**CW2**

**1. Understand the Assignment Requirements**

* **Objective**: Create an individual presentation (15 minutes) and a 1000-word briefing report for the New England Hospital's Board of Directors.
* **Focus**: Identify vulnerabilities and security issues, propose mitigation strategies, and consider cloud computing implications.
* **Topics to Cover**:
  + CIA (Confidentiality, Integrity, Availability) triangle.
  + Industry-standard security practices.
  + Penetration testing, risk mitigation, cloud security, and ethical/legal implications.

**2. Research and Analysis**

* **Vulnerabilities**: Review the hospital’s IT infrastructure and identify potential security risks. This includes:
  + The use of legacy systems like Windows XP.
  + The absence of cyber security controls.
  + Internet-based services (web portals for patients and pharmacies).
* **Security Standards**: Familiarize yourself with relevant standards such as:
  + **ISO/IEC 27001**(information security management).
  + **NIST publications** ( 800-30).
* **Penetration Testing**: Conduct research on penetration testing methodologies and tools (e.g, **Kali Linux , Open VAS**).

**3. Create the Presentation (60 Marks)**

* **Structure**:
  + **Introduction**: Brief overview of the hospital's IT infrastructure and its security needs.
  + **Identify Issues**: Discuss vulnerabilities like legacy systems, weak log-in mechanisms, and lack of encryption.
  + **Mitigation Strategies**: Propose changes, such as:
    - Updating or replacing legacy systems (e.g., Windows XP).
    - Implementing strong encryption for patient data.
    - Regular penetration testing.
  + **Cloud Security**: Address the hospital's desire to move to cloud computing. Suggest secure cloud platforms and migration strategies.
  + **Legal and Ethical Implications**: Discuss how security measures comply with data protection laws and ethical considerations.
  + **Conclusion**: Summarize key recommendations.
* **Presentation Tips**:
  + Use clear, simple language as the audience is non-specialist.
  + Focus on how the proposed measures improve confidentiality, integrity, and availability of patient data.

**4. Write the Briefing Report (40 Marks)**

* **Report Structure**:
  + **Title Page**: Include your name, module, date, and other relevant information.
  + **Introduction**: Summarize the hospital's current IT environment and security challenges.
  + **Findings**: Highlight the identified vulnerabilities.
  + **Recommendations**: Provide detailed remediation steps, such as implementing encryption, firewall rules, and cloud migration security.
  + **Cloud Computing**: Discuss potential cloud services (e.g., AWS, Azure) and their security features.
  + **Conclusion**: Reinforce the necessity of the security measures for protecting patient data.
  + **References**: Use APA style for citations and include relevant scholarly sources.

**5. Prepare for the Submission**

* **Report**: Ensure it is formatted according to university guidelines (Calibri or Arial font, size 12, 1.5 line spacing).
* **Presentation**: Prepare PowerPoint slides summarizing the key points of your presentation.
* **Submission Format**:
  + **Briefing Report**: A Word document (.docx) with APA citations.
  + **Presentation Slides**: PowerPoint (.pptx).
  + Submit via Aula before the deadline (April 18th, 2025).