**Santhosh K**

**Ph: 408-874-6132**

**Email:** [**santhosh.apk21@gmail.com**](mailto:santhosh.apk21@gmail.com)

**Sr. Android Developer**

**Linkedin :** [**https://www.linkedin.com/in/santhosh-k-a95258245/**](https://www.linkedin.com/in/santhosh-k-a95258245/)

**PROFESSIONAL SUMMARY:**

* 10+ years of IT experience in software development which include professional experience in mobile application development.
* Design GUI and interfaces with services for mobile applications, Asynchronous Programming in Android (such as Thread pool, Tasks and services). Implemented the monetization of apps, which has capabilities to do in-app purchases.
* Experience with designing and developing web Applications using Java/J2EE, JavaScript, XML technologies and JSON.
* Develop Applications using Eclipse IDE, SQLite, JSON, Android SDK and ADT plug-in
* Develop and architected multiple Android applications across versions.
* Implement native libraries in application by using Android SDK.
* Proficient in developing Android Framework Services using Intent, Services and AIDL.
* Good in public APIs, such as Google, Face book, You Tube and Twitter.
* Experience in using Storage options in Android like Shared Preferences.
* Strong in Android system development, including the kernel, device driver, HAL and framework.
* Strong in MVC, MVP and MVVM frameworks.
* Work on Fragments, Activity workflow, Action Bar Navigation, Menu designs and view controls and Loaders.
* Experience with source code control management like Git, good at using the markup languages like JSON and REST
* Good at Mockito, Espresso and Appium for UI testing.
* Leveraged cutting edge technology like Kotlin, Android , Retrofit, Navigation, View Model, Room, Actions.
* Experience writing apps from scratch in Kotlin.
* Play & record live stream or Video on demand media content using Media player, Media recorder, Video views and Surface Views.
* Expertise in OOP (Object Oriented Programming) and OOAD (Object Oriented Analysis and Design) concepts.
* Proficient with common Android Framework API’s (Location, Camera, Notifications, Maps).
* Knowledge on using CI Tools like Jenkins.
* Expertise in implementing JavaScript for validation.
* Knowledge and exposure to full Software Development Life Cycle including design, data modeling, software implementation, and documentation.
* Good understanding of Web Services, XML Parsing and JSON.
* Goal oriented, organized, team player with good interpersonal skills, thrives well within group environment as well as individually.

**TECHNICAL SKILLS:**

* **Technologies:** Android 2.3-14.0, Android NDK, Java, Kotlin, Dagger, Rx Java 1.0, Rx Java 2.0, JNI, C, J2EE (JSP 1.2/2.0, Servlets 2.2/2.3/2.4/2.5, EJB 2.0/2.1, ANT), Struts1.3, JavaBeans, JSF 1.2, Web Services, Spring2.0.x/2.5.x, Hibernate 3.0/3.1.1, JMS 1.1, JDBC 3.0, JavaScript 1.8.x, SOAP 1.2, J Unit 4.0C, C++.
* **Markup Languages:**HTML 5, XML, CSS 3, XHTML.
* **Servers:**Web Logic 8.1/9.2, Apache Tomcat 6.0/7.0, JBoss 5.0.
* **Build Tools:**Gradle, Maven
* **Debugging Tools:**Log cat, DDMS, J Unit.
* **RDBMS:**SQLite, db4o, Oracle 10g/11g, MySQL 5.1.69, MS-SQL Server.
* **IDE’s:**Android Studio, Eclipse, NetBeans, IntelliJ IDEA.
* **Operating Systems:**Windows (2000/XP Professional, Windows 7/8/10), Unix, Linux, Macintosh.

