

ANDROID

*Development*

SriSeshaa Technologies



## Introduction to Android

Android is a mobile operating system initially developed by Android Inc., a firm purchased by Google in 2005. Android is based upon a modified version of the Linux kernel. Google and other members of the Open Handset Alliance collaborated to develop and release Android to the world. Android delivers a complete set of software for mobile devices: an operating system, middleware and key mobile applications.

- A complete & modern mobile operating system
- A Cutting-edge mobile user experience
- A world-class software stack for building applications
- An open platform for developers, users & industry



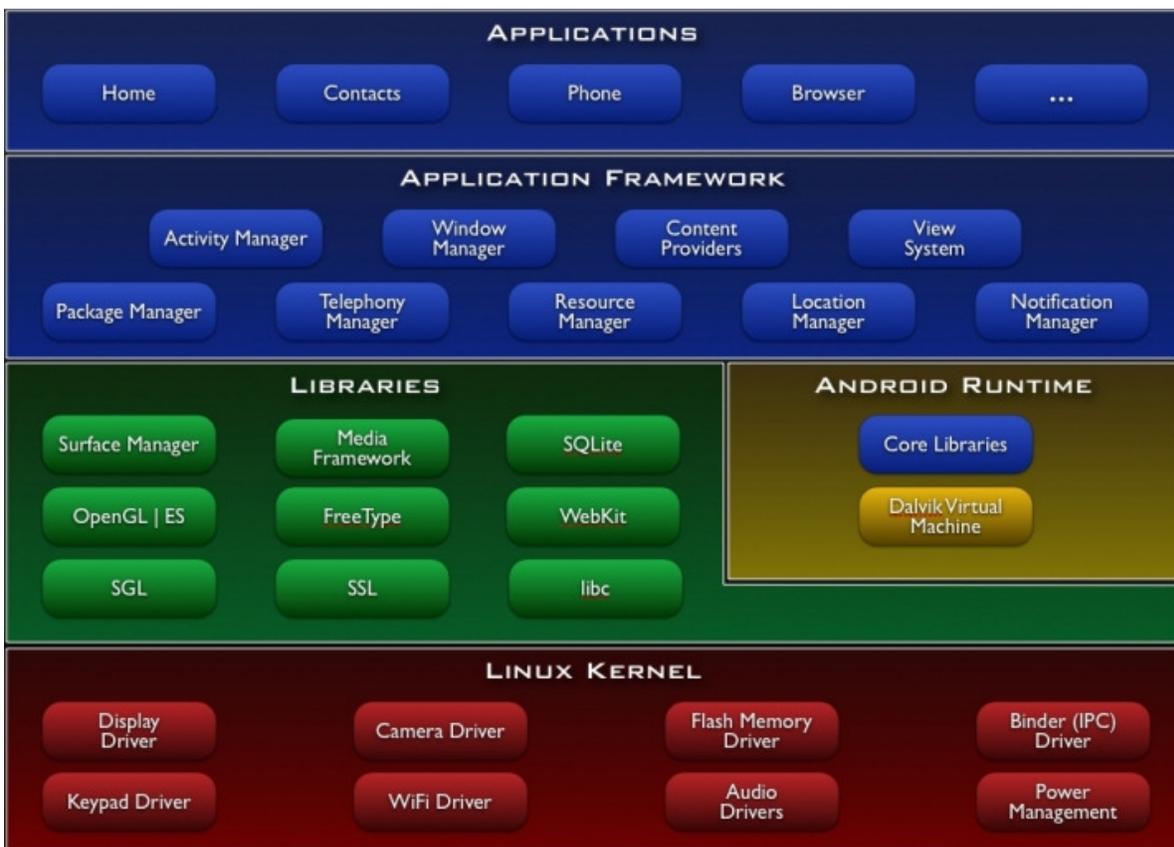
## Android Features

- Application framework enabling reuse and replacement of components
- Dalvik virtual machine optimized for mobile devices
- Integrated browser based on the open source WebKit engine
- Optimized graphics powered by a custom 2D graphics library; 3D graphics based on the OpenGL ES 1.0 specification (hardware acceleration optional)
- SQLite for structured data storage
- Media support for common audio, video, and still image formats (MPEG4, H.264, MP3, AAC, AMR, JPG, PNG, GIF)
- GSM Telephony (hardware dependent)
- Bluetooth, EDGE, 3G, and WiFi (hardware dependent)
- Camera, GPS, compass, and accelerometer (hardware dependent)
- Rich development environment including a device emulator, tools for debugging, memory and performance profiling, and a plugin for the Eclipse IDE.

