in/daniel-covault-712913353/)

**Profile Summary**

Android Development Expertise:

* Seasoned Android Developer with 13+ years dedicated to designing and building mobile applications using Kotlin and Jetpack Compose. Adept at implementing architectural patterns such as MVVM, MVI, and Clean Architecture, ensuring robust, scalable, and maintainable solutions.

UI/UX and Performance Optimization:

* Skilled in optimizing app performance, achieving a 30% enhancement through efficient architectures and intuitive UI/UX designs. Proficient in Material Design 3 principles and leveraging Jetpack Compose to create modern, responsive interfaces.

Proficient in Kotlin Ecosystem:

* Expertise in Kotlin Flow, StateFlow, and Coroutines, enabling optimized app performance and streamlined development. Strong background in multi-threading with Coroutines and RxJava to handle asynchronous tasks. Experienced in integrating RESTful APIs and utilizing Jetpack components such as LiveData, ViewModel, and Paging 3.

Cross-Platform Development:

* Hands-on experience in cross-platform frameworks like Flutter and React Native, ensuring seamless and consistent user experiences across Android and iOS platforms.

Cloud Integration and CI/CD:

* Extensive experience integrating cloud services, including Firebase, AWS, and Google Cloud, with proficiency in Firestore, RealtimeDB, Cloud Functions, and Firebase Cloud Messaging. Skilled in CI/CD automation using GitHub Actions, Jenkins, and CircleCI.

Data Handling and Security:

* Expert in managing large datasets using Room, Paging 3, and Lazy Loading for optimal performance. Proficient in mobile security protocols such as OAuth 2.0, JWT, and Biometric Authentication to safeguard user data.

Testing and Debugging Expertise:

* Comprehensive knowledge of automated testing frameworks like JUnit 5, Espresso, and Mockito, ensuring high test coverage and app reliability. Experienced in debugging tools like Android Profiler, Leak Canary, and Firebase Performance Monitoring for addressing memory leaks, improving load times, and fixing ANRs.

Advanced Technologies:

* In-depth understanding of 5G technology and IoT protocols such as Bluetooth Low Energy (BLE) and NFC, incorporating cutting-edge connectivity features. Expertise in dependency injection with Hilt and Dagger 2 for modular and testable code.

Agile and Team Collaboration:

* Active contributor in Agile environments, working within Scrum teams to deliver high-quality projects while driving continuous process improvements.

React Native and Flutter Contributions:

* Experienced in debugging and troubleshooting React Native applications, writing unit tests with Jest, and integrating RESTful APIs with Flutter using Futures and Streams.

**Technical Skills**

* Programming Languages: Kotlin, Java, Python, Groovy, Kotlin DSL, XML
* Android Platforms: Android Studio, Firebase, Android JetPack Compose, Android SDK, Content Resolvers, RecyclerView Layout Manager, RecyclerView Animator, Location Services, Content Providers, JobScheduler, Espresso, Broadcast Receiver, Services, Activities, LiveData, ViewModel, Room DB
* Frameworks: Firebase Push Notifications, Firebase Firestore, Google Places, Google Play Services, Google Maps API, Volley, Retrofit, Junit, Kotlin Coroutines, Kotlin Flow
* Android Development: Constraints, Handlers, Threads, Loopers, Loaders, Java, RxJava, Picasso, Glide, Coil, Custom Android Views, ListView, RecyclerView, Widgets, Fragments, Bundle, Intents, Runtime Permissions, PendingIntent, Repository Layer, Single Source of truth, Cache, Offline Mode
* Architectures and Design Patterns: MVC, MVP, MVVM, CLEAN, MVI, Builder, Factory, Singleton, Adapter, Observer
* Servers & Databases: SQL, Firebase Firestore, SQLite, GraphQL
* IDEs: Android Studio, IntelliJ, SourceTree, Github Desktop
* Issue Tracking & Project Management Tools: JIRA, Jenkins, JUnit, Unit Testing, Agile, Scrum, Git, SVN, GitHub, BitBucket, GitLab, Travis, Confluence, GitHub Actions
* Tools: DDMS, ADB, LeakCanary, Firebase, Firebase Crashlytics, ART, Bluetooth Low Energy, Test Driven Development, Continuous Integration, Android Profiler
* Third-Party Frameworks/APIs: Glide, Google Console APIs, Samsung SDK, Logger, Dagger, Moshi, Robolectric, LeakCanary, Robotium, NFC (Near field communication) technology, Retrofit, OkHttp, Http Logging Interceptor, Certificate Pinning

**Professional Experience**

**Lead Android Engineer**

**Goldman Sachs, New York City, NY since December 2023**

https://play.google.com/store/apps/details?id=com.marcus.android&hl=en-US

Project Summary: I led the development of a secure and user-friendly mobile banking app, implementing modern architecture like MVI and leveraging Jetpack Compose for seamless, responsive UI. I optimized critical features such as bill payments, mobile deposits, and biometric authentication, ensuring top-tier performance, accessibility, and data security. Additionally, I enhanced cross-platform consistency with Kotlin Multiplatform Mobile (KMM) and streamlined CI/CD pipelines to accelerate delivery.