**PROFESSIONAL EXPERIENCE:**

**Client: Delta Airlines, Atlanta, GA July 2023 – Present**

**Sr. Android Developer**

**Responsibilities:**

* Involved in all phases of Software Development Life Cycle (SDLC) like Analysis, Design, Development, Implementation and Testing of the project.
* Worked on Fly Delta application which allows customers to book domestic and international flight tickets.
* Worked as a Tester on the Seatback application which is a Inflight entertainment allows Passengers to watch Movies, Series and Live-Tv etc
* Designed and developed UI screens and business logic using MVVM pattern for the application with Android Studio IDE and latest Android SDK.
* Having experience in using Kotlin with Android Studio and Eclipse with ADT plugin, designing UI layouts using Linear Layout, Relative Layout, Frame Layout, Table Layout, List View, Grid View and using Android native widgets and custom Widgets.
* Implemented the Kotlin with Android studio for smooth functioning of the location-based services GPS, Bluetooth on Android.
* Participated in architecture migration from MVP to Kotlin based MVVM architecture using lifecycle aware components like LiveData, ViewModel, Room and ViewBinding
* Implemented Jetpack Compose such as composable functions, setting the content to the screen, and updating content. Managed Android background jobs using JetPack WorkManager.
* Experienced in Writing test cases across multiple features for ViewModels using Kotlin Mockk, Espresso for automated UI.
* Worked on Android NDK with C++ for the implementation of native libraries in the applications on android mobile. Worked with designers to implement UI/UX designs and improve application usability.
* Created a separate Couchbase Database cluster to store flight control data log information.
* Used Shared preferences for login activity and for password and email validation.
* Tested application in stage, code review fixing the bugs and providing post-production support.
* Developed Restful Service Calls at the various stages in the app development cycle and parsing the JSON responses back from the web servers according to the application requirement.
* Developed GraphQL APIs for interacting with databases and performing different integrations and operations around them.
* Designed and developed GraphQL APIs for performing CRUD operations with databases and performing different operations around them which improved APIs response times by 30% on an average.
* Experienced with testing REST and GraphQL API logic using Postman.
* Participated in the development and execution of encryption, EVM tokenization and key management platforms, solutions and strategies across the enterprise. Implemented efficient data caching and offline data synchronization techniques to enhance app performance and user experience.
* Optimized app performance by identifying and resolving performance bottlenecks, memory leaks, and other issues. Good understanding on Security and privacy Policy for Android Application development.
* Experienced utilizing GitHub Actions and Bamboo as the CI/CD tool and built the code integration, code delivery and release pipelines.
* Setup, upgrade and maintain Cassandra DSE clusters. Optimized the Cassandra cluster by making changes in Cassandra configuration file and Linux OS configurations.
* Implemented Adobe Tag Manager on marketing sites, generated reports summarizing campaign traffic by location, New Vs Existing users, Bounce rates etc.
* Executed A/B testing for sites and campaigns to increase conversion rates and maximize user experience using Adobe Target Manager.
* Debugging for Stored Procedures in the application and using SQL queries to access Oracle, DB2 and SQL Server 2012. Building and Installing servers through Azure Resource Manager Templates or Azure Portal.
* Collaborate with cross-functional teams to integrate data protection (encryption and EVM tokenization) solutions seamlessly with organizational goals. Migrating an On-premises virtual machine to Azure Resource Manager Subscription with Azure Site Recovery.
* Implemented GitHub Actions for the application repos, migrated some of pipeline from Jenkins to GitHub Actions from scratch by creating various scripts.
* Integrated third-party SDKs and libraries for analytics, push notifications, and social media integration.
* Conducted testing and debugging of applications to ensure robustness and stability. Automating Test Cases using MAUI. Working with Penetration Testing tools to find the vulnerabilities in the app.
* Implemented remote install and hyper care support for the VeriFone TransArmor Tokenization with EVM project through the AJB RTS Servers in all US locations. Automated Advanced features of Visual Studio like Snap Lines, Smart Tags, Filters, Custom Snap lines using Maui.
* Used Native Development Kit for Android, which makes use of JNI APIs to interact with C++ legacy code.
* Refactor background processing tasks, migrate from Android Job library to WorkManager API to adheres to power-saving feature and asynchronous one-off
* Utilized Agile Methodologies - Scrum meetings to manage full life-cycle development of the project.
* Used GIT for source code management, conducted code reviews and provided technical feedback to team members for code quality improvement.

**Environment:** Android Studio, Visual Studio Code, Rx Java 2, Kotlin, Jetpack, Java, C++, GraphQL, Gradle, SQLite, jQuery, SVN, REST, Eclipse IDE, Coroutines, Typescript, Gitlab, MSSql.