## SriSeshaa Android Capabilities

SriSeshaa Technologies has pioneered Android based application development. We have been the first movers to recognize the huge potential of Android and to embrace the technology. Our Android team has a well-defined roadmap to develop applications to cater to individual user to large enterprises. Our team has developed few applications which can be downloaded free from Android market, to demonstrate our capabilities in Android.

SriSeshaa capabilities encompass all the major components of the Android operating system.



## Android Application Framework

By leveraging the option to use the open development platform, our developers have the ability to build extremely rich and innovative applications. They take advantage of the device hardware, access location information, run background services, set alarms, add notifications to the status bar, and many more features to develop intuitive as well as intelligent applications.

With the full access to the same framework APIs used by the core applications, our development team creates application architectures designed to simplify the reuse of components. This capability enables our team to deliver faster and within budget.

## SriSeshaa Android Capabilities

### Case Study 1 - Privacy Guard

#### Introduction

Ignoring a phone call or SMS is an obvious activity for almost every mobile user. But unfortunately this facility is not available in his/her Smartphone by default. Even though this facility can be obtained from their mobile service provider as a value added service, achieving the same through an inbound application makes them feel at home.

#### About Privacy Guard

Privacy Guard is one of the many applications developed by our Android team to demonstrate capabilities in Android based technologies.

Privacy Guard is an Android mobile application through which user can block a contact through an intuitive user interface. User can choose block options to block SMS alone, phone calls alone or blocking both messages and phone calls. At anytime he can change the block options for a blacklisted contact or remove a blocked contact from blacklist. Wiping the entire blacklist is also possible with a single click. User can toggle the background running Privacy Guard Service on or off.

#### Screenshots

Here are a few screenshots of Privacy Guard, available for free download from Android Market.

