Mobile Phone Security

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Practical related

Configuration of target vulnerable mobile application

and Understanding of Android Application architecture

✓ Santoku OS - https://santoku-linux.com/

✓ Gynimotion - www.genymotion.com

✓ Vulnerable Mobile Application

    ✓ DIVA - Damn insecure and vulnerable App

    ✓ OWASP GoatDroid

    ✓ OWASP Security Shepherd

✓DIVA (Damn insecure and vulnerable App) is an App intentionally designed to be insecure.

✓The aim of the App is to teach developers/QA/security professionals, flaws that are generally present in the Apps due poor or insecure coding practices.

✓Who can use Diva?

  ✓Android App developers

  ✓Android Penetration testers

  ✓Security professionals

  ✓Students

Ref: https://github.com/payatu/diva-android

What is included in Diva?

- ✓ Current Challenges include:
  - ✓ Insecure Logging
  - ✓ Hardcoding Issues – Part 1
  - ✓ Insecure Data Storage – Part 1
  - ✓ Insecure Data Storage – Part 2
  - ✓ Insecure Data Storage – Part 3
  - ✓ Insecure Data Storage – Part 4
  - ✓ Input Validation Issues – Part 1
  - ✓ Input Validation Issues – Part 2
  - ✓ Access Control Issues – Part 1
  - ✓ Access Control Issues – Part 2
  - ✓ Access Control Issues – Part 3
  - ✓ Hardcoding Issues – Part 2
  - ✓ Input Validation Issues – Part 3

✓ Vulnerable Mobile Application

   ✓ OWASP GoatDroid -

   ✓ self-contained training environment for educating developers and testers on Android security.

   ✓ GoatDroid requires minimal dependencies and is ideal for both Android beginners as well as more advanced users.

   ✓ The project currently includes two applications:

      ✓ FourGoats, a location-based social network, and

      ✓ Herd Financial, a mobile banking application.

✓FourGoats server control panel, in the bottom there are several security flaws which are there in FourGoats Application.

    ✓Client-Side Injection

    ✓Server-Side Authorization Issues

    ✓Side Channel Information Leakage

    ✓Insecure Data Storage

    ✓Privacy Concerns

    ✓Insufficient Transport Layer Protection

    ✓Insecure IPC

✓OWASP GoatDroid

 ✓Download: https://github.com/jackMannino/OWASP-GoatDroid-Project/downloads

 ✓Details: https://github.com/nvisium-jack-mannino/OWASP-GoatDroid-Project/wiki/Getting-Started

- ✓OWASP Security Shepherd is a web and mobile application security training platform.

- ✓The Security Shepherd project is free software

- ✓https://owasp.org/www-project-security-shepherd/

✓Configuration of DIVA

✓Download link: https://payatu.com/damn-insecure-and-vulnerable-app/ or

✓https://payatu.com/wp-content/uploads/2016/01/diva-beta.tar.gz

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