Fly Delta App Link: <https://play.google.com/store/apps/details?id=com.delta.mobile.android> 

**Client: Reece, Dallas, TX July 2022 – June 2023**

**Sr. Android Developer**

**Responsibilities:**

* Worked on all phases of SDLC methodologies in Agile and Waterfall model and known for writing efficient, maintainable and reusable code that preserves privacy and security
* Designed and developed user interfaces using XML.
* Developed documentation for each app, detailing operation aspects, functions, capabilities, and features.
* Implemented the full user navigation by using the android navigation component from jetpack and have a smooth transition between screens.
* Worked with software development, testing and UX team members to design and develop robust solutions to meet client requirements for functionality, scalability, and performance.
* Defined, Created, and maintained technical and user documentation, test cases and release notes.
* Build small re-usable pieces using fragments which are easy to manage and permits a more fluid visual design than can adapt to both tablet and phone resolutions.
* Used C, C++ to work on NDK platform for building the native android mobile applications. Used Agile Methodology and used Jira for sprint tracking.
* Developed the activities and UI layers. Using Activity and Fragments developed App screens and its workflow, which has List and scroll views.
* Used Android SDK and Eclipse IDE for development. Utilized shared preferences to store and maintain user information.
* Used Kotlin Coroutines to perform asynchronous tasks for optimized thread management.
* Having Knowledge on Replacing RxJava callbacks with coroutines creating Android Jetpack Viewmodel Scopes. Implemented Kotlin coroutines for service layer API calls.
* Front and back-end transaction processing: Magnetic Stripe, Card-on-File, Contact, Contactless (NFC), Integrated Circuit Card (EVM), Tokenization and Transaction Encryption Technologies.
* Used Firebase cloud service for real time database, cloud messaging, authentication, and notification.
* Worked closely with another mobile app developer, leading the other platform development.
* Tested the app across different versions of Android and different android phones to assure quality and performance. Researched and tested for security vulnerabilities of android devices of various used versions.
* Automated Cassandra Builds/installation/monitoring etc. Refactored legacy code and added unit tests to increase code coverage.
* Having Knowledge on React JS Virtual Dom and React views, rendering using components which contains additional components called custom HTML tags.
* Having Knowledge in using React JS components, Forms, Events, Keys, Router, Animations, and Flux concept. Created GraphQL Endpoint for serving Navigation Service.
* Created SQL scripts for test validation. Involved in testing GraphQL APIs JSON responses using PostMan
* Used the android support libraries to provide the latest features like action bar, fragments to the lower versions of android devices.
* Created the unit test cases using Mockito, Mockk, JUNIT framework.
* Having experience on CI/CD tools AzureDevops and Github Actions to deploy the applications
* Integrated automation tests in continuous integration tools AzureDevops and GitHub Actions for nightly consignment run of the script.
* Ensure the quality, usability, and performance of the encryption and EVM tokenization platform including ensuring high availability, disaster recovery, and auditable logging. Implemented traffic and conversion tags using Adobe Tag Manager and developed reports using Adobe Analytics
* Configured Tags using Adobe Dynamic Tag Manager (DTM) and Adobe Analytics script into webpages to capture the visitor matrix during run time.
* Android backward compatibility was achieved using the Action Bar Sherlock library.
* Integrated applications to Firebase (Firebase Analytics, Crashlytics, Firebase Performance Monitoring) and took care of code review, code fixes and bug fixes.
* Worked on Bluetooth Low Energy (BLE) to communicate with BLE devices that have low power requirements.
* Used GIT for source code management, setting Gitlab repository and Gradle for build automation.
* Used Abd logcat, Network and Database Inspector for Debugging.

**Environment:** Android Studio, Rx Java 2, Kotlin, Jetpack, Java, C++, ReactJs, GraphQL, Gradle, SQLite, jQuery, SVN, REST, Eclipse IDE, Coroutines, Cassandra, Couchbase.

