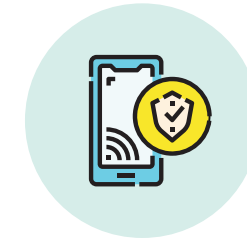


# ENSURING MOBILE APPLICATION SECURITY OF A RENOWNED CREDIT LENDING INSTITUTION FROM SECURITY ATTACKS

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CASE STUDY

## PENETRATION TESTING FOR SECURITY



One of the leading and oldest Baltimore-based credit lending institutions improves security posture of its mobile application with penetration testing

## PROBLEM STATEMENT

The client is an industry veteran in the consumer finance industry providing customers with creative, flexible and convenient lending options.

With its affiliates now featuring over 470 branches in 24 states throughout the country, they are on a path to ensuring they never lose touch with what's important to them: delivering the most safe and secure customer service to all.

It is with this 'security first' quest in mind they turned to Zuci to discover security gaps in their mobile application across the operating systems.

## BUSINESS GOALS



Identify vulnerabilities in the mobile app to curtail security attacks from an insider's and ethical hacker's eye view



Employ industry standard penetration testing approaches and tools to locate potential areas of exposure



Implement black box testing with Static and Dynamic Analysis on both Android: root privileged & non-rooted application, iOS: Jailbroken & non-Jailbroken to pinpoint security gaps



## HOW ZUCI HELPED

### Pre-Engagement

- Sign SOW
- Allocate single point of contact
- Project scoping
- Gather intelligence
- Decide and prioritize the attack vectors
- Scale of time

### During Test

- Threat Modeling
- Security checklist
- Detect vulnerabilities
- Penetration and post-exploitation
- Gather logs



### After Test

- Analyze logs
- Rule out false positives
- Apply Art
- Create interim report for critical flaws

### Test Outcomes

- Debrief initial report
- Detailed technical report
- Executive summary

## HOW ZUCI HELPED

- Developed a custom mobile app penetration testing set-up made up of a combination of rooted/non rooted Android devices and jailbroken/non-jailbroken iOS devices
- Performed in-depth Mobile application assessment based on OWASP - Mobile Application Pentest Framework
- Identified security vulnerabilities oriented towards business logic flaws, data flows, data leakage, runtime attacks
- Identified highly impactful vulnerabilities in the mobile app, which was possible after following a custom static and dynamic analysis developed in-house
- Formal documentation of identified vulnerabilities
- Walk-through of vulnerabilities to stakeholders

## BUSINESS OUTCOME



Helped client to fix the critical, high, and medium rated vulnerabilities in priority to deliver secure application to its customers



Identified very critical security vulnerabilities in application, which are already in production and helped client to fix them



## TECH STACK

**SANTOKU**

 **BURPSUITE**



**JD-GUI**



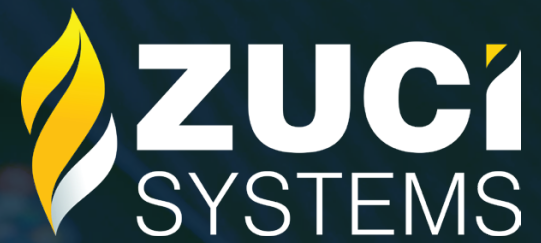
**FRIIDA**



**drozer**

 **OBJECTION**  
RUNTIME  
MOBILE  
EXPLORATION  
GIT.ID/OBJECTION





STRENGTHEN YOUR MOBILE APP'S SECURITY WITH  
PENETRATION TESTING.

Boost your overall security posture.

ACT NOW →



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