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ASSIGNMENT 3 : ACADEMIC WRITING

TITLE :PROJECT MANAGEMENT AND SYSTEM DEVELOPMENT



LECTURER : DR. SURIATI BINTI SADIMON

GROUP 6

GROUP MEMBERS	NO.MARTRIC
TINESH A/L GAJENDRA BAHADUR	A25CS0153
TENGKU ADAM BIN TENGKU BADRUL HISAM	A25CS0362
DOMINIC MAH YU QIAO	A25CS0214
LAI YAN CHENG	A25CS0077
WONG SENG CHOON	A25CS0162

Description Of The Speaker's Experience

Three years into his professional career, Ts. Hj. Abdul Alim Bin Abdul Muttalib revisited his university notes from his time as a student at Universiti Teknologi Malaysia. He sought to comprehend the fundamental principles of systems development that had previously eluded him. Now the Head of Technology and Innovation at Serunai Commerce Sdn Bhd, he recognised a central challenge, which was the apparent disconnect between his academic studies and their practical application in his daily work. To internalise these concepts, he began mapping formal methodologies to relatable everyday analogies, for instance, likening the Software Development Life Cycle to following a recipe for a dish like nasi lemak. Furthermore, he reflected on the inherently collaborative nature of professional work, where each team member assumes a distinct and specialised role. In his conception, the traditional SDLC represented a linear and sequential progression, analogous to a waterfall flowing in one direction from its source to its destination.

Basic Skills Required for Computer Science

Basic skills required for computer science include a deep understanding of project management, system development, teamwork, and solid knowledge. Project management focuses on planning a project to ensure that its objectives can be achieved within time and cost constraints. Without proper planning, a project may fail. System development refers to creating a project according to the System Development Life Cycle (SDLC). The SDLC begins with defining the system and its objectives, followed by the design stage, where necessary resources such as tools and manpower are prepared. After development, the system must be tested to ensure functionality and to fix any errors before deployment. Once testing is completed, the system can be deployed and introduced to users, and the final stage, maintenance, involves collecting user feedback and improving the system accordingly. Throughout the SDLC, project management plays an essential role in supervising each stage and ensuring that the project progresses in the correct direction.

Next, the speaker emphasised that projects are typically team-based; therefore, effective communication and collaboration are essential. In addition, having solid knowledge of one's course is mandatory. Students need to understand each concept well to build a strong knowledge structure and not rely solely on AI, as AI may sometimes provide incorrect information. AI should only be used as an assisting tool to support learning and improve understanding. In conclusion, the speaker emphasised that these skills should be learned early before entering the workforce.

Basic Skills Required By Industry

The skills required by the industry are similar, including system development, project management, teamwork, and strong fundamental knowledge, but they focus more on application. The industry assumes that these skills are already equipped in every employee; therefore, employees are expected to implement these skills to carry out projects effectively. Industry projects are often large-scale and cannot be completed individually, requiring several teams to work together. Therefore, effective communication and collaboration must be practised to ensure that everyone understands their respective tasks and can solve problems together.

Furthermore, team members need to plan projects in a systematic and structured manner so that tasks and durations for each stage are clearly defined. During project development, the SDLC must be applied to ensure a proper development process. In addition, possessing strong fundamental knowledge ensures a full understanding of the system and reduces the risk of hidden or logical errors. AI can serve as an assisting tool to enhance performance.

Reflection

Group Members	Description
Tinesh Gajendra	As a student preparing to enter the industry, I will do my best to ensure that I have all the skills required to perform and work well in an organisation. I will start working on side projects, especially in teams, to build strong communication and leadership skills. Hackathons and Team CTFs are a must for me from now on. This is so that I can experience industry-level simulation of problem-solving and real-world experience. Not only that, but it is so that I can avoid facing the same experience as the speaker had faced, where everything that he studied felt disconnected from the industry. I will have to work on my mental framework in order to meet the workforce standards. It was a great pleasure listening to Ts. Hj. Abdul Alim bin Abdul Muttalib's sharing session.
Tengku Adam Bin Tengku Badrul Hisam	I will now ensure I connect my studies to real-world tasks to avoid the gap the speaker experienced. I will relate theory to practice, such as thinking of development cycles like everyday processes. I will build teamwork and communication skills, understanding that projects are collaborative efforts. I will develop strong fundamental knowledge and use AI only to support, not replace, my learning. I will prepare with this mindset so I can apply these skills effectively from the start of my career.
Lai Yan Cheng	Reflecting on these insights, I realise that the core challenge of computer science is bridging the gap between theory and industry practice. The speaker's comparison of the SDLC to a recipe for <i>nasi lemak</i> illustrates that true mastery involves applying abstract concepts to real-world logic. While a university provides the foundation, the professional world demands a seamless blend of technical skill, project management, and collaboration. I now see that "solid knowledge" is essential to navigate the limitations of AI, which can assist but never replace human intuition. Ultimately, I've learned that communication and structured planning are critical standards that must be mastered before entering the workforce.
Wong Seng Choon	After listening to the insights shared throughout these four years of studying, I will implement the Waterfall Model for the Software Development Life Cycle (SDLC). I will approach the building of the software, teamworking, and development with this coordinated approach. In the meantime, I will avoid being overly dependent on AI tools, instead making them part of assisting tools, similar to using Google Scholar to do research in the past. I understand that project management requires good practice in order to prevent failures without structural planning. By that, I will make sure that I follow all the necessary requirements to avoid these failures.
Dominic Mah Yu Qiao	Over the next four years, I will try to implement project management and system development concepts in my university projects. It is beneficial for me to start with mini projects so that I will not feel overwhelmed at the beginning and can handle them through effective and systematic management. At the same time, I can practice effective team communication within my project team so that we are able to solve problems and complete our projects successfully. In addition, I will try to understand every concept taught by my lecturers to build a strong knowledge structure. If I have questions, I will use AI to assist in finding the answers.