FACULTY OF COMPUTING
UTM Johor Bahru

Semester I 2025/2026

Industry Talk on Project Management dan System Development

Figure 1 : Project Management

Subject : Technology and Information Systems (SECP 1513)
Section : 05
Task : Academic Writing
Group : 04
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Date: 14 January 2026

Regarding from speaker's experience, project management can be described as a systematic planning process that should be integrated with project management and system development to ensure a successful project implementation. Although some of the individuals possess strong coding skills, they may lack the ability to effectively. The main goal of project management is to deliver an acceptable system to the user in an agreed-upon time frame, while maintaining cost and controlling chaos, as well as team synergy. Waterfall methodology is a traditional, linear and sequential approach that is suitable for a project that has a fixed requirement. In contrast, Agile methodology follows a modern and iterative approach. It is flexible, faster feedback as it is suitable for rapidly changing needs. Through practices such as daily stand-up meetings in Scrum, teams can test, review and continuously refine the system throughout the development process. For the system development, it involves more than merely writing code, but it encompasses an entire process that includes defining, designing, testing, and implementing a software application. System development is important to prevent chaos, bugs and failed projects. This process is guided by the system development life cycle (SDLC), which consists of five cycles which are planning, analysis, design, implementation and maintenance. These phases provide a structured framework that supports and ensures the smooth development of software systems.

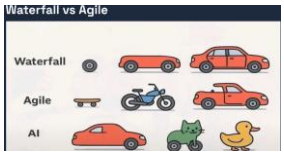

Figure 2 Comparison between Waterfall, Agile and AI

Figure 3 Software Development Life Cycle

The Project Management dan System Development have been used in programs such as computer networks. For instance, students learn how to define objectives, assign tasks, set milestones and deadlines and work in teams. Furthermore, the system development process guides the configuration, testing, and optimization of the network system, ensuring its stability and performance. These will produce an effective project and network issues are identified, analysed and resolved through structured planning and testing phases. This approach helps students minimise configuration errors and improve system reliability.

Basic computer science skills provide the foundation for industry readiness. Project management teaches students how to plan tasks, manage time, and use resources efficiently, which is essential in both academic and real-world projects. System development skills, especially understanding the System Development Life Cycle (SDLC), help students develop systems in a structured and logical way, reducing errors and improving reliability.

Teamwork and communication are important in university projects and become even more critical in the industry, where projects involve multiple teams and stakeholders. Strong collaboration ensures clear understanding of tasks and project goals. Additionally, solid fundamental knowledge allows students and professionals to solve problems independently and use AI tools responsibly as support rather than replacement.

In conclusion, while these skills are introduced in computer science education, the industry expects graduates to apply them effectively in real projects. Mastering these skills ensures a smoother transition from academic learning to professional practice.

ONG SHI YUN(ACS250338) I will be successful in computer science-related related in the next four years by improving my current computer skills and learning new skills continuously. If I am already familiar with these skills, I will become confident while doing everything related to computer science. (Team, 2025) Also, I will attend events such as workshops and meetups that focus on computer science and technology. These events will ensure us always informed of the latest industry trends as well as finding new ways to grow our skillset. (What do you do if you're a computer science student or recent graduate in need of networking tips?, n.d.) . Additionally, I will take part in some competitions such as Capture The Flag and Hackathon. By participating in these competitions, I will earn hands-on experience and learn communication skills and teamwork.	Kerthiga A/P Vijayan (A25CS0238) I see myself as a successful student in computer science in next four years, by strengthening both of my technical and soft skills. Throughout my study journey, I'll improve my programming and system development knowledge such as System Development Life Cycle (SDLC). To my practical projects. I also learnt when to use Waterfall or Agile methodology so that I can manage projects efficiently. Moving forward, I'll teamwork, communication and time management. These skills can help me in shape myself into a person who are ready to be employed by companies. Last but not least, I understood that use of AI tools is a learning support rather than being dependant on it. This also ensure that I build strong fundamentals and problem-solving abilities.
Muhammad Afieq Bin Hasbullah (A25CS0095) This sharing session highlighted the importance of bridging theory and real-world practice in computer science. The speaker's explanation of SDLC using everyday examples showed that understanding comes from application, not memorization. I also learned that while universities provide technical foundations, the industry demands strong communication, planning, and adaptability. Another key takeaway was the limitation of AI tools, which require solid human understanding to be used effectively. This reflection has reshaped my perspective on learning, encouraging me to focus on meaningful understanding rather than surface-level knowledge.	Halden Naning Anak Roy (A25CS0228) I understood the importance of applying knowledge rather than memorising slides just to pass an exam. Starting a project does not mean immediately writing code but preparing how it will be done and completed. Proper planning, including cost and manpower considerations, is essential to minimize chaos. If these are ignored, problems are likely to occur. As the famous quote goes "you fail to plan, you plan to fail," which although is cliché but is still true. The main goal of a project is to deliver on time, within budget, and minimize chaos. While chaos is unavoidable, effective planning helps reduce its impact on cost, time, and the team's mental health.

References

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