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FACULTY OF EGINEERING AND TECHNOLOGY

MOBILE SECURITY

LECTURE -2

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OUTLINE

- Mobile Risks and Attacks
- Attack Surfaces
- Security in Development Lifecycle
- Special Risks
- MCQ
- References

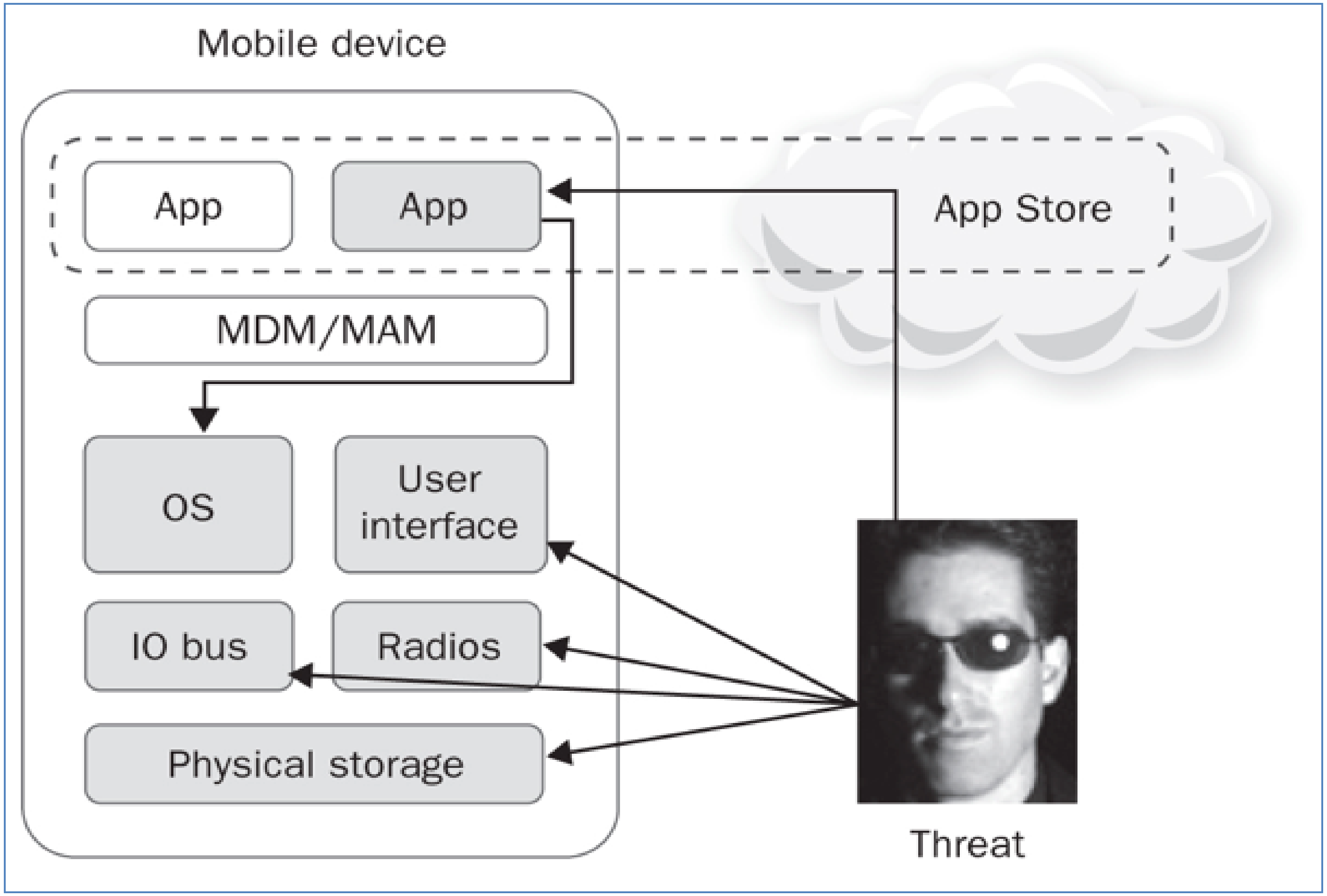
MOBILE RISKS & SECURITY

Mobile Risks and Attacks

Mobile applications are implemented in many of the same languages as their desktop and Web counterparts (e.g., Objective-C and Swift for iOS, Java for Android), and therefore are susceptible to many of the same vulnerabilities and attacks associated with those languages including infection and compromise by malicious software including spyware, Trojan horse programs, worms, and computer viruses. Phishing and other social engineering tactics prey on the weaknesses of the users. Other attacks target the mobile application itself, the server to which the mobile application speaks, unprotected internal APIs, alternate routes through and around security checks, and open server ports

