MICHIGAN STATE UNIVERSITY

Project Plan

Integrated Silent Dynamic Authentication through Symantec VIP

The Capstone Experience

Team Symantec

Scott Binter
Tyler Erskine
James Mariani
Daniel Parlin
Christopher Perry

Department of Computer Science and Engineering
Michigan State University

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From Students…
…to Professionals

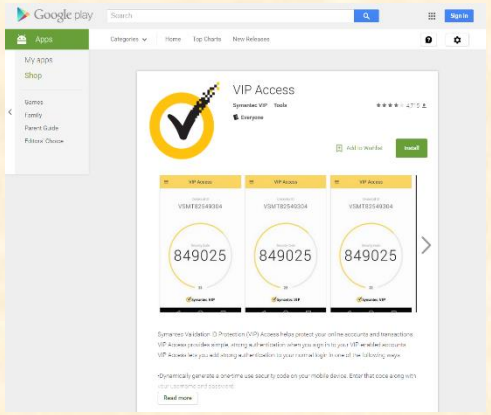
Functional Specifications

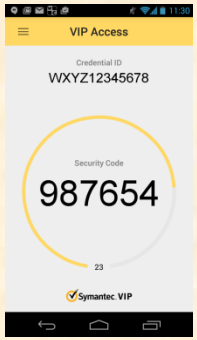
- Mobile two factor authentication is NOT user friendly
  - Slow and clunky
- Implementation will be fast and seamless
  - No switching applications
  - Embedded
  - Six Digit Authentication Code
- Testing ease of VIP Integration for clients
  - Providing documentation

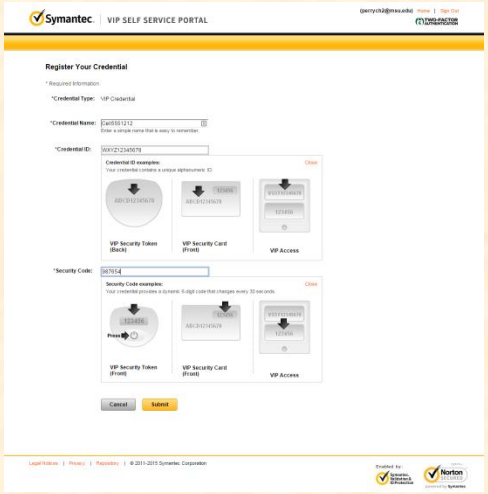
Design Specifications

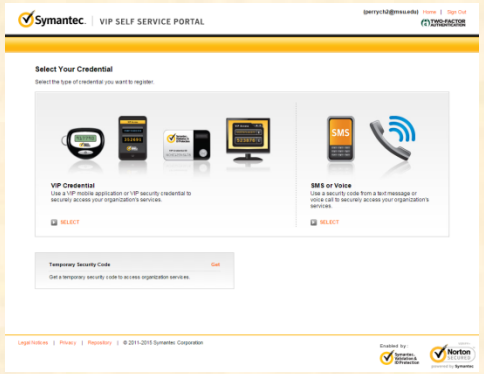
- Example implementations
  - iOS
  - Android
  - Web App supporting push notifications
- Seamlessly swap between Symantec VIP enabled applications
- Configurable
  - Fingerprint scanning
  - Timeouts
  - Pins

