



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

TECHNOLOGY AND INFORMATION SYSTEM (SECP1513)

ASSIGNMENT 3: ACADEMIC WRITING

SECTION 5 GROUP 7

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Project management and System Development

Ts. Abdul Halim Abdul Muthalib, currently a Head of Technology and Innovation at Serunai Commerce Sdn. Bhd. (December 2024 – January 2026), specializes in digital transformation, blockchain, and AI within the Halal ecosystem, focusing on solutions that help consumers verify Halal products and services. He was graduated from University Technology Malaysia (UTM) in 2015 and has been involved in multiple companies and technology projects. During the session, he shared his early career challenges, especially in applying academic knowledge to real-world environments, and explained the importance of understanding practical concepts such as the Software Development Life Cycle (SDLC).

System development and project management play a crucial role in industries to improve efficiency, accuracy, and decision-making. The system development life cycle (SDLC) is a process to design, test, and implement a software application (GeeksforGeeks,2025). These skills are used to break a problem into small parts, making it easy to solve. The fundamental step for all development is planning. It helps to narrow project scope, set objectives, and manage resources. Following approval of the plan, the system is defined, designed, developed, tested, deployed, and maintained to achieve the best outcomes.

Project management also includes planning as a step to achieve their targets, which can be long-term or short-term targets. Steps for project management are initiation, planning, execution, monitoring, and closure (GeeksforGeeks,2025). Teamwork is also important to have different perspectives and suggestions from members to create a successful project. Project management includes two methods, which are waterfall and agile. The waterfall method is a traditional method where they used the linear sequential method. It is hard to change the data once it is stored, making it not suitable for complex projects while agile method is more modern, flexible, and suitable for rapid change. Agile method is widely being used in today's industries.

Application of Project Management and System Development in Computer & Network Security

In Computer Network & Security, project management helps to manage security projects in an orderly manner. From my perspective as a student, cybersecurity doesn't only involve technical knowledge like networking and coding but also involve appropriate project management skills. Incorporating cybersecurity aspects into project management is vital to ensure cybersecurity aspects are considered in the initial phases to reduce the risk of compromising project outcome and data integrity (Harake, 2025). Current frameworks emphasize that cybersecurity should not be treated as an afterthought but as a core component throughout project execution. By integrating security into project planning, project resilience and success can also be enhanced within environments that are IT-driven and constantly experience evolving risks.

In relation to my academic projects and labs, the usage of structured planning and development stages help improve time-management, involvement of team members, and quality of outcomes. All in all, project management and system development in my course helps prepare me to handle real cybersecurity problems systematically and efficiently.

REFLECTION

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Based on the industry talk, success in the computer science field over the next four years requires continuous learning, adaptability, and developing technical skills. System management and project development are important skills for computer science students, as these will increase the probability of getting a job in the industry. As technology continues to grow, these skills are crucial for managing complex projects. Therefore, students should be aware and enhance themselves to remain competitive and relevant in the industry.

NAQIBAH DINIYAH AHMAD

In the next four years in computer science, I believe that proper planning, clear steps, and sufficient knowledge are essential for successful projects. I will plan carefully by understanding the project goals and required tools before starting to avoid mistakes. For complex projects, I will collaborate with others to share ideas and learn as a team. Through this approach, I believe I can overcome challenges and achieve success in computer science.

KHAIRULNAIM ZAQUAN

From the talk, I know that technical knowledge alone won't be enough to guarantee me with a successful career in computer science. In the next four years, I aim to improve my project management and soft skills via academic projects and experience. I will also keep myself updated with growing technology trends to enhance my problem-solving skills. This helps me to become more efficient and reliable computer network & security professional one day.

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