Skills in University and Industry

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The first speaker, Mr. Mohd Hakimi Iqmall is an UTM alumnus in Bachelor in Science Computer (Graphic & Multimedia) and graduated in 2018. Currently he's working in UTM Digital as Project Manager and System Analyst. He began the talk by introducing the organization structure of UTM Digital and his team members. He talked about his education background and working experiences. He began his career as an intern at ME-Tech Solution which involved in development of a ship simulator for the Royal Malaysian Navy. Later he joined Okakichi Sdn Bhd, a company that creates engaging digital games with captivating graphics and gameplay originating from Japan. He then continued his career at UTM Research Computing and currently works at UTM Digital. He also shared the projects he created every year which are Kingdom Ran, Clinic Panel System, Welfare Service System, Payroll 2.0, and the most recent project which is SSPA System. Mr. Hakimi also emphasized the importance of having a good relationship with lecturers, being brave to challenge ourselves and never stop learning.

The second speaker, Mr. Nik Mohd Habibullah Bin Nik Mohd Nizam is also an alumni from Universiti Teknologi Malaysia, UTM who graduated in 2005. The earliest project for UTM that he worked on was a montage for Digital Library launching which involved the collaboration between UTM Library and UTM Graphic team. His previous work, which was a montage video on Aman Malaysia was recognized by the UTM Library team and afterward he was offered to do work with them. He started his internship at UTM Library until his final year project in which he developed a system for thesis cataloging. He explained how the system works and described the task he was required to do so the system can learn how to classify each thesis according to their respective field. Once he graduated, he started NI Solution Company and then he developed his own company which was Micro Semiconductor SDN BHD. The company evolved mainly with hardware production in 2013. After that, he joined a collaboration with Universiti Teknologi Malaysia, UKM to develop DatSini. His own product that he developed was GetMe Hired and Dialysis Manager.

A strong foundation in computer science is fundamental and there are a few basic skills that have been emphasized by the speakers following these categories, technical skills and management skills. According to Mr. Mohd Hakimi Iqmall, by understanding the logic behind a programming language, there will be no problem to learn another different programming language in a short amount of time. Besides, be familiar with version control such as Github and Gitlab, development tools and system framework such as Net, Laravel and Yii as it is widely used in the industry. Next, the skill in debugging systems and analytical and logical skills will be essential in problem solving. Continuously build self characteristic and soft skills as a leader since everyone will experience leadership during work and start to practice communication skills as it plays a crucial part to bridge the gap between stakeholders, developers and end-users. Next is to have the knowledge of SDLC Methodologies, documentation and reporting to ensure clarity and maintain project alignment. Other than that, testing and quality assurance (QA) skills and risk management skills can be developed throughout the experiences that we gain while working in the industry.

Mr. Nik Mohd Habibullah, began his sharing by explaining Job Application Flow using IPRA Method: Identify, Research, Prepare, and Apply. Moving on, he explained about comparison between Self-Employed vs. Salaried. Self-employed individuals enjoy flexibility and independence but face high financial risks and variable income. Salaried employees benefit from stable income, structured career growth, and employer-provided benefits like EPF, SOCSO, and bonuses. Next, he shared steps to start a

business saying to become an entrepreneur, individuals must first develop business ideas by identifying a product or service, analyzing market size and demand, and understanding the industry. Lastly, he outlines various IT roles and their essential skills and tools. Programmers need to master algorithms, object-oriented programming, APIs, debugging, and version control using Visual Studio Code. System Analysts focus on requirements gathering and stakeholder analysis using Wireshark and Snort. Graphic Designers should understand color theory, design tools like Adobe Creative Suite. Project Managers must excel Agile methodologies and key performance indicators. Cybersecurity Specialists work with encryption and intrusion detection systems using Firebase.

Reflections

The valuable insight that Zahin received from this industry talk is that skills in computer science alone is not enough for a person to build their career in this profession. Soft skills and leadership also play a crucial part in maintaining a smooth workflow and the effectiveness of a project.

This industry talk has made Farihin realize that in order to be successful in computer science in the next four years, building a strong foundation in understanding algorithms, data structures, and programming while discovering new technologies is important. Stay updated with industry trends, connect with other programmers, and develop soft skills like communication and teamwork. Balancing learning, hands-on experience, strengthening problem-solving abilities and networking will set up for a successful career in this field.

From Salwa's point of view, a structured approach to career and business decisions reduces uncertainty and increases success rates. This shows that while creativity is important, discipline and strategy are equally essential in achieving long-term goals. The importance of self-reflection and research often gets overlooked. This method reinforces that knowing yourself and the market is critical for long-term career satisfaction.

Having the core strength in understanding the basic skills in programming and the ability to developing creative critical thinking in solving logical problems proves to be the key in facing many obstacles and challenges as technology advances along the passage of time. This can help Nasrahtul to navigate life as a student in computer science.

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