Screen Mockup: Registration

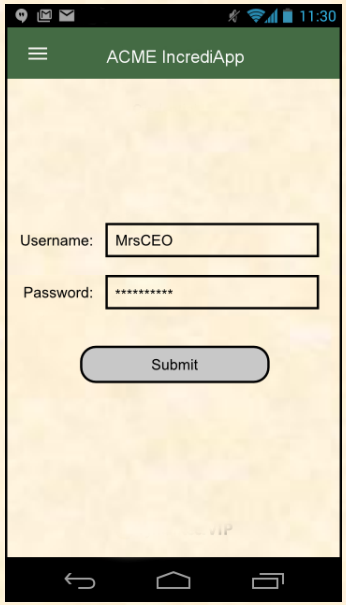


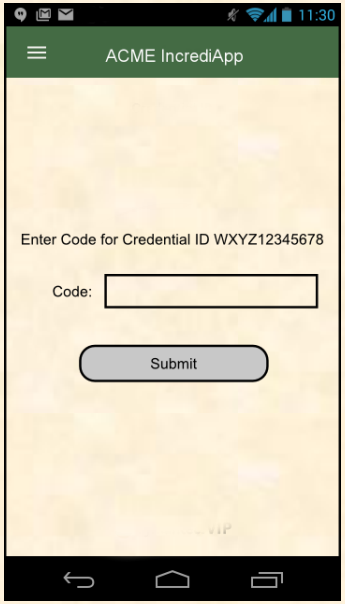


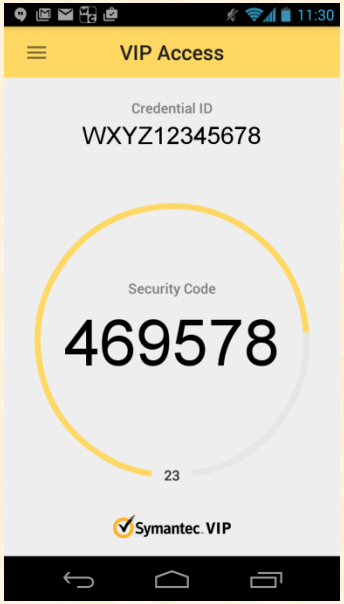


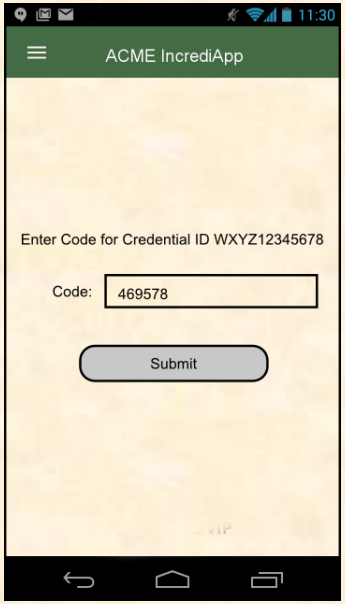


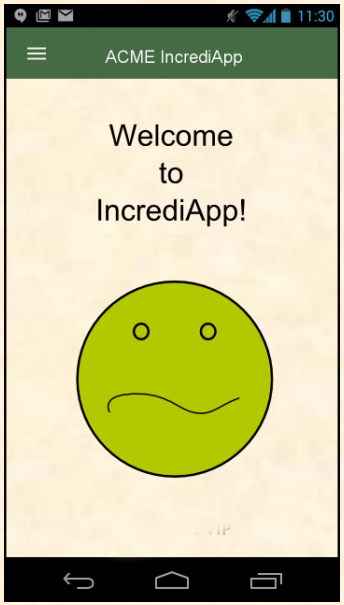
Screen Mockup: Existing Flow





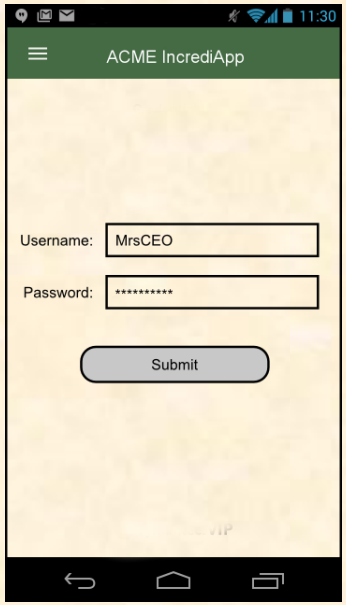


