TECHNOVERSE

UTM UNIVERSITI TEKNOLOGI MALAYSIA | SERUNAI

INDUSTRIAL TALK 2

PROJECT MANAGEMENT & SYSTEM DEVELOMPENT

Speaker : TS. HJ. ABDUL ALIM BIN ABDUL MUTTALIB

PROFESSIONAL EXPERIENCE

- 10 years of experience in software and technology industry
- Involved in multilple system development projects across various organizations

CONTENT COVERED:

- Speaker's Professional Journey and Experience
- Essential Skills for Computer Science Students
- Industry Requirements
- The SDLC and Project Management Methodologies.
- Individual Reflections

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HYFLEX CLASSROOM

DESCRIPTION OF SPEAKER EXPERIENCE

The session was led by **Ts. Abdul Alim bin Abdul Muttalib**, a **UTM alumnus** (Class of **2014/2015)** currently serving as the **Head of Technology and Innovation at Serunai Commerce Sdn Bhd**. With over a decade of industry experience, he has transitioned from a **developer role to a leadership position** overseeing technological innovations, such as digital halal solutions. His professional journey highlights **a deep expertise in navigating various corporate environments and managing large-scale system developments.**

BASIC SKILL REQUIRED IN COMPUTER SCIENCE

Basic technical capabilities like programming, system analysis and problem solving are the core of competency in computer science. These skills are, however, to be backed by a high level of knowledge of the **Software Development Life Cycle (SDLC)**. SDLC offers a systematic model which helps the students **plan, design, develop, test, deploy and maintain software systems in a systematic manner.**

Problem-Solving and Logic: Computer science is also based on the capability of dividing complex problems into logical and manageable steps. This was likened by the speaker to day to day chores such as cooking or packing, where there was a clear roadmap to avoid any mistakes in the future.

Requirement Analysis: Before any code is written, a very important skill is determining what it is as a system that must do. In the absence of this analysis, the projects tend to have bugs or they may not meet the expectation of the users.

System Design and Architecture: Students should be taught more than simple coding, they need to know how various components of a system interact with each other. This involves the knowledge of selecting the appropriate frameworks and libraries to see that a system can support a large number of users simultaneously.

Knowledge of Methodologies: Expertise of SDLC entails learning when to adopt a Waterfall method (sequential steps) and when to adopt an Agile method (flexible, iterative cycles).

This is consistent with the opinion of scholars that the build of methodologies is needed to enhance the quality of software and the success of the project. In the absence of such fundamental skills, graduates will find it difficult to implement their technical expertise in the workplace.

SKILLS REQUIRED BY INDUSTRY

Project Management Skills

- Ability to plan, organize, and manage software projects effectively
- Control project scope, timeline, and resources to avoid system failure
- Ensure smooth coordination among team members

Understanding of System Development Methodologies

- Strong knowledge of Software Development Life Cycle (SDLC)
- Ability to apply appropriate methodologies such as Waterfall and Agile
- Awareness that Agile is widely adopted in modern industries due to its flexibility

Teamwork and Communication Skills

- Capability to work collaboratively in multidisciplinary teams
- Effective communication between developers, testers, designers, and project managers

System Architecture and Design Skills

- Ability to design scalable and modular systems
- Understanding of suitable technology stacks and frameworks
- Awareness of system performance and long-term maintainability

PERSONAL REFLECTION ON THE INDUSTRY TALK

FIONA

From this industry talk, I learned that success in computer science requires more than programming skills. The speaker emphasized the importance of project management, system development, and teamwork in real industry projects. Over the next four years, I plan to strengthen my understanding of SDLC and Agile methodologies while improving my communication and collaboration skills through group assignments.

I also realized that artificial intelligence should be used as a supportive tool, not as a replacement for learning. This talk motivated me to start preparing early, build strong fundamentals, and continuously improve my skills to succeed in the computer science field.

DAYANA

This industry talk makes me realized that I can start earlier to learn all the skills needed in computer science. The speaker also highlight that most of the people know how to coding but doesn't really know how to implement it in real situation. As someone who want to pursue in cybersecurity, Software Development Life Cycle (SDLC) is important especially to the fresh graduate to get a job. So I'm planning to mastering the SDLC over the next four years in university. I'm also gonna learn and understand the Agile methodologies.

Other than that, The speaker told us that the two-ways communication is important when designing a program so I'll also try to improve my communication skill. Thanks to this industry talk, I got to know the importance of other skills beside coding that not all first year students can get.

AZAAM

Alim's industry presentation highlighted how this generation is currently engaging with AI. Most students appear to see AI as the solution to having to learn anything. Alim stressed that a "copy-paste" approach creates a weak systems that will break or fail to sustain real-world scaling and thousands of active users. This understanding has shaped my personal approach to the next 4 years as I want to be a "Human-in-the-loop" developer. I plan to keep AI from driving my decisions and use it as an advanced tool to assist me in achieving "10x productivity" while I retain my role as the primary designer and explain every line of code. I want to graduate having the skill to produce steady and consistent output so that I can keep the software's consistency and integrity. I want to combine the human logic and machine speed.

NISHAT

This industry talk enhanced my understanding of the expectations within the computer science industry beyond technical skills. I gained valuable insights into the importance of SDLC, Agile methodologies,effective communication, and teamwork in real-world projects. The session also emphasized the responsible use of AI as a supportive tool in learning and development. Overall, the talk motivated me to continuously strengthen my skills and prepare for future industry challenges.

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Rigby, D. K., Sutherland, J., & Takeuchi, H. (2016). Embracing agile. Harvard Business Review, 94(5), 40–50.

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