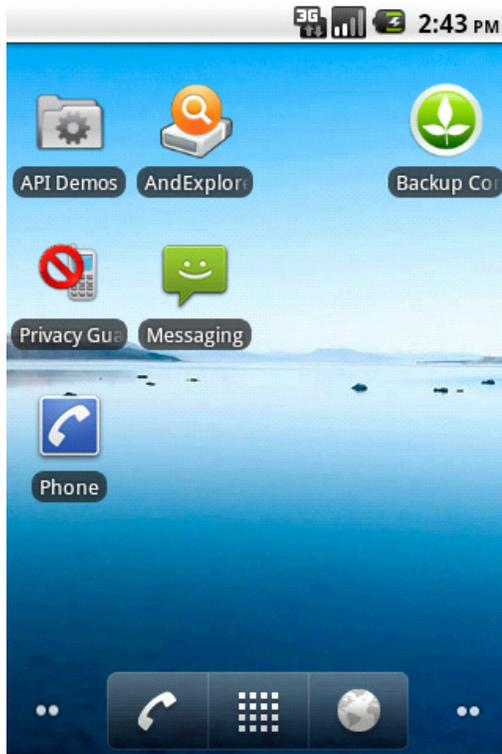


Fig.1 Privacy Guard Launcher



Fig.2 Home Screen



Fig.3 Menu options

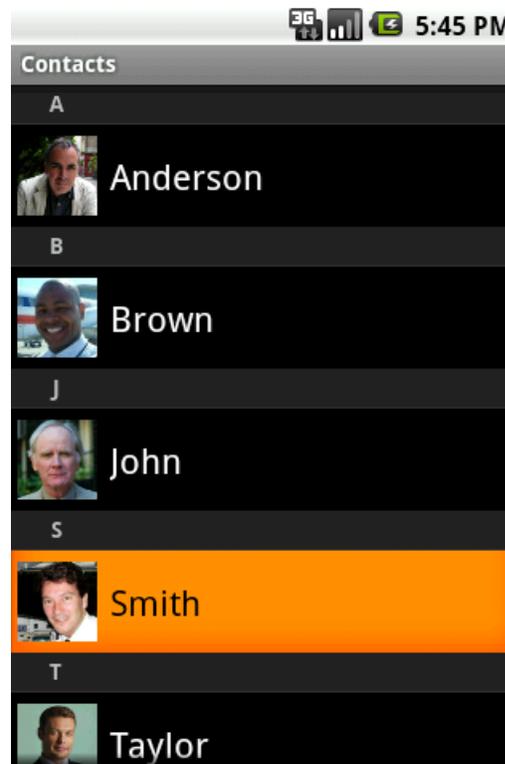


Fig.4 Blocking a contact

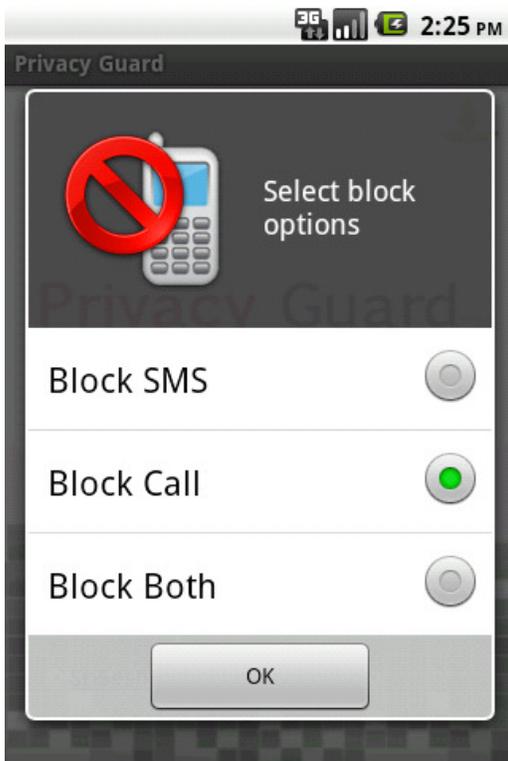


Fig.5 Block options

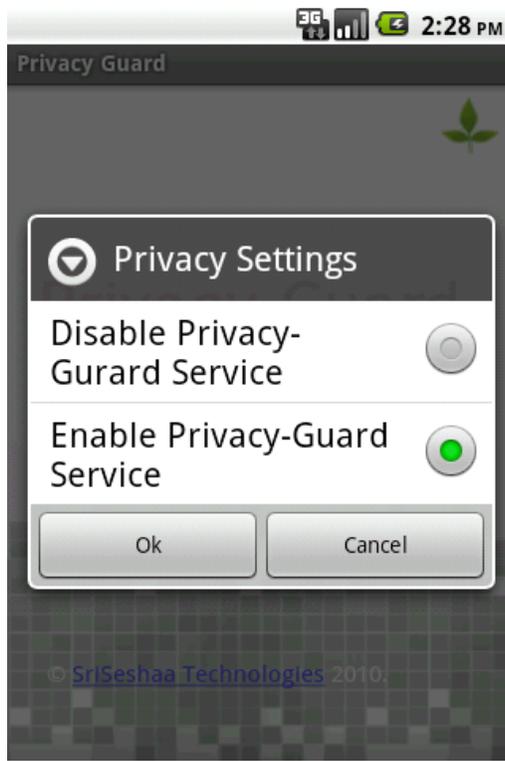


Fig.6 Service Settings

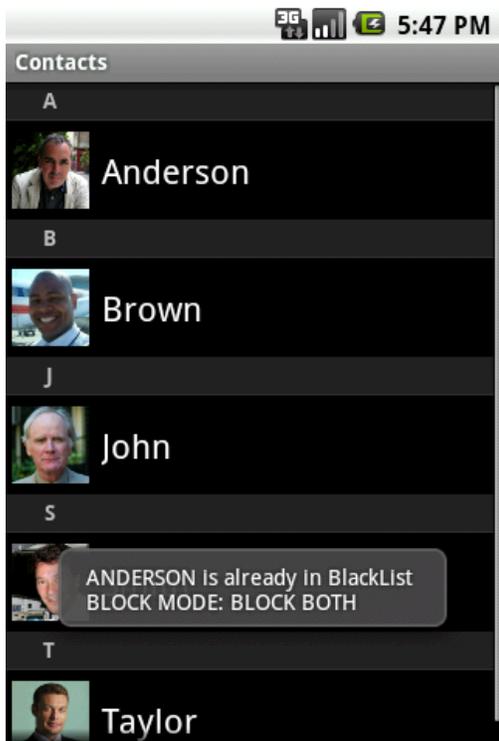


Fig.7 Blocking Duplicate



Fig.8 Listing Blocked contacts

## Case Study 2 – SecureMe

### Introduction

Data safety is vital for any individual user or an organization. For a mobile user his/her contacts are very important. If data in mobile unfortunately get corrupted or phone was lost it adds much loss than the device itself, because data is more valuable. Keeping copy of data remotely comes as a rescue in such difficult situation.

### About SecureMe

We developed a Backup & Restore mobile security application which takes care safe backup of data in Android mobile devices. Data are securely backed up in our registered background web site. If users wish to save their data in third party cloud, they can choose Amazon or Google cloud offerings. Users can backup their phone contacts, messages, call logs, phone settings, videos, music files, documents and installed applications remotely and whenever want it back, they can simply restore them. In case of emergency user can log into SecureMe website to lock the phone or wipe the entire data. Also user can monitor his/her phone remotely through GPS facility.

User can schedule a backup for his intended content type. SecureMe will automatically backup files periodically. For long backups such as memory card files, users no need to wait patiently until its get finished, they can just trigger backup and exit from application. At anytime when he returns back to application they can view its current progress.

All policies in this application are clearly intimated to user at the time of registration itself, at anytime it is purely user's choice to allow SecureMe to run in background or not. If users don't like to give wipe and remote lock control to SecureMe, they can approve or deny. If SIM card of phone get changed, immediately it is notified to background SecureMe server. Users can control their mobile not from the website, they can control it through a phone also.

Following are a few screenshots of SecureMe which helps us to keep our data secure.

