APPMOBI
THE SECURE MOBILE PLATFORM

The Fallacy Behind “There’s Nothing to Hide”

Why End-to-End Encryption Is a Must in Today’s World

www.appmobi.com

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Presenters

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A History of Groundbreaking Ideas

Appmobi Launched

XDK Hybrid app dev platform

XDK acquired by Intel

Mobile cloud services launched

Secure Mobile Dev Platform launched

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Who we are?

- Mobile Security software and services company
- **Security Kit:** Our SDK that simplifies the development of end-to-end encryption and security for new and existing apps
- **Protection Center:** Automates the detection and remediation of mobile threats in real time
- **Professional Services:** Security consulting, secure app architecture and development, platform support and installation.

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The Problem

- Apps today are insecure
- Devices and OS's are insecure
- Users are even more insecure
- HIPAA and other laws require protected data
- All data needs to be encrypted – everywhere!

We are Responsible for our User's Privacy and Our Data!

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By the numbers…

- **375** security vulnerabilities found in iOS
- **85%** of all Android devices have at least 25 vulnerabilities
- Average mobile devices connect to **160** unique servers each day
- **37M** Malware issues detected over a 6 month period
- **75%** of all mobile apps fail basic security tests
- **43%** of mobile users do NOT use a passcode!
- **9M** suspicious apps in the app store
- **52M** smartphones lost or stolen in 2014

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Secure Development Challenges

- Improper Platform Usage
- Insecure Data Store
- Insecure Communication
- Insecure Authentication
- Time Pressure
- Budget Constraints
- Insufficient Cryptography
- Code Tampering
- Reverse Engineering
- Extraneous Functionality
- Feature Creep
- Poor Testing

Um…This Is Not the Solution.

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Healthcare App – Use Case

- A simple HIPAA compliant app for Patients to review their Electronic Medical Records and chat with their Physician. It should also enable Dr. to Dr. chat.

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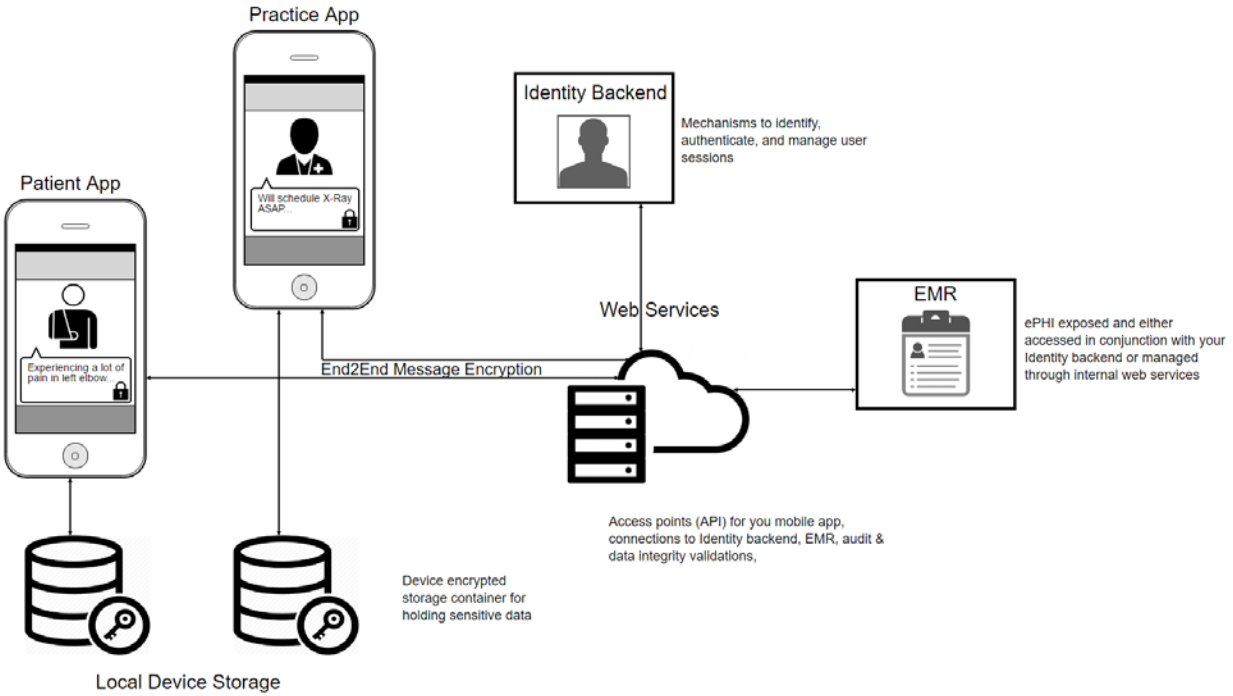

Healthcare App Architecture

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HIPAA Core Compliance

- Strong encryption mechanisms to protect data
- Identity controls to enforce user authorization and policies
- Data integrity and auditing tools

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3 Key Areas to Cover

1. ***Access Control Requirements:*** Deals with user identification, authentication controls, access to information, and protection of data on all points of transmission
2. ***Transmission Security:*** Both encryption of data over the wire and validation of data sent
3. ***Audit & Integrity:*** Recording access to data and validates data is not improperly modified or destroyed

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Protecting Our Data

- **Unique User Identification:** All users accessing the system must be uniquely identifiable and trackable
- **Authentication:** Implement procedures to verify that a person or entity seeing access to ePHI is the one claimed
- **Encryption & Decryption:** Mechanisms must be in place to encrypt and decrypt ePHI
- **Secure Transmission:** ePHI data must be appropriately encrypted when transmitting
- **Auditing:** Implement mechanisms that record and examine activity in systems that contain or use ePHI

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Development & Release Process

- **Dev Sandbox** - mock data, never include ePHI in any dev or staging environment
- **Test & Debug** - protect against common pitfalls such as unintended data leakage, client side injection, proper session handling, etc.
- **Enforce strict data policies** - only allow access to the bare minimum required
- **Session timeouts** - Automatically log off users after a predetermined window of time
- **Password policy** - Enforce length, complexity, and rotation
- **Log application activity** - User authentications, access to ePHI, emergency access procedures

But wait, there's more!

Appmobi can help - our solutions solve this problem.

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Security Kit

End-to-end encryption and full security solutions for any mobile app – existing or new, native or hybrid

Encryption Toolkit

Secure Data Store

Secure Push Messaging

Secure Live Update

Secure Analytics

All provided via secure cloud, private stack or on premise

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Protection Center

- Monitors and resolves security issues automatically
- App level threat event monitoring
- Real time, rule based resolutions (protections)
- User behavior profiles
- Launching with predefined “Protections” – events and rule mapping with action choices
- Easily add custom events and new rules and actions

1st of its kind mobile threat detection and remediation platform

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Professional Services

- We are experts at building secure apps
- Software Installation, training, support
- App security consulting, planning, & strategy
- Application architecture, development, & testing

We can help with all of your secure app needs

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Summary

- Apps, Devices, and OS's are insecure
- Users are even more insecure!
- All data needs to be encrypted – everywhere!
- Its not an option with regulations such as HIPAA
- Appmobi can help!

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Let's Talk

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