INDUSTRY TALK ON PROJECT MANAGEMENT AND SYSTEM DEVELOPMENT IN COMPUTER SCIENCE

TOPICS COVERED:

1. **Background and Experience of The Speaker**
2. **Project Management and System Development**
3. **Project Management and System Development in programs (Data Engineering, Computer Network, Bioinformatics, and Computer Graphics)**
4. **Reflection**

SUBJECT : Technology and Information System (SECP1513)

SECTION : Section 01

GROUP : Group 4

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1. Background and Experience of The Speaker

Ts. Hj. Abdul Alim bin Abdul Muttalib, Head of Technology and Innovation at Serunai Commerce Sdn. Bhd. is the speaker for the industrial visit. The speaker discussed his expertise in overseeing technology-driven projects, with a focus on information systems, innovation, and system architecture. He is responsible for managing development teams, supervising system planning, and making sure that technology solutions complement company goals. The speaker emphasized the importance of efficient project management in managing complicated system development projects using real-world examples and experience. In addition to the technical expertise, the seminar stressed the need for strategic planning, communication, and ongoing project monitoring.

2. Project Management and System Development

“System development is the core feature of our language”, said the speaker. In his talk, he mentioned system development is essentially the process of defining, designing, testing, and implementing a software application rather than just writing code. Moving on, he discuss about software development life cycle (SDLC), which begins from define, design, development, testing and deployment. In another word, the road map of SDLC is Planning, Analysis, Design, Implementation and Maintenance. It simply has a lot to do with project management, which is about managing chaos and fostering teamwork. We must first analyse and plan our path of action. Next, we must plan the project's flow and implementation. This will therefore make it easier for us to put it reality and ensure the success of our project. This can stop chaos and uncontrollable events from occurring. He discussed the "waterfall" methodology in project management. The pathway for waterfall will be obtaining the requirement, followed by design, development, testing, deployment, and maintenance. Basically, waterfall methodology is like evolving. Unlike the “Agile” methodologies that is very flexible and able to get faster feedback. It rapidly changing based on the demands of software.

3. Project Management and System Development in Programs (Data Engineering, Computer Network, Bioinformatics, and Computer Graphics)

Project Management and System Development are applied across data engineering, computer network, bioinformatics, and computer graphics programs to ensure projects are systematically planned, developed, and maintained. In data engineering, SDLC is used to design and implement data pipelines and architectures, while project management helps coordinate workflows and adapt to changing data requirements, often using Agile methods. In computer networking, system development focuses on planning and deploying network infrastructures, where project management ensures clear requirement analysis, structured design, thorough testing, and stable deployment, making the Waterfall methodology more suitable. For bioinformatics, system development integrates computing techniques with biological data analysis, and project management is essential to handle interdisciplinary tasks, validate results, and accommodate frequent changes in research, often through Agile approaches. In computer graphics, system development supports the creation of visual systems such as animations, games, or simulations, while project management helps manage iterative design, performance testing, and user feedback. Overall, Project Management and System Development reduce chaos, improve teamwork, and provide a clear roadmap through the SDLC, ensuring successful and efficient project outcomes across all these programs.

4. Reflection

SHAMITA A/P DHEEVAN RAO

The speaker explained the Software Development Life Cycle (SDLC) in a very clear and relatable way. He used the process of cooking nasi lemak as an example, which really helped me visualize each stage and made the concept much easier to understand. Through learning SDLC, I realized how important it is to organize tasks and manage even large projects in a systematic and structured manner. He advised us not to rely on AI blindly, as it is not always accurate and can sometimes complicate problems or lead to misunderstandings. Therefore, we need to focus more on critical aspects such as system design, since AI can already assist with syntax and coding. In conclusion, this industry talk helped me understand the importance of SDLC and raised my awareness of how improper use of AI can negatively impact us.

EMILY TAI PEI EN

During the session, he explained the software development life cycle (SDLC) in a very clear and relatable way. He explained it by using how to cook nasi lemak as an example, and this help me to illustrate things, which made it easier for me to comprehend. By learning SDLC, I learn how to organize a task or even a big project systematically. In the new era, we are introduced to AI. He advised us to stop applying AI as it is not always right and sometimes it can make our issue complicated or lead us to a wrong concept. For sure, humans have brains but artificial intelligence does not. In conclusion, this industry talk made me realize the importance of SDLC and also how AI can ruin our life if we don't use it wisely. Indeed, while AI can be useful, it will also make it more difficult for us to be outstanding.

AZIZAH BINTI SAMIUN

The industry talk made it clear that success in computer science goes beyond just coding. The speaker emphasized the importance of understanding the entire development process and how essential it is to manage projects effectively. The rise of AI was also highlighted, that while it's a powerful tool, it doesn't replace the need for critical thinking and thoughtful system design. In the next four years, I plan to focus on building both my technical and project management skills. I'll work on understanding the full project lifecycle and how to structure development to deliver quality results. In conclusion, the talk reinforced that being a successful developer requires a combination of technical expertise, project management and critical thinking. I'll focus on developing these areas to be well-prepared for the future of software development.

AHNAF BIN ZAIZAL

The speaker provided a straightforward and accessible explanation of the Software Development Life Cycle (SDLC) in project development. This made me realize how crucial it is to manage projects and duties in an organized and methodical way, and also taught me how to organize a task for a project to be successfully organized systematically. Other than that, he is against relying solely on artificial intelligence because it is not always reliable and does not think like people. AI can assist with code and syntax, but we should concentrate more on important areas like system design. In conclusion, the discussion made me realize how crucial the SDLC is and how careful application of AI is necessary to in today's market.

References

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