**Client: Office Depot, Boca Raton, FL April 2021 – June 2022**

**Sr. Android Developer**

**Responsibilities:**

* Participating in application android development, defect validation, deployment.
* Working in complete Software development Life Cycle SDLC for a successful delivery of the projects.
* Knowledge with Content providers and content resources and worked on integration with Google maps API. Developed UI using Auto layouts and size classes.
* Experience in Android NDK using C++ to access physical components and Android application framework. Worked on refactoring the app from Objective C to swift.
* Experience writing apps using Kotlin with Android Studio. Designed material design user interface according to the requirements.
* Designed and developed the App screen navigation using Dialog boxes, Action Bar Navigation control and designed Menus based on the user context.
* Worked on designing the layouts to compatible with screens of different resolutions.
* Worked with the team lead to develop the mobile application technical design and architecture, in particular forward-thinking choices of map rendering and visualization libraries.
* Working with Creative Designers and UX Specialists to make interface appealing and usable.
* Worked with QA and product to design integration and usability test plans.
* Creating and developing app with Dagger2 + RXJAVA 2 + MVP + layer pattern.
* Used Object oriented programming principles and worked on MVVM pattern.
* Developed App screens and its workflow using Activity and Fragments which has views such as List View and Scroll View.
* Lead the selection, enterprise integration and deployment of payment infrastructure, which included EVM compliant credit card terminals, and payment gateway with point-to-point encryption (P2PE) and tokenization. Created a new XML layout with Android Map View to display the location Map and defined the layout that can be reuse.
* Downloaded and uploaded content from back-end web server via REST API.
* Involved in the migration Vin lookup module and warranty module from RxJava 1 to RxJava 2.
* Used Rx Java/Rx Android as a library for composing asynchronous and event-based programs by using observable sequences.
* Experienced in security engineering with a focus on Data Encryption, EVM Tokenization, Key Management Systems, Cryptography, Worked with Observable, Interactor and Observer to get the data from the server and to publish it on to UI.
* Worked with tools like GitHub actions, Azure DevOps to implement build automation and setup CICD pipelines and make use of wide range of plugins available to setup smooth developer friendly workflows.
* Worked with REST web services using Retrofit and RxJava2 which used a JSON Schema to communicate with backend systems in the background.
* Implemented Broadcast Receivers for sending MMS and SMS messages from Sprint Zone application to the Messaging client application. Worked on Fire Base cloud messaging for push notification.
* Using Agile Methodology and Jira for sprint tracking. Took care of code review, code fixes and bug fixes
* Worked on Restful Web Services and Continuous Integration. Implementing Analytics in the application.
* Using Web Views, Recycler Views & populated lists from databases using simple adapters.
* Used fragments to build small re-usable pieces that are easier to manage and allow for a more fluid visual design and can adapt to tablet and phone resolutions.
* Created a local database using SQLite to store and retrieve the data.
* Implemented the functionality of getting the download progress, aborting the download.
* Using GIT for source code management, setting Gitlab repository and runner for build automation.
* Using Abd logcat, DDMS for Debugging.
* Implemented an express GraphQL library to mount a GraphQL API server on the user-configured HTTP endpoint.

**Environment:** Android Studio, Rx Java 2, Kotlin, Java, C++, SQLite, GraphQL, jQuery, SVN, REST, Eclipse IDE.

Office Depot App Link: [https://play.google.com/store/apps/details?id=com.office depot.mobile.ui](https://play.google.com/store/apps/details?id=com.officedepot.mobile.ui)

**Client: LexisNexis - Boca Raton, FL Oct 2018-Mar 2021**

**Android Developer**

**Responsibilities:**

* Worked with delivery leads, architects, project managers, QA, and other developers as part of a team.
* Developed e-commerce mobile application facilitating product catalogue, payment portals, seller portal, delivery & pickup etc.
* Integrated application with payment gateway like PayPal, Paytm, Razor pay Implemented push notifications using FCM.
* Used RXJAVA, Dagger UI, Butter Knife android libraries.
* Responsible for updating and validating the new software on different Telematics units using ADB tool.
* Having Experience on development, application and introduction of Telematics, Wireless Sensors, and Remote Diagnostics capability on Cars.
* Implemented local database storage using SQLite & Shared preferences.
* Continuous research and development which made us upgrade to GIT, 3rd party libraries, programming, troubleshooting, complex web services.
* Development, delivery, and maintenance of mobile applications across multiple android devices.
* Ensuring all our projects user interface meets the material design standards.
* Participated in daily scrum calls, backlog refinement meetings, design meetings, retro calls Trained new resources.
* Used Retrofit to make the Restful Service Calls at the various stages in the app development cycle and parsing the **JSON** responses back from the web servers according to the application requirement.
* Experience working with diverse application/system teams of engineers, designers, and testers.
* Proficient with android tools like Android Developer Studio, Git, Gradle, MAT, GDB etc.
* Experience in C and C++ implementation of VoIP components such as SIP client and Proxies. Resolving the issues in PLM and submitting report to the client.
* Preloading 3rd party applications using perforce. Modifying existing Confidential libraries or apps to support 3rd party apps.
* Flashing the devices and installing the new builds. Validating the applications after preloading.
* Trialing and fixing of issues in application as well as framework.

**Environment**: Java, Kotlin, C++, Gradle, Android Studio, UNIX, Eclipse IDE, Android application, Android Framework, Android VPN and device services, Developer tools.

