

PROJECT MANAGEMENT AND SYSTEM DEVELOPMENT



TOPIC:

1. INDUSTRY TALK ON SKILLS IN UNIVERSITY AND INDUSTRY
2. SPEAKER'S EXPERIENCE AND SYSTEM DEVELOPMENT PROCESS
3. PROJECT MANAGEMENT AND TEAMWORK SKILLS
4. DEVELOPMENT METHODOLOGIES: WATERFALL AND AGILE
5. REFLECTION

GROUP 8:

1. BRANSON KOH MING XUAN A25CS0199
2. CHA XIN YUAN A25CS0200
3. ANG LE SHAN A25CS0193
4. ERIC TAN ZHI EN A25CS0058

Industry Talk on Skills in University and Industry



Tuan Hj. Abdul Alim, an expert in software development, offers insight into the true nature of what the software industry expects and considers important. He feels that System Development is much larger than simply creating code. It is a complete process that includes planning, analysis, design, implementation, testing, and maintenance. Students can understand the importance of structured thinking and using methodology in computer science.

Speaker's Experience and System Development Process

Tuan Hj. Abdul Alim said that successful software development follows a clear roadmap, much like building a house. For example, a house needs a blueprint before construction, and a software system requires careful planning before coding. The roadmap includes five main phases: planning, analysis, design, implementation, and maintenance. Without planning, software projects are likely to encounter chaos, bugs, delays, and failure.



The speaker pointed out that many failed projects are caused by skipping early stages like planning and design. This highlights the importance of system development methods, which help students think logically and work properly.

Project Management and Teamwork Skills



Among the other major themes, the conversation moved to project management (PM). Software projects are complicated and usually have deadlines that cannot be extended and limited budgets. Skills in project management are important to make sure that projects are still going as planned, can be finished on time, and fulfill the needs of users.

Moreover, the point about team synergy was heavily emphasized by the speaker, that staff in computer science rarely work individually. The productive interaction with designers, testers, and other developers. Thus, it becomes not only helpful but also necessary for achieving the goal of the project.

Development Methodologies: Waterfall and Agile

The speaker introduced two common system development methodologies. The Waterfall model is a traditional, linear, sequential approach where one must finish one phase before moving to the next. It is suitable for projects with fixed requirements because it has clear milestones and is easy to manage but it is hard to change course once started. The teams are allowed to work in a focused manner since the waterfall methodology provides clear milestones. (Nathan Cavet, 2024) The Agile methodology uses an iterative approach with short development cycles known as sprints. Agile allows for flexibility and faster feedback to make it suitable for modern software projects. Examples include Scrum and Kanban. The teams can deliver consistently and the clients' changing demands can be managed effectively when using the Agile methodology. (Alex Zhezherau, 2025)

Reflections

1. Branson Koh Ming Xuan

In order to succeed in computer science over the following four years, I will make sure that I really comprehend the concepts taught in the lectures rather than memorizing the information because the final year project will use all of the knowledge I have learned during my degree. Additionally, I will ensure that I do not rely too much on artificial intelligence to finish assignments or projects.

2. Ang Le Shan

After listening to the talk, we realized that it is important for us to keep studying the latest knowledge and technology to ensure we have the ability to compete with other computer science students. We need to explore knowledge beyond our academic syllabus to make it easier for us to be hired after we graduate. Not only that, we need to learn how to use artificial intelligence wisely to help us in studying rather than using it for harmful purposes. Besides, we need to ensure we fully understand and can apply all the knowledge that has been taught by our lecturers these four years in order to make our final year project easier and less stressful.

3. Cha Xin Yuan

From this industry talk, I learned that success in computer science is not just dependent on coding skills. In the next four years, I plan to develop strong foundations in system design, project management, and teamwork because these are important skills shared by the speaker. I will actively practice structured problem-solving by following proper development processes in my assignments and projects. Besides that, I aim to improve my collaboration skills and participate in group projects to learn how to communicate effectively in a team. The introduction of agentic coding tools also inspires me to adapt to the latest technologies. These tools can help to improve productivity and employability.

4. Eric Tan Zhi En

For the next four years, I will focus on improving my problem-solving and logical thinking skills, as these are essential in computer science. Instead of only focusing on getting correct answers, I will practice understanding why a solution works and how it can be optimized. Another important factor for my success is gaining practical experience. I aim to participate in internships, workshops, hackathons, or coding competitions to apply the theoretical knowledge learned in class to real-world problems.

References

Cavet, N. (2024, September 24). Discover the Advantages of the Waterfall Model for your Projects. Appvizer. Retrieved December 26, 2025, from <https://www.appvizer.com/magazine/operations/project-management/advantages-of-waterfall-model>

Zhezherau, A. (2025, April 14). The Benefits & Advantages of Agile. Wrike. Retrieved December 26, 2025, from <https://www.wrike.com/agile-guide/benefits-of-agile/>