



FACULTY OF ENGINEERING & TECHNOLOGY

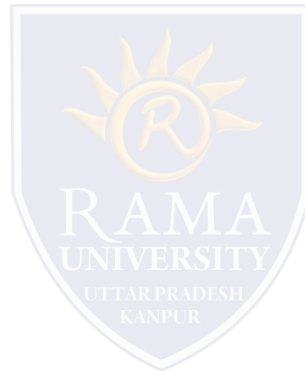
MOBILE SECURITY

LECTURE -4

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OUTLINE

- **Introduction: Importance of Mobile Forensics**
- **MCQ**
- **References**



INTRODUCTION: IMPORTANCE OF MOBILE FORENSICS

Introduction: Importance of Mobile Forensics

The term “mobile devices” encompasses a wide array of gadgets ranging from mobile phones, smart phones, tablets, and GPS units to wearable's and PDAs. What they all have in common is the fact that they can contain a lot of user information.

Learn Computer Forensics



This learning path is designed to build a foundation of knowledge and skills around computer forensics.

You'll learn topics such as:

- ⇒ Email and browser forensics
- ⇒ Network forensics concepts
- ⇒ And more

INTRODUCTION: IMPORTANCE OF MOBILE FORENSICS

Information that resides on mobile devices (a non-exhaustive list):

1. Incoming, outgoing, missed call history
2. Phonebook or contact lists
3. SMS text, application based, and multimedia messaging content
4. Pictures, videos, and audio files and sometimes voicemail messages
5. Internet browsing history, content, cookies, search history, analytics information
6. To-do lists, notes, calendar entries, ringtones
7. Documents, spreadsheets, presentation files and other user-created data
8. Passwords, pass codes, swipe codes, user account credentials
9. Historical geo-location data, cell phone tower related location data, Wi-Fi connection information
10. User dictionary content
11. Data from various installed apps
12. System files, usage logs, error messages
13. Deleted data from all of the above

INTRODUCTION: IMPORTANCE OF MOBILE FORENSICS

What is the Mobile Forensics Process?

Crimes do not happen in isolation from technological tendencies; therefore, mobile device forensics has become a significant part of digital forensics.

Most people do not realize how complicated the mobile forensics process can be in reality. As the mobile devices increasingly continue to gravitate between professional and personal use, the streams of data pouring into them will continue to grow exponentially as well. Did you know that 33,500 reams of paper are the equivalent of 64 gigabytes if printed? Storage capacity of 64 GB is common for today's smart phones.

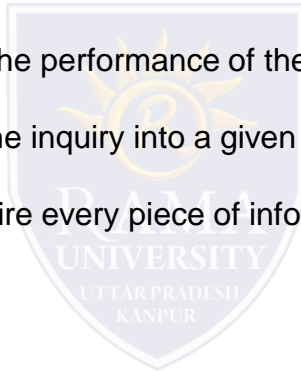
The mobile forensics process aims to recover digital evidence or relevant data from a mobile device in a way that will preserve the evidence in a forensically sound condition. To achieve that, the mobile forensic process needs to set out precise rules that will seize, isolate, transport, store for analysis and proof digital evidence safely originating from mobile devices.

INTRODUCTION: IMPORTANCE OF MOBILE FORENSICS

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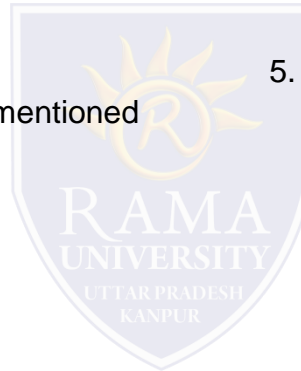
Usually, the mobile forensics process is similar to the ones in other branches of digital forensics. Nevertheless, one should know that the mobile forensics process has its own particularities that need to be considered. Following correct methodology and guidelines is a vital precondition for the examination of mobile devices to yield good results.

Among the figures most likely to be entrusted with the performance of the following tasks are Forensic Examiners, Incident Responders, and Corporate Investigators. During the inquiry into a given crime involving mobile technology, the individuals in charge of the mobile forensic process need to acquire every piece of information that may help them later – for instance, device's passwords, pattern locks or PIN codes.



MCQ

1. In general how many key elements constitute the entire security structure?
 - a) 1
 - b) 2
 - c) 3
 - d) 4
2. According to the CIA Triad, which of the below-mentioned element is not considered in the triad?
 - a) Confidentiality
 - b) Integrity
 - c) Authenticity
 - d) Availability
3. This is the model designed for guiding the policies of Information security within a company, firm or organization. What is “this” referred to here?
 - a) Confidentiality
 - b) Non-repudiation
 - c) CIA Triad
 - d) Authenticity
4. CIA triad is also known as _____
 - a) NIC (Non-repudiation, Integrity, Confidentiality)
 - b) AIC (Availability, Integrity, Confidentiality)
 - c) AIN (Availability, Integrity, Non-repudiation)
 - d) AIC (Authenticity, Integrity, Confidentiality)
5. When you use the word _____ it means you are protecting your data from getting disclosed.
 - a) Confidentiality
 - b) Integrity
 - c) Authentication
 - d) Availability



REFERENCES

- ❑ <https://resources.infosecinstitute.com/category/computerforensics/introduction/mobile-forensics/the-mobile-forensics-process-steps-types/#gref>
- ❑ <https://www.sanfoundry.com/cyber-security-questions-answers-elements-security/>