* Coordinate the architecture, design, and development of the Goldman Sachs Mobile Banking App, delivering a secure and user-friendly experience for banking customers.
* Transition the app’s architecture from MVVM to MVI, enabling efficient data stream handling and improved Jetpack transformations.
* Incrementally modernize the codebase by adopting Jetpack Compose, Kotlin Coroutines, Flows, Channels API, Paging, Navigation Component, AndroidX, and the Jetpack Crypto Library.
* Develop and optimize mobile deposit functionality with image capture and validation, enhancing the check deposit experience.
* Design and implement Goldman Sachs Bill Pay, allowing users to manage and pay bills securely with external financial institutions.
* Integrate secure login methods, such as fingerprint and facial recognition, utilizing Android biometric APIs to ensure seamless and secure authentication.
* Developed robust end-to-end mobile test automation using Appium, ensuring high test coverage across critical banking workflows on Android.
* Integrated Appium tests into CI/CD pipelines, enabling faster, more reliable deployments in a secure, regulated environment.
* Establish and refine CI/CD workflows using Jenkins and GitHub Actions, boosting deployment frequency by 50% and reducing integration issues.
* Build modern, declarative UI components with Jetpack Compose, enhancing UI consistency, performance, and maintainability.
* Optimize app performance with Jetpack components like Room, ViewModel, and WorkManager for storage, UI management, and background tasks.
* Conduct code reviews and mentor team members through pull request feedback, ensuring adherence to clean coding standards and Android best practices.
* Add accessibility features like Switch Access, TalkBack, and additional gesture support, using the Accessibility Test Framework to ensure content labels, clickable items, and contrast compliance.
* Leverage the Flow API for reactive programming, ensuring real-time responsiveness to asynchronous data streams and UI events.
* Integrate tools for FICO® score tracking and financial health management, enabling users to monitor their credit scores and budgets effectively.
* Refine Git workflows, introducing techniques like squash and amend to maintain a clean commit history.
* Utilize tools like Crashlytics and JIRA to diagnose and resolve critical bugs related to balance checks, pending transactions, and accessing past PDF statements.
* Implement Kotlin Multiplatform Mobile (KMM) solutions, reducing cross-platform development efforts by 40% while maintaining feature consistency between iOS and Android.
* Implement in-app analytics tracking with Adobe Analytics, providing actionable insights for stakeholders.
* Lead automated testing efforts with Espresso and Robolectric, emphasizing Test-Driven Development (TDD) for code quality and app stability.
* Participate in Agile Scrum processes, including daily standups, sprint planning, and backlog grooming, ensuring timely and efficient task completion.
* Introduce a multi-module architecture approach, separating the domain, data, and presentation layers for improved maintainability and clearer module boundaries.
* Implement advanced certificate pinning to further secure data exchanges, protecting user credentials and sensitive financial information.
* Establish an automated code coverage pipeline using Jacoco reports integrated into CI, raising coverage by 20%.

**Android Solutions Architect Oct 2022 – Nov 2023**

**Stellantis, Auburn Hills, MI**

https://play.google.com/store/apps/details?id=com.stellantis.fleet&hl=en-US

Project Summary: I led the development and enhancement of the Stellantis App, delivering key features such as remote access, vehicle status updates, and maintenance reminders. Focused on improving user experience, performance, and compatibility across Android platforms, I leveraged modern architecture like MVVM, Kotlin Coroutines, and Firebase to create a seamless and connected rider experience.