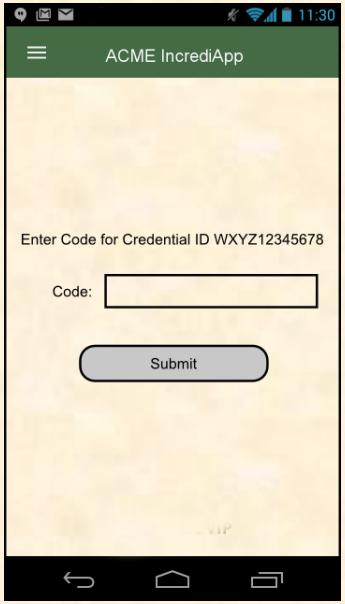


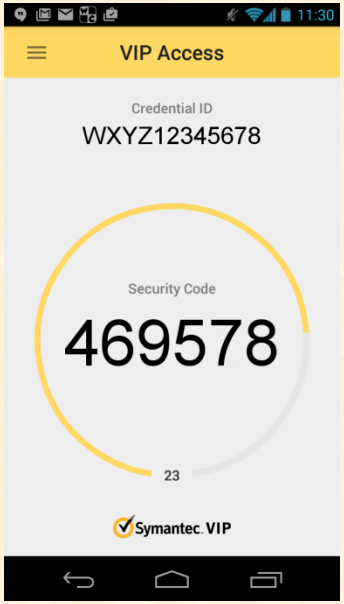


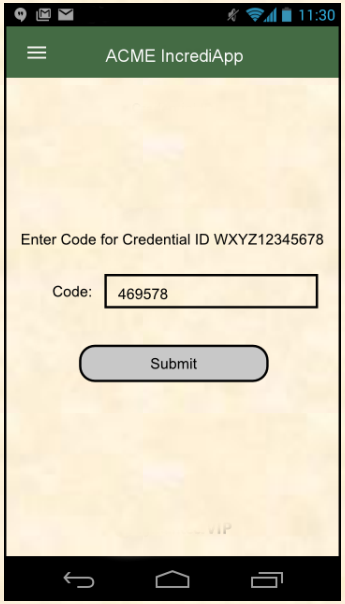
First Time Accessing Client Application

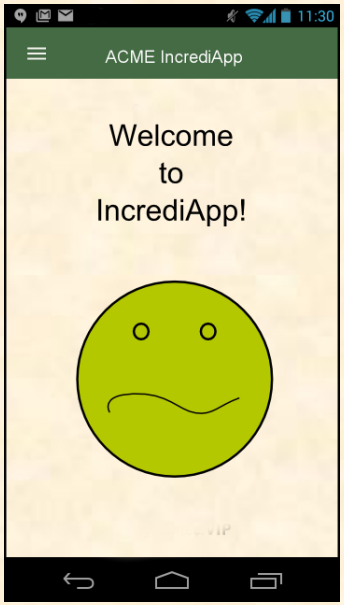
Screen Mockup: Existing Flow





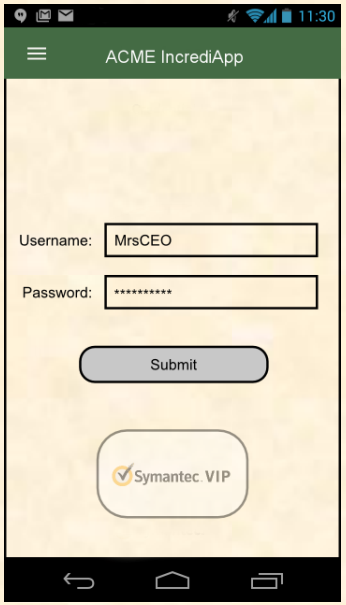


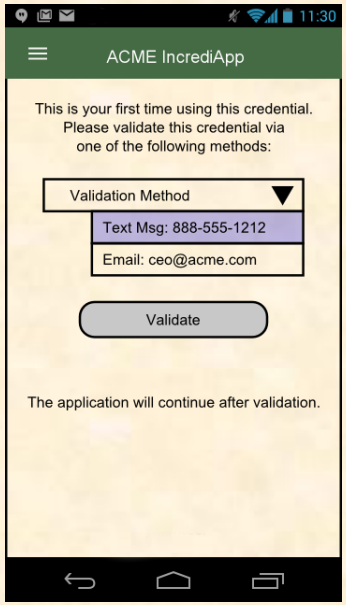


