

Industry Talk on Project Management and System Development Technology and Information System (SECP1513)



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1.1 Introduction and Speaker's Professional Background

The industry talk was focused on real industry practices that include project management and system development and how these skills are used in real work environments to provide computer science students a clearer career pathway. The talk was conducted by speaker Ts. Hj. Abdul Alim Bin Abdul Talib, who graduated from Universiti Teknologi Malaysia, UTM in 2014/2015. He is the Head of Technology and Innovation at Serunai Commerce Sdn. Bhd who has about 10 years of working experience in the industry. The speaker shared the challenges he faced and how to solve them when he was a fresh graduate. His sharing helped students have a better understanding of how project management and system development skills are crucial in building a successful career in the technology industry.

1.2 Project Management and System Development

In the industry talk, the speaker explained that project management required more planning and essential to sustain a career in an industry, as it is a common language for our future careers. Without proper project management, chaos will occur and lead to bugs and failed outcomes. System Development Life Cycle (SDLC) was introduced to help the project planning and managing chaos. He shared about two common methodologies, which are waterfall and agile. Waterfall consists of clear milestones that are easy to manage but difficult to change when started. While Agile is more flexible that allow changing after started and is widely used by many companies. It uses Scrum and sprints to get feedback and solve the problems quickly.

System development is a structured process used in information systems for development and maintenance to meet user and operational standards. The SDLC is commonly used in systems and consists of several stages. Examples of the stages are planning, analysis, design, implementation, testing and maintenance. It enables developers to reduce risks, save costs, increase productivity, and make sure the results meet users' requirements. Thus, the structured system development is crucial to produce high-quality solutions in technology.

1.3 Application of Project Management and System Development in Bioinformatics

In bioinformatics, system development is required in processing and managing large amounts of biological data, while project management is to support system developments in bioinformatics projects. Based on the article, a structured system development process will apply in creating biological tools, databases and analytical platforms to improve accuracy, efficiency and capability. From some studies, practices of project management are crucial to make sure the bioinformatics systems and research results are delivered successfully. As a bioinformatics student, the application of project management and system development really helps to manage complex computational projects in both academic and professional environments that can improve the efficiency in learning and studying.

1.4 Skills and Reflection

Siti Aleeya Qaisara binti Mohd Fayyaz	In the next four years, I plan to succeed in computer science by truly understanding what I learn and applying it in real projects, not just studying for exams. I'll use AI as a tool to help me but still focus on building strong fundamentals. By staying curious and willing to learn, I believe I'll be ready for the industry.
Teo Kai Xuan	From the industry talk, I realised that what we learned in lecture will use in real technology projects. A good planning and teamwork are as important as technical knowledge. I decided to improve my computational skills and communication skills to increase my confidence in my future career.
Nurshahadah binti Shahrul Effendi	This talk gave me new knowledge, which is the comparison of SDLC approaches. This industry talk gave me awareness on the importance of planning project management, the relationship between academic knowledge and real-world industry practice. The overall talk reshaped my understanding of employability and reevaluated my insight that can be applied in the future.
Khairun Najiha Budriah binti Mohamad Husaini	As a bioinformatics student, the industry talk enhanced my understanding of the importance of project management and system development in supporting effective technological solutions. It also emphasized the value of teamwork and time management when handling complex biological and computational tasks, motivating me to continuously strengthen my technical and analytical skills for my future career.

1.5 Conclusion

The industry talk provided useful insights into real situations faced when working in the technology industry. The speaker highlighted the common challenges faced in work and the importance of building a strong foundation during study. To become successful in the future, the students must have not only technical knowledge but also strong project management skills and professional qualities such as teamwork, communication and never stopping to learn. Thus, from the industry talk, long-term success in the technology industry depends on an effective combination of technical skills, project management and professional skills.

1.6 References

1. Mahesh Vangala, Vincent, J., & Driscoll, H. (2013). Bioinformatics Core Project Management. *Journal of Biomolecular Techniques: JBT*, 24(Suppl), S32. <https://pmc.ncbi.nlm.nih.gov/articles/PMC3635415/>
2. Matellio. (2024, February 28). *Bioinformatics Software Development: Process, Use Cases, Insights, and More* - Matellio Inc. Matellio Inc. <https://www.matellio.com/blog/bioinformatics-software-development/>