* Developed and maintained the Stellantis App for Android, integrating core features like remote access, security, personalization, and vehicle information, while optimizing compatibility with Wear OS devices.
* Collaborated with cross-functional teams to implement features including vehicle maintenance reminders, remote lock/unlock, and vehicle status updates, enhancing connected experiences for Stellantis owners.
* Improved user experience across various Stellantis models by enhancing app performance, usability, and customer satisfaction through user feedback and analytics.
* Migrated the Android codebase from MVP to MVVM, improving modularization and manageability of functional views and modules.
* Integrated Push Notifications via Firebase Cloud Messaging and developed app features using both Java and Kotlin.
* Followed a clean-code approach with feature-based modular development, focusing on MVVM architecture.
* Applied design patterns such as Singleton, Façade, and Abstract Factory, utilizing Retrofit and OkHttp for efficient network communication, and multi-threading with Kotlin Coroutines and RxJava.
* Replaced older testing frameworks with Espresso for automated testing, conducted JUnit testing, and mentored team members on Android best practices.
* Consumed RESTful Web Services using Retrofit, managed threading with Coroutines, and parsed JSON data with Moshi.
* Operated in a TDD environment with version control via GitHub and continuous integration pipelines through Bitrise.io.
* Implemented AIDL for inter-process communication (IPC) and created functional modules with Parcelables for data passing.
* Utilized core Android components—Activities, Fragments, Intents, Services, Broadcast Receivers, Content Providers—and advanced features like notifications and media players.
* Addressed debugging challenges through robust JUnit testing and integrated Location Manager for location-based functionalities.
* Adopted a domain-driven design approach, clearly defining domain models and use cases, simplifying feature updates and improving business logic clarity.
* Developed and maintained cross-platform mobile applications using React Native, focusing on seamless integration with Android native modules, ensuring high performance, scalability, and consistency in user experience across both Android and iOS platforms.
* Introduced a dedicated performance test suite using Benchmark and Android Profiler to measure function execution times, reducing app latency by 15%.

**Sr. Android App Developer Aug 2020 – Sep 2022**

**H&M, New York City, NY**

https://play.google.com/store/apps/details?id=com.hm.goe&hl=en-US

Project Summary: I led the development of the H&M App, enhancing user engagement through personalized product recommendations, timely drop notifications, and streamlined checkout experiences. I integrated features like H&M Rewards, providing exclusive perks and fashion challenges, while optimizing app performance to ensure smooth navigation across various collections. My work involved utilizing modern Android frameworks like MVVM, Kotlin Coroutines, and Jetpack Compose, ensuring scalability, maintainability, and seamless user experience. Additionally, I improved app functionality with push notifications, cloud integrations, and efficient local storage solutions, all while promoting best practices in development and testing.

* Developed and maintained the H&M App for Android, introducing personalized product suggestions, timely drop notifications, and exclusive rewards for improved user engagement.
* Partnered with interdisciplinary teams to implement loyalty program integrations like H&M Rewards, offering perks, fashion challenges, and priority access to events.
* Enhanced app performance for smooth navigation across collections, ensuring compatibility with a wide range of Android devices and platforms.
* Built a robust push notification system to update users on releases, promotions, and events in real time.
* Improved the shopping experience by developing user-friendly UI/UX elements, supporting personalized suggestions, seamless gift shopping, and secure payment options (Klarna, PayPal, and H&M Account).
* Utilized MVVM architecture, Kotlin Coroutines, and Jetpack Compose for scalable, maintainable app modules.
* Optimized the app to handle over a million products efficiently, focusing on performance and responsive UI/UX design.
* Engineered integrations with backend systems for live product availability, pricing, and store locators.
* Developed engaging animations and transitions using Android's native features and third-party libraries to enhance visual appeal and interactivity.
* Refined search and navigation activities, leveraging Jetpack Animation APIs and Compose Animation libraries for fluid transitions.
* Incorporated Java Guava libraries for improved string manipulation, concurrency management, and I/O processes.
* Integrated Firebase SDKs such as Authentication and Firestore, and employed Room for efficient local storage.
* Created custom views for a polished and highly customizable UI.
* Troubleshot and resolved issues related to Bluetooth, network connectivity, and Wi-Fi, ensuring smooth functionality.
* Adopted the CLEAN architecture pattern to ensure modularity and ease of maintenance.
* Executed rigorous testing and debugging to maintain app stability while adhering to MVC principles.
* Leveraged Parcelable for efficient object serialization and Robolectric for thorough testing.
* Integrated Jetpack Compose with ViewModel and StateFlow or LiveData for effective UI state management.
* Introduced a multi-environment deployment pipeline to align dev, staging, and production releases, reducing merge conflicts by 25%.
* Implemented a feature-toggle system using Firebase Remote Config, enabling rapid activation or deactivation of app features without requiring updates.