ATTACKS POSIBILITY

Attack Surfaces



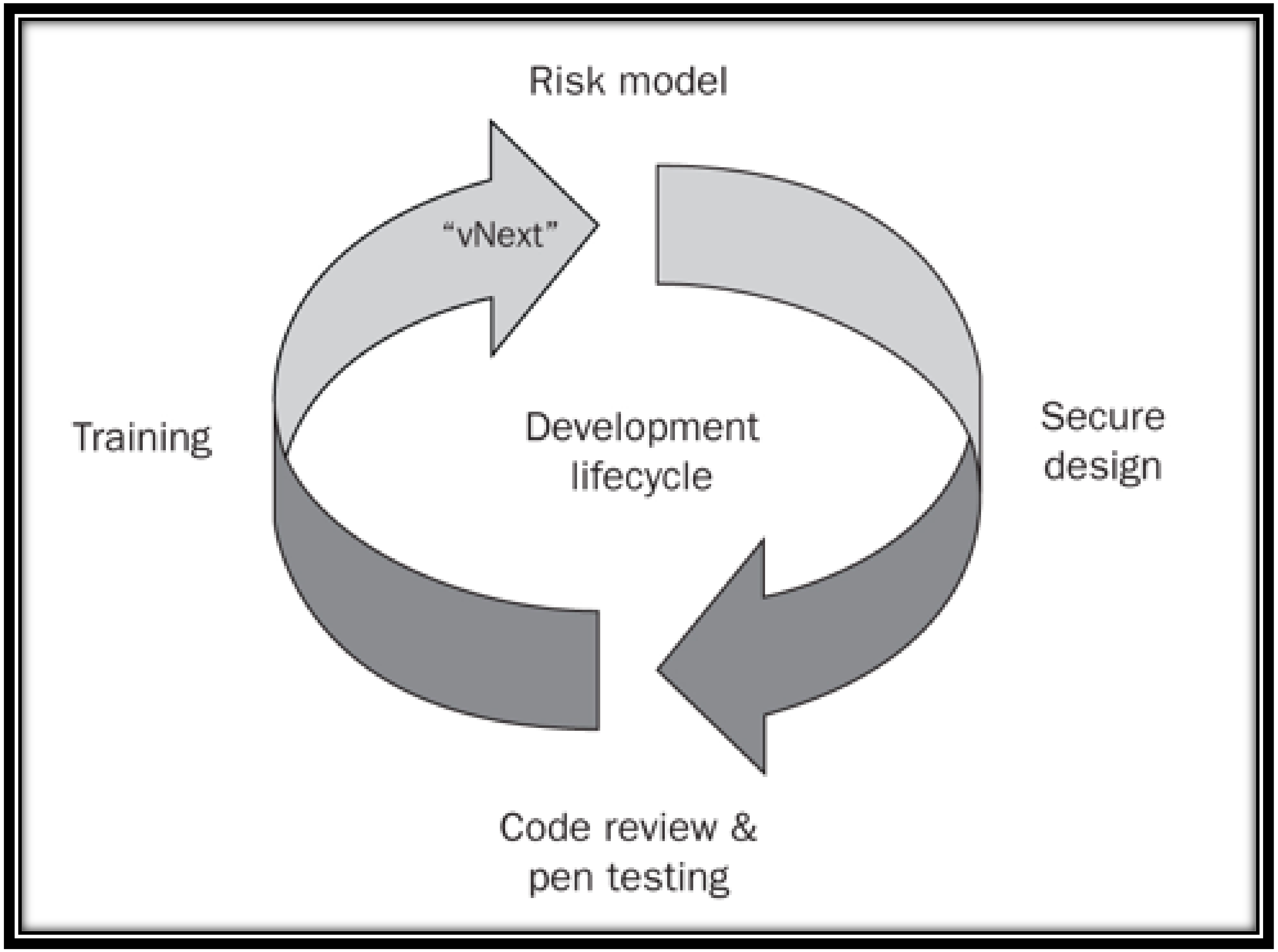
ATTACKS POSIBILITY

Attack Surface

- ❑**Physical theft**
    - ❑Access to the user interface, physical storage, IO Bus, and radios
- ❑**App publication**
    - ❑Trojan horse or other malware
    - ❑Access to OS resources
    - ❑Interposes communication
    - ❑Phone may be jail broken/rooted
    - ❑App permissions may be weak
    - ❑User may allow excessive permissions

SECURITY DEVELOPMENT CYCLE

Security in Development Lifecycle



ATTACKS POSIBILITY

Special Risks

- Mobile devices are connected to many networks
  - Often insecure or unknown ones
- Mobile devices are used for personal, private purposes
  - Banking, selfies, SMS messages, phone calls

MCQ

6.Mobile security is also known as ____________

a) OS Security

b) Wireless security

c) Cloud security

d) Database security

7. DDoS in mobile systems wait for the owner of the _____________ to trigger the attack.

a) worms

b) virus

c) botnets

d) programs

8. Hackers cannot do which of the following after compromising your phone?

a) Steal your information

b) Rob your e-money

c) Shoulder surfing

d) Spying

9. Hackers cannot do which of the following after compromising your phone?

a) Shoulder surfing

b) Accessing your voice mail

c) Steal your information

d) Use your app credentials

10. App permissions can cause trouble as some apps may secretly access your memory card or contact data.

a) True

b) False

REFERENCES

- https://www.slideshare.net/SamBowne/cnit-128-ch-1-the-mobile-risk-ecosystem?from_action=save
- https://www.sanfoundry.com/cyber-security-questions-answers-mobile-phone-security/