## CYBER SECURITY LONG-TERM INTERNSHIP



Technology Stack: Cyber security with IBM QRadar

Project Title: Leveraging real-time security intelligence for enhanced defence.

Real-time threat response and mitigation require swift and effective actions to counter potential security breaches or attacks. Here are some general steps to consider:

- Monitoring and Detection: Implement robust security monitoring tools to identify potential threats in real-time.
- 2. Alerting and Notification: Set up alerts and notifications to inform security teams of potential threats, enabling swift response.
- Threat Assessment: Quickly assess the threat level and potential impact to determine the appropriate response.
- Containment and Isolation: Isolate affected systems or networks to prevent threat spread.
- Eradication and Remediation: Remove the threat and implement fixes or patches to prevent reoccurrence.
- 6. Recovery and Post-Incident Activities: Restore systems and data, conduct post-incident analysis, and implement improvements.

Some specific real-time threat response and mitigation strategies include:

- Implementing intrusion detection and prevention systems (IDPS)
- Utilizing security orchestration, automation, and response (SOAR) tools
- Conducting regular security information and event management (SIEM) analysis
- Enabling endpoint detection and response (EDR) solutions
- Executing incident response plans and playbook.

The materials required for a project can vary greatly depending on the specific project, its scope, and the industry or field it belongs to. However, here are some general categories of materials that might be needed for a project:

- 1. Documentation:
  - Project plan
  - Requirements documents
  - Design documents
  - Technical specifications
  - User manuals
- 2. Hardware:

- Computers
- Servers
- Networking equipment
- Software licenses
- Peripherals (printers, scanners, etc.)
- 3. Software:
  - Operating systems
  - Development tools (IDEs, compilers, etc.)
  - Productivity software (office suites, etc.)
  - Specialized software (graphic design, video editing, etc.)
- 4. Infrastructure:
  - Network infrastructure (routers, switches, etc.)
  - Storage solutions (hard drives, cloud storage, etc.)
  - Power supplies and backup systems
- 5. Creative assets:
  - Graphics
  - Images
  - Videos
  - Audio files
  - Fonts and typography
- 6. Testing and quality assurance:
  - Testing software and tools
  - Debugging tools
  - Quality assurance frameworks
- 7. Project management:
  - Project management software (Asana, Trello, etc.)
  - Time tracking and scheduling tools
  - Communication and collaboration tools (Slack, email, etc.

## **Conclusion**

Real-time intelligence is a rapidly growing field with significant potential for various industries and applications. Organizations can analyze vast amounts of data in real-time and make informed decisions by leveraging technologies such as machine learning, AI, IoT, edge computing, and predictive analytics. Cyber security is one of the most important aspects of the fast-paced growing digital world. The threats of it are hard to deny, so it is crucial to learn how to defend from them and teach others how to do it too.