**Sr. Android Mobile App Developer Jun 2018 – Jul 2020**

**Sun Country Airlines, Minneapolis, Minnesota**

* Developed and enhanced key features for Sun Country Airlines, such as the SkyAir Fast Checkout for streamlined payments with stored credit card details and Dynamic Boarding Queue for real-time seat readiness notifications.
* Created essential travel tools, including real-time flight tracking, boarding passes, and check-in reminders, all displayed on the home screen and powered by Kotlin Flows for real-time updates.
* Improved trip management functionalities—seat selection, itinerary changes, and additional service options—by utilizing Kotlin Coroutines for efficient task handling.
* Built custom packages in Flutter, leveraging native Android and iOS APIs to elevate user experience.
* Partnered with UI/UX designers to design intuitive, visually appealing interfaces for time-sensitive features like boarding passes.
* Ensured consistency with brand guidelines and maintained cohesive updates across interfaces.
* Implemented offline functionality using Room Database, allowing access to critical boarding information without internet connectivity.
* Integrated geolocation features through Flutter Geolocator for precise location tracking.
* Applied top-tier security measures to safeguard user data and ensure compliance with industry standards.
* Advocated for Test-Driven Development (TDD) with JUnit and Espresso to maintain high-quality, bug-free code.
* Utilized Firebase Crashlytics for real-time monitoring and resolution of production crashes, improving app stability.
* Enhanced backend communication with Kotlin Coroutines, Retrofit, and OkHttp for optimized data processing.
* Applied Agile methodologies—SCRUM, sprint planning, retrospectives, and standups—to ensure on-time delivery of features.
* Collaborated with product managers, designers, and backend teams via JIRA, Slack, and Teams to ensure seamless coordination.
* Managed version control and CI/CD pipelines using GitHub and GitLab, maintaining a clean and efficient codebase.
* Implemented MVVM architecture to ensure a scalable codebase, utilizing Kotlin Coroutines for efficient background task management and data handling.
* Integrated Omniture Tracking for real-time data collection and actionable business insights.
* Provided technical support to quality analysts to ensure thorough test coverage.
* Stayed up to date with the latest Kotlin and Android best practices to maintain a modern approach.
* Mentored junior developers, conducted code reviews, and guided the team in following best practices with Kotlin and Coroutines.
* Refined key modules into a feature-based multi-module structure to accelerate builds and simplify testing.
* Initiated a Flutter parallel project for rapid testing of new UI concepts, enabling faster prototyping and experimentation.

**Sr. Android Developer Jan 2016 – May 2018**

**Amgen, Thousand Oaks, CA**

https://play.google.com/store/apps/details?id=com.amgen.oncoday&hl=en\_US

Project Summary: I led the development of mobile applications focused on event management, symptom tracking, and IoT integrations. I utilized Kotlin, MVVM architecture, and various APIs to enhance user experience, ensure smooth navigation, and optimize app performance. Additionally, I played a key role in Agile practices, mentoring junior developers, and ensuring the delivery of high-quality, scalable, and maintainable software solutions.

* Designed and developed key features for event registration, workshop selection, and post-event presentation access.
* Enhanced UI/UX to ensure seamless navigation through registration flows.
* Collaborated with backend teams to integrate RESTful APIs for dynamic content, workshop options, and questionnaire responses.
* Implemented secure data handling for user registration details, event preferences, and feedback collection.
* Enabled users to access event presentations after completing satisfaction questionnaires.
* Addressed performance issues and optimized speed to improve user experience.
* Oversaw the integration of symptom tracking features, ensuring accurate data collection and reporting.
* Introduced a navigation drawer to streamline in-app navigation, improving accessibility.
* Standardized the use of Universal Image Loader for efficient image loading and memory optimization.
* Employed Kotlin for improved code readability and maintainability.
* Acted as Scrum Master, resolving roadblocks and managing dependencies to ensure adherence to Agile principles.
* Maintained source control with BitBucket, supporting effective version management and collaboration.
* Developed local broadcast messaging for asynchronous communication between app components.
* Applied the observer pattern to manage UI events across views.
* Mentored junior developers on Agile methodologies, promoting iterative development.
* Improved app performance by using RoomDB for caching frequently accessed data.
* Promoted functional unit testing to maintain code quality and reliability.
* Utilized React Native’s built-in features and third-party libraries (e.g., Redux, MobX) for effective state management.
* Architected the app using MVVM, ensuring scalable, maintainable, and testable code.
* Implemented Dagger or Hilt for dependency injection, optimizing dependency management.
* Conducted requirement-gathering sessions with clients to clarify IoT-specific needs, including device connectivity and remote-control features.
* Leveraged BLE sensors to integrate IoT-driven health metrics into event apps, showcasing real-time symptom monitoring.
* Established a multi-locale strategy using resource qualifiers, ensuring inclusive user experiences across diverse regions.

