INDUSTRY TALK ON SKILLS FOR SUCCESS IN COMPUTER SCIENCE

PREPARED BY GROUP 2
SHIMAA,FAIZ,KHALIEF,BAQIR AND MUHAMMAD HILMI

TABLE OF CONTENT

1. Speaker's Experience

Nik Muhammad Habibullah bin Mohd Nizam, a graduate from the University of Technology Malaysia (UTM), delivered an engaging talk on valuable skills relevant to both academia and industry. Since graduating from UTM in 2005, he has accumulated extensive experience in graphics, IoTs (Internet of Things), and hardware development through co-founding companies like NI Solution and Mikro Semiconductor Sdn Bhd. Among his career highlights are the launch of a digital library at UTM, significant contributions to cloud-based systems during the 2020 lockdown, and the development of platforms such as GetMe Hired for career coaching. These achievements demonstrate how academic skills can be effectively translated into real-life applications.

2. Basic Skills Required for Computer Science

Mastering technical skills like programming languages (C++, Java, Python), understanding data structures and algorithms, and knowing software engineering principles (OOP, frameworks, Git) are essential for problem-solving and developing scalable applications. Analytical skills involve breaking down complex problems and finding efficient solutions. Clear communication and collaboration are vital for working in teams and presenting ideas to non-technical stakeholders.

3. Skills Required by the Industry

The industry needs employees who can quickly learn and adapt to new technologies, as demonstrated by Nik's work with cloud-based systems and various projects. Communication, potential for leadership, and teamwork are vital soft skills desired in today's work environments. Practical application of knowledge through internships, hackathons, or freelance jobs provides valuable experience that improves employability. Additionally, the tech industry prefers individuals with an entrepreneurial mindset who proactively create solutions rather than wait for problems to arise.

4. Individual Reflections on Career Success in Computer Science

Shimaa: Nik's talk inspired me to develop both technical and professional skills. As a computer student, I will focus on mastering programming, machine learning, AI, and tools like Git. I'll gain practical experience through internships and projects, staying flexible with industry trends like software development and cybersecurity. Additionally, I'll improve my communication, teamwork, and leadership skills, and seek mentorship to guide my career.

Hilmi: To succeed in computer science over the next four years, I will build on my strong foundation of balancing academics, personal projects, and technical skills, such as my experience in system design and app development. Projects like "HealthSphere" and my attendance system demonstrate my ability to tackle real-world challenges creatively while honing my technical expertise. By maintaining structured time management, staying current with industry trends, and engaging in collaborative efforts, I can ensure consistent growth while avoiding burnout. My entrepreneurial mindset and passion for innovation, combined with my commitment to research and problem-solving, position me to excel in my studies and make meaningful contributions to the field.

Baqir: I learned from Nik Muhammad Habibullah's talk how important it is to develop both soft and technical abilities. I'll improve my leadership, teamwork, and programming skills while accumulating experience through projects and internships. I learned how to get ready for a lucrative profession in computer science from this seminar.

Faiz: Nik’s talk reinforced the importance of integrating technical expertise with professional development. As someone with a background in logistics and a strong interest in supply chain systems, I aim to leverage computer science to innovate in these fields. Over the next four years, I will deepen my knowledge of programming, database management, