**Mobile Security Research Project (Project 2) (ZAA)**

**Project Overview**

This is an individual project focusing on mobile security research and practical application. Each student will conduct in-depth research on their assigned topic and perform a lab experiment demonstrating the concepts studied.

**Due Date**

The project is due on **July 12, 2024, at 23:59**.

**Project Components**

1. **Research Paper** (10 marks)
    - Follow academic research structure
    - Components: Author, topic, professor, semester, abstract, table of contents, introduction, problem statement, threat, risk, mitigating controls, detection techniques, protection techniques, conclusion, references
    - Length: 10-15 pages (excluding lab experiment screenshots)
2. **Lab Experiment** (5 marks)
    - Practical demonstration of the assigned topic
    - Detailed lab manual with step-by-step instructions
    - Bonus: Short explanatory video of a successful lab (+2 marks)

**Formatting**

Adhere to submission standards for document formatting.

**Grading**

- Research Paper: 10 marks
- Lab Experiment and Manual: 5 marks
- Bonus Video: Up to 2 additional marks

**Important Notes**

- Comply with college policies on resource use, plagiarism, and academic integrity
- Ensure lab instructions are clear and replicable
- The research should be comprehensive and based on academic sources

- Lab experiments should practically demonstrate the concepts from the research

**Topic Assignments for the Class (Code: ZAA)**

1. Fahim Ijaz: Pegasus iOS malware
2. Samuel Temitayo: Security Assessment of Augmented Reality (AR) and Virtual Reality (VR) Applications on Mobile Platforms
3. Sasan: Mobile Threat Defense with Microsoft Intune
4. Manju: DevSecOps in Android/Mobile Apps
5. Sagar: Data Loss Prevention in Mobile Systems
6. Amirarsalan: Security concerns for mobile devices connected to cars via Bluetooth, cable, NFC and WiFi
7. Tolulope Aworinde: Android vulnerability assessment (OS, web browser, Intents, SQLite)
8. Priyanka: Detect Capability leaks in Android Devices
9. Het Nitalbhai: Complete research on GPS spoofing and its security concerns
10. Ishan Aakash: Mobile device management as a service (cloud)
11. Harshita Nilesh: Multi-factor authentication in Mobile applications
12. Sangam: Social Media App Security Assessment
13. Pranjal: Managed Security Service on the cloud for mobile users
14. Kheelesh Krishna: Risk of pre-installed applications and how to discover and protect
15. Shruti Amit: Espionage in mobile devices, methods, how to detect and counteractions, and countermeasures
16. Umut: Machine Learning in Mobile Security

**Important Reminders**

- Due Date: July 12, 2024, at 23:59
- Follow the project components and grading criteria as outlined earlier in this brief
- Adhere to academic integrity guidelines
- Reach out to your instructor if you have any questions or need clarification on your assigned topic