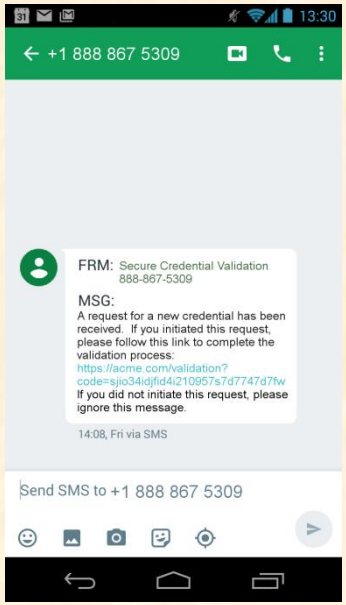


Subsequent Client Application Accesses

Screen Mockup: ISDA Flow







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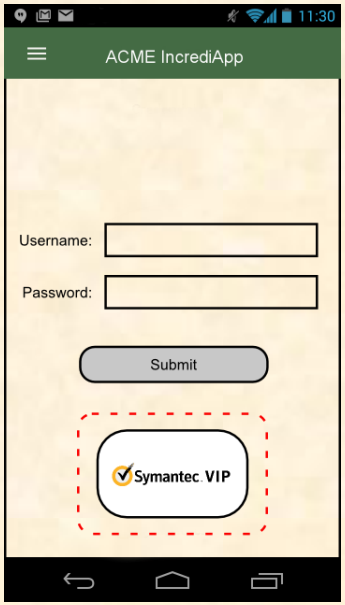
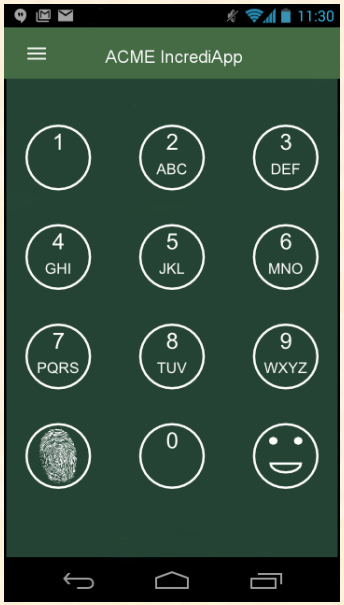
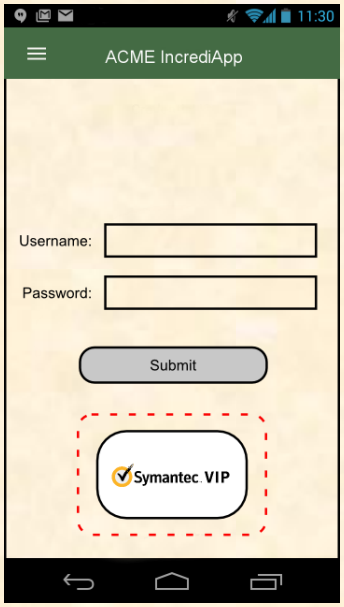
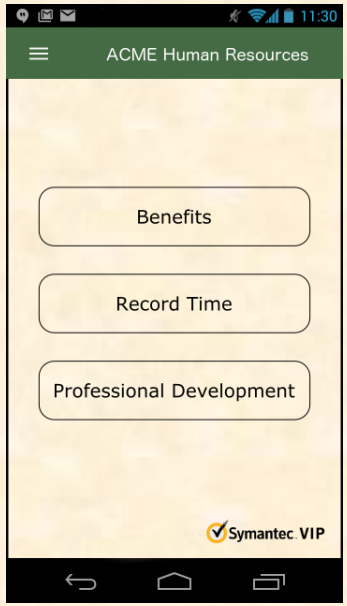