**Sr. Android Developer Sep 2013 – Dec 2015**

**Frontier Communications, Dallas, TX**

https://play.google.com/store/apps/details?id=com.frontier.selfserve&hl=en\_US

Project Summary: I led the development of the MyFrontier app, empowering users to manage services, upgrade plans, and access personalized rewards seamlessly. Key contributions included integrating real-time order tracking, troubleshooting tools, and a virtual assistant for 24/7 support. Leveraging modern Android frameworks like VIPER and Firebase, I delivered a secure, scalable, and user-friendly app, enhancing customer satisfaction and engagement.

* Designed and implemented features enabling users to manage services, upgrade plans, and access personalized rewards, discounts, and offers.
* Built tools for users to make payments, set up Auto Pay, and view billing history seamlessly through the app.
* Integrated real-time order tracking, installation updates, and direct messaging for enhanced customer service interactions.
* Added troubleshooting features such as outage checks, gateway/TV box reboots, and trouble ticket tracking.
* Developed a virtual assistant and Help Center for 24/7 user support and faster issue resolution.
* Secured account management with password resets, notification preferences, and contact info updates.
* Created an internal library for consistent UI components, improving code maintainability.
* Incorporated Google APIs and custom SDKs for robust user authentication and secure login.
* Used WebView for additional security and designed a two-panel layout for improved user experiences.
* Managed version control using Git, including handling reverted merges and complex operations.
* Leveraged Google Maps API for displaying contact addresses and location-based services.
* Refactored modules with the VIPER architecture for better maintainability and scalability.
* Implemented BroadcastReceiver for timely updates and SharedPreferences for personalized app experiences.
* Migrated notifications from Google Cloud Messaging to Firebase Cloud Messaging.
* Utilized SQLite for local data storage, ensuring efficient data access.
* Collaborated with UI/UX and QA teams to deliver seamless user experiences and resolve bugs.
* Integrated RESTful APIs using Retrofit, OkHTTP, GSON, Jackson, and custom interceptors for smooth data consumption.
* Employed Glide for optimized image handling and ensured responsive UI layouts with Fragments.
* Streamlined app theming, optimized tablet layouts, and implemented secure login features including two-factor authentication.
* Coordinated with offshore teams and managed the project backlog via JIRA, ensuring timely delivery.
* Established a continuous deployment process using Travis and Git tags, reducing manual overhead by 40%.
* Implemented advanced logging and analytics with Splunk for improved real-time monitoring of user interactions and app usage.

**Android Developer Jan 2011 – Aug 2013**

**Viking, Los Angeles, CA**

https://play.google.com/store/apps/details?id=com.vikingcruises.mvjapp&hl=en\_US

Project Summary: I enhanced the Voyager® mobile app, delivering a seamless onboard experience for Ocean, River, and Expedition journeys. I implemented user-friendly interfaces for activity schedules, dining menus, and excursion bookings while optimizing performance with features like RecyclerView, BLE location updates, and Content Provider-based caching. Focused on localization, push notifications, and custom animations, I ensured a polished user experience while maintaining app stability through rigorous testing and performance optimization.

* Developed and improved features in the Voyager® mobile app to enrich the onboard experience for ocean, river, and expedition travelers.
* Implemented intuitive user interfaces for activity schedules, dining menus, and excursion bookings.
* Integrated RecyclerView to display dynamic lists for food, drinks, and attraction menus.
* Utilized SharedPreferences to track user preferences and configuration changes.
* Supported localization by implementing multi-language and regional settings with string resources.
* Managed network caching through a Content Provider, enabling seamless offline usage.
* Leveraged Android BLE libraries and geofences to update location data via iBeacon.
* Created custom animations to enhance overall user engagement.
* Collaborated with stakeholders to gather and refine app requirements.
* Built Custom Views to persist user data effectively and improve interactivity.
* Used JIRA for task tracking and agile development.
* Implemented ViewPager for smooth navigation between fragments.
* Optimized image rendering with Vector Drawables and minimized app size.
* Added push notifications to keep users informed on promotions and important updates.
* Created a comprehensive error-handling system to log and manage application issues.
* Maintained application stability through robust unit testing.

**Education**

Degree in Computer Science

University of California