Lexis nexis App link: <https://play.google.com/store/apps/details?id=com.lexisnexis.accurint>

**Client: PNC Bank, Pittsburg, PA**  **Oct 2016 – Sep 2018**

**Android Developer**

**Responsibilities:**

* Worked with Android Studio and the latest Android SDK in developing an enterprise level mobile application.
* Designed screens using MVP pattern for the application with Android Studio IDE.
* Designed and developed network frameworks to consume RESTful APIs using Retrofit to fetch user profile and daily transaction details.
* Worked with Android mobile development team to complete assigned short-term weekly tasks or long-term monthly tasks.
* Strong knowledge of RxJava, Dagger, Retrofit, Kotlin, and Gradle
* Worked in the Use case requirements, analysis, design and development phase.
* Created various custom views for the application using standard Android components, database, services and various UI widget types.
* Collaborated with UX team in creating better UX Android widgets (phones & tablets).
* Developed rich user interface of the application by making best use of the Android UI Layouts and Fragments.
* Implemented several types of Layouts like Linear Layout, Constant Layout Relative Layout, & Frame Layout.
* Developed activities, UI layers natively and customized as per the client request.
* Consumed Web Services (RESTFUL) from third party for send the emails in bulk. This service is used to send the emails to the customers in bulk as a part of Batch process.
* Participated in code reviews with the development team, provided actionable feedback and discussed findings.
* Consumed the REST services, getting JSON response and parsing them to get the required information.
* Used Rx Java as a library for composing asynchronous and event-based programs by using observable sequences.
* Learnt new OPPs language called Kotlin and successfully migrated parts of the project to Kotlin.
* Worked with development of Android versions 4.0 and higher.
* Implemented TDD and development the test design for the project before it was coded
* Worked in a pair programming environment, as a team of two and guided the other developer for implementing new feature with my skills.
* Embedded Google Maps API, GPS Location Data into app with zooming controls.
* Integrated application with analytics to log User Sessions and Touch Gestures.
* Developed and enhanced features to restrict the usage based on Authorization and Authentication tokens.
* Implemented unit testing using Mockito framework for client-side validation.
* Implemented unit testing across the application and used Espresso and Appium for UI testing.
* Used Scrum Agile methodology that included iterative application development, weekly Sprints, stand up meetings and customer reporting backlogs. Actively participated in requirements gathering, analysis, design, and testing phases.

**Environment:** Android SDK, Rx Java, Retrofit, MVVM, RESTFUL Web services, JSON, Google Map API, Lotto, JIRA, Agile, GIT (version control).

**Health Trust, India. Oct 2013 – Apr 2015**

**Android Developer**

**Responsibilities:**

* Develop mockups and translate them to Core Java, XML user interfaces Developed apps with good user interface.
* Worked with team members by syncing our project with bitbucket through git.
* Contributed to the design and development of apps that are elegant, efficient, secure, highly available, and maintainable.
* Worked closely with other developers and end users to ensure technical compatibility and user satisfaction.
* Contributed insights into ways to improve the processes and tools used on the Android team Helped cultivate consistent development best practices.
* Collaborated with architects & developers to plan, design, develop, test, and maintain the Android application.
* Used Async Task for multithreading. Used SVN for code management.
* Registered the Broadcast Receivers with various intent filters for the android system announcements.
* Designed the Custom Dialog using the Fragment Activity.
* Designed the Custom Action bar, Custom Progress bar while making service calls.
* Created a pop-up notification for alerting users.
* Worked on Agile Methodology. Performed data validation in Form beans and Action Classes.
* Worked on XML, XSLT, XPATH, DOM and SAX.
* Used RAD for developing the application.
* Involved in application android development, defect validation, deployment and production maintenance.
* Created a local database using SQLite to store and retrieve the data.
* Extensively worked on designing the layouts to compatible with screens of different resolutions.
* Took care of code review, code fixes and bug fixes
* Responsible for testing the application in stage, code review fixing the bugs and providing post-production support.

**Environment:** Android SDK 4.4, Java, Android Studio, Eclipse, HTML5, JQuery, SQLite, Selenium, Volley, JSON, SVN, XML, Windows and MS SQL Server.

**Educational Qualifications:**

**Master’s in Computer Science** from **Silicon Valley University**, USA-2016.

**Bachelor’s** in **ECE** from **JNTU**, HYD-2011