
sdmay19-23: Mobile, Biometric Bitlocker

Week 3 Report

September 17 - September 24

Team Members

Yousef Al Absi — *Development Operations Engineer*

Ammar Khan — *Product Owner*

Justin Kuhn — *Testing Engineer*

Morgan Anderson — *Scribe*

Cole Alward — *Storyboard Master*

Larisa Thys — *Scrum Master*

Summary of Progress this Report

Began progress on four research tickets regarding PUF (Physical Unclonable Function), kernel access and preexisting software. Met with the client and TA to gain further knowledge of project requirements and preexisting software implementation.

Pending Issues

Issue: Research Subtask 1 - Research PUF

Description: Look through provided code, research other implementations to understand the process, update and integrate Tim's documentation, meet with Client to verify ticket.

Assigned to: Morgan and Larisa

Issue: Research Subtask 2 - Android Apps within PUF

Description: There are several Android applications within the PUF repository. We most likely want to know what they do, update the documentation and determine if any applications are viable for future use.

Assigned to: Ammar and Yousef

Issue: Research Subtask 3 - Access to Kernel

Description: How do we retrieve things from the kernel? Make a diagram of what levels we have to access to retrieve information from the kernel.

Assigned to: Cole and Justin

Plans for Upcoming Reporting Period

Issue: Research Sub Task 4 - Android App OS Integration

Description: Can we make an Android application that integrates into the OS and can be accessed during initial run time? If it cannot be in the OS, make another ticket to research alternatives.

Continued work on pending issues.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
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Yousef Al Absi	Yousef researched through the existing Android applications and found that the gradle used is 1.2. It needs to be updated to at least 2.x. The .jar file in the library needs to be updated as well.	5.5	11.5
Ammar Khan	Ammar attempted to run existing applications and discovered the same issue as Yousef. He explored the other existing applications to try to find viable code or operations.	6	12
Justin Kuhn	Justin found msm kernel documentation, including instructions for how the security key retention service is implemented.	5	12
Morgan Anderson	Morgan researched PUF by reading through preexisting software and found external documentation which discussed the past 15 years of PUF advancement (e.g., PUF integration and security).	5	12
Cole Alward	Cole researched kernel and Android architecture. He worked with Justin to obtain documentation and started cloning the kernel.	5	10
Larisa Thys	Larisa led the team's meeting and researched PUF. She did this by looking through the preexisting software and outside documentation.	5	12

Gitlab Activity Summary

Nothing to report.