Subsequent Client Application Accesses

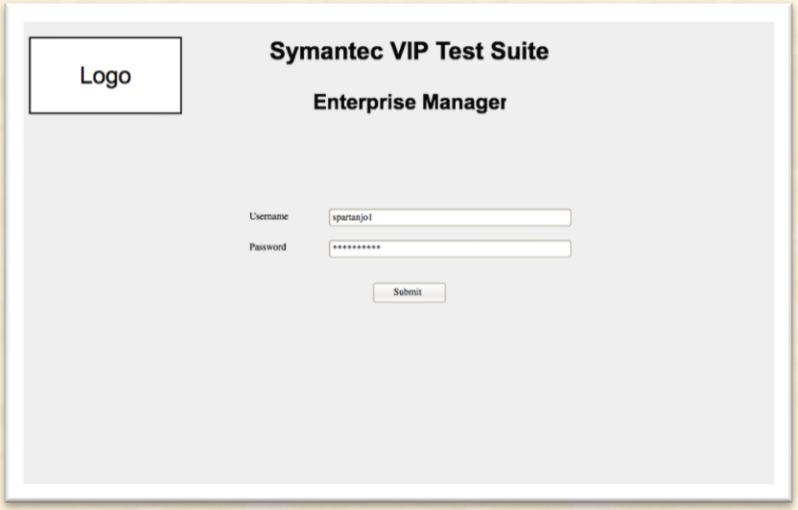
Screen Mockup: Switching Apps

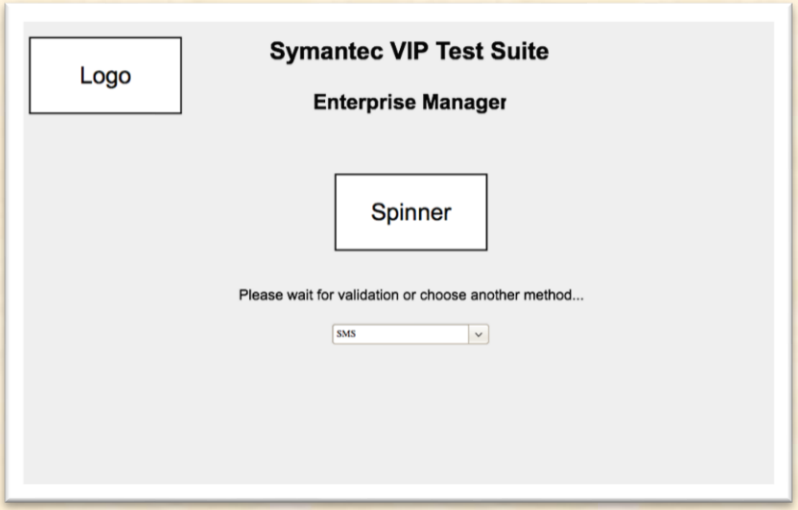




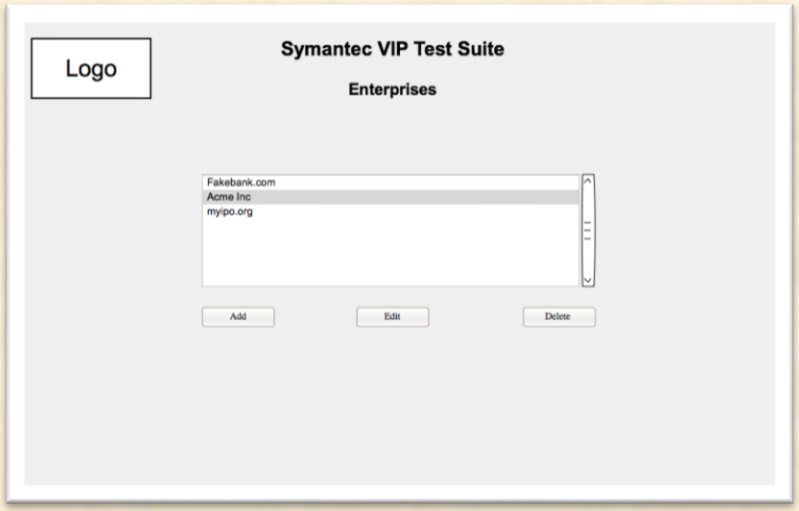
Subsequent Client Application Accesses

Screen Mockup: Webapp Auth





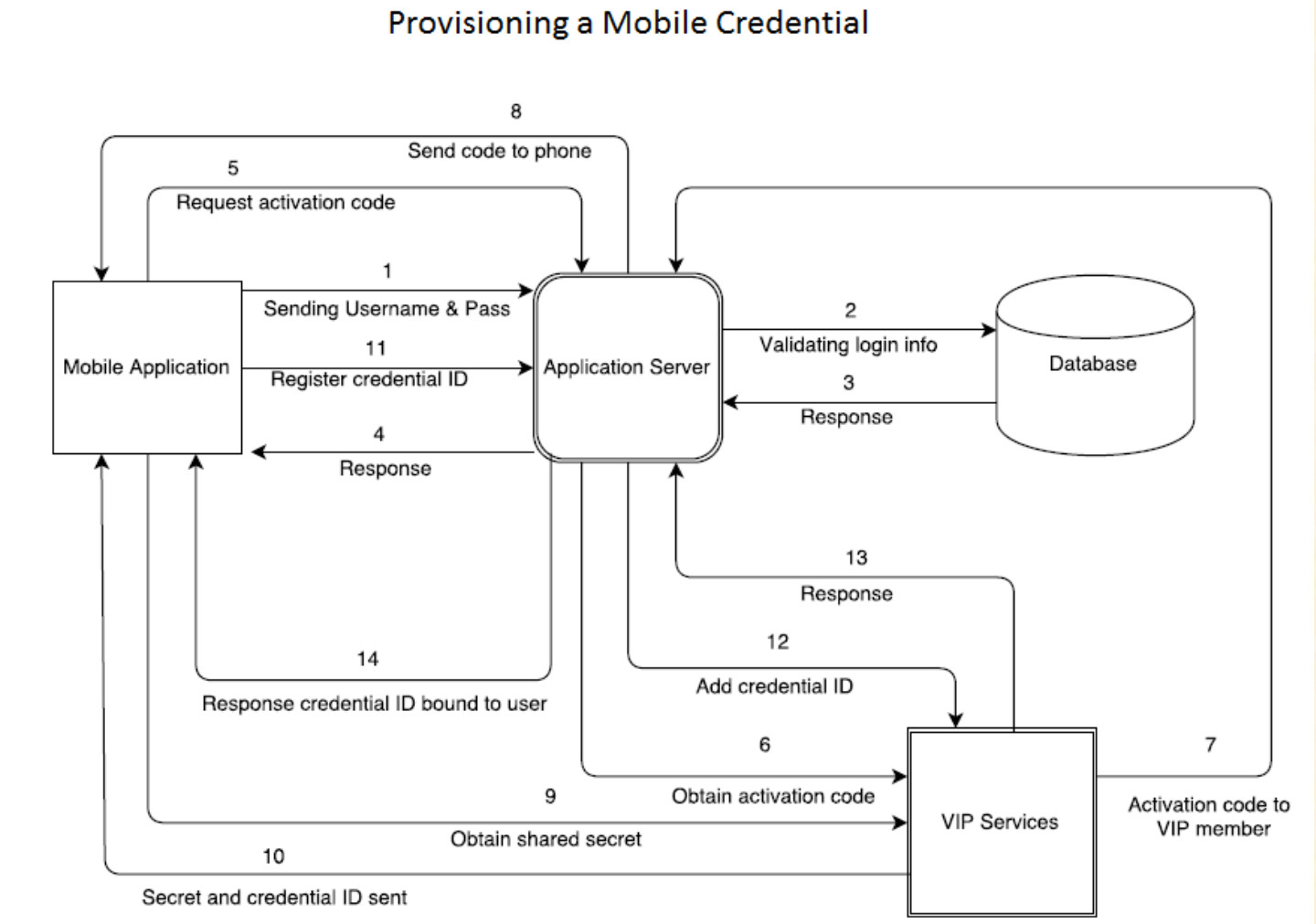
Screen Mockup: Switching Apps



Technical Specifications

- App Server
  - Linux – Ubuntu 14.04.3
  - Glassfish – 4.1
  - MySQL – 5.5
- Symantec SDK
- App Development Tools
  - iOS - Swift
  - Android - Java
- Web App
  - J2EE

System Architecture



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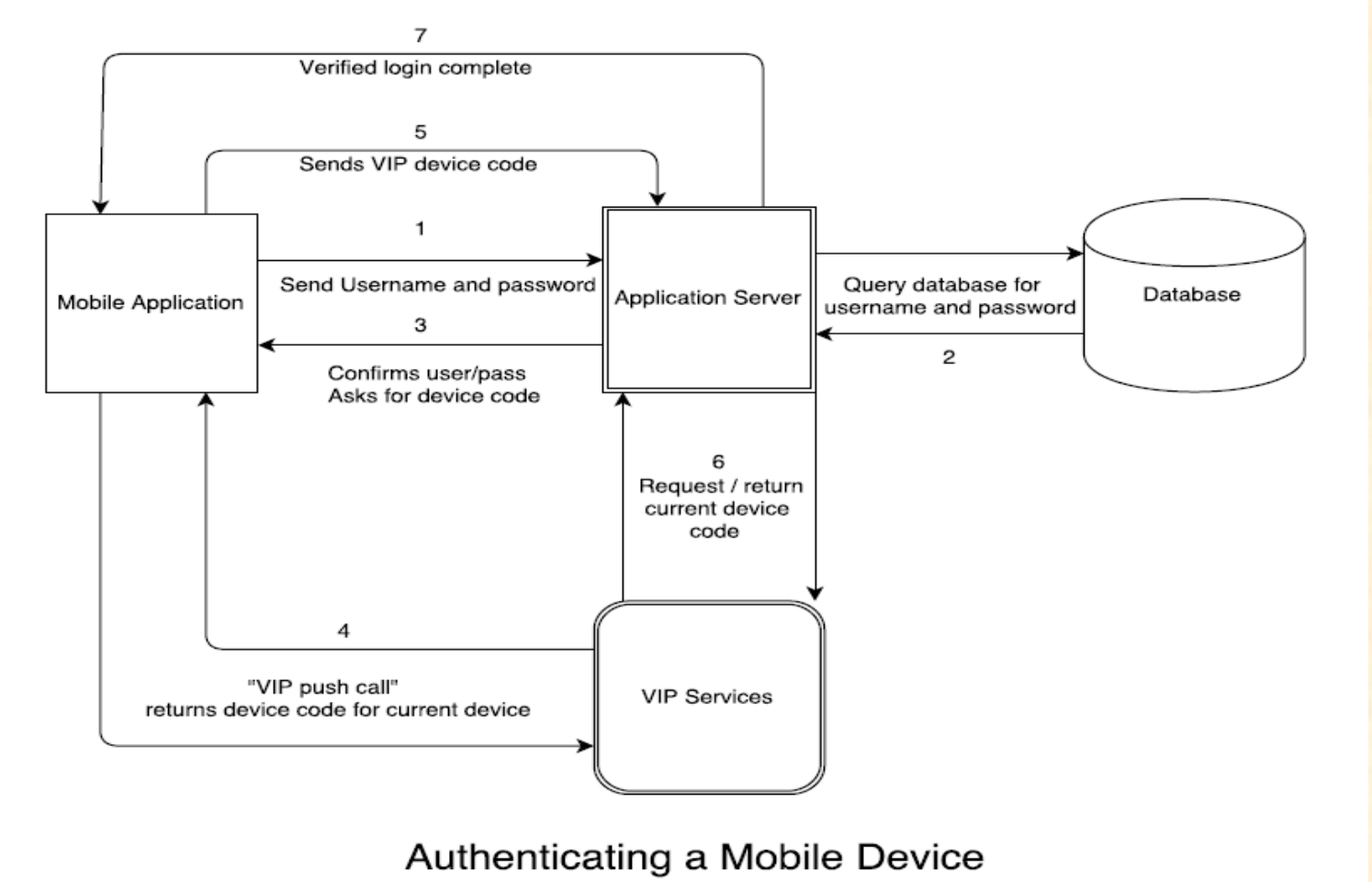

Authenticating a Mobile Device

System Components

- Hardware Platforms
  - Android Devices
  - iOS Devices
  - Dell Rack Mounted Server
- Software Platforms / Technologies
  - Symantec SDK
  - Linux Server
  - Java/Swift

Testing

- Unit Testing
  - Built into Xcode for iOS application
  - Use Junit for Android and web applications
- User Testing
  - First-time login
  - Regular login
  - Mobile application switching
  - Push notifications for web authentication
- Demonstrations to client

Risks

- Integrating Symantec VIP SDK into our Application
  - Complications may arise during the integration of Symantec's SDK
  - Refer to provided documentation and request assistance from client
- API Documentation References Older Development Software
  - Provided documentation was written for Eclipse and may not be compatible
  - iOS documented example code written in Objective C
  - Workarounds may need to be found or development software changed
- No iOS experience on team
  - Become familiar with Swift
- Inability to integrate biometric authentication into application
  - Client specified a stretch goal of using biometric authentication
  - Project specifications may have to be adjusted
- No experience with mobile listener services
- Pre-authorized switching between applications