Screenshots



Fig.9 SecureMe Registration



Fig.10 SecureMe Home

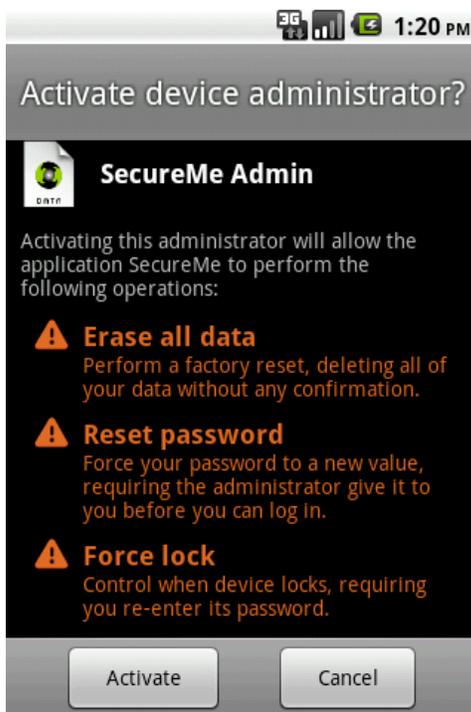


Fig.10 SecureMe Device Policy

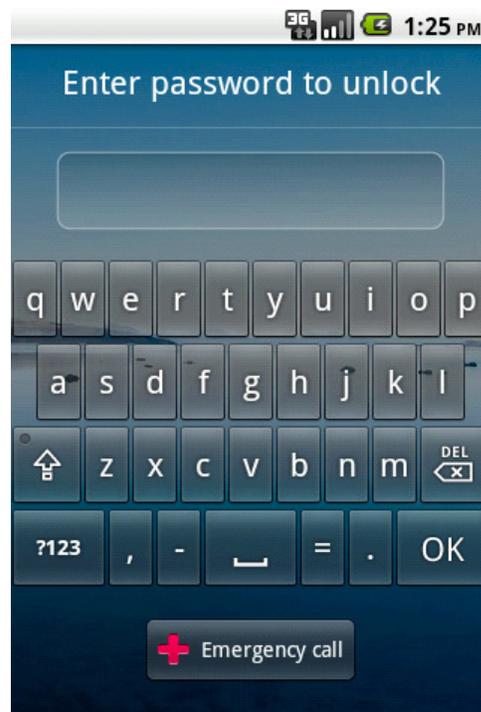
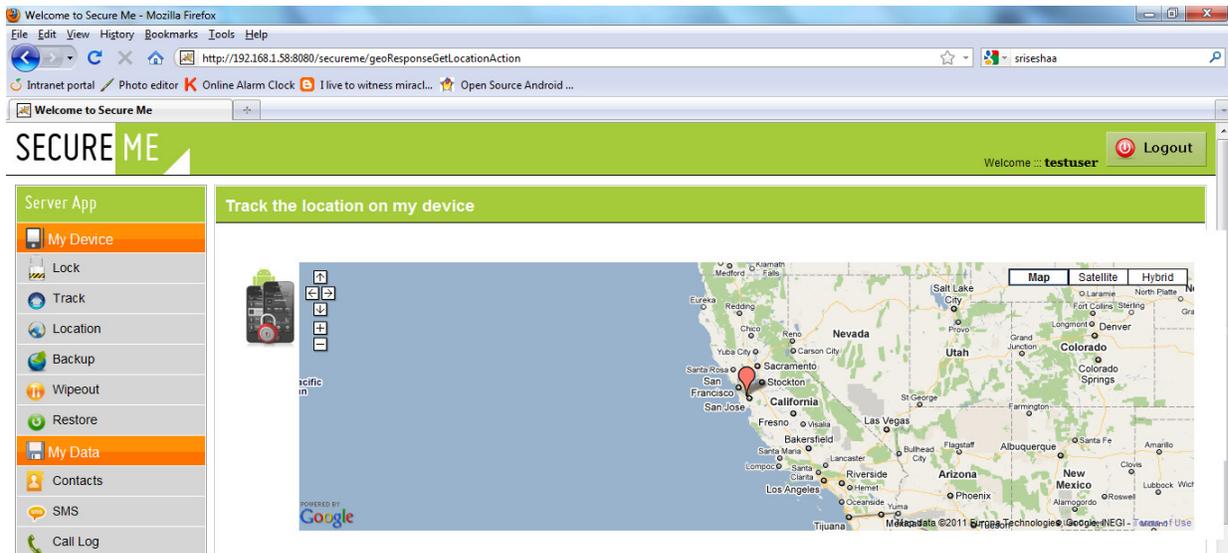


Fig.11 Locked phone



**Fig.12 Tracking Mobile phone from SecureMe website**

## Conclusion

SriSeshaa has the first-mover advantage of understanding and leveraging Android based technologies. Our highly qualified and experienced Android professionals are well supported by the Management with decades of experience in Technology. We have developed our core competence through sustained R & D efforts since the introduction of this exciting Android technology. We offer our expertise, derived from our years of R&D, to assist our clients to realize the potential of this exciting new technology.

## Contact Info

We would be glad to discuss about using this technology to increase your competitive advantage. Please contact Prasad at [prasad.ramachandran@sriseshaa.com](mailto:prasad.ramachandran@sriseshaa.com) to get further information about Android development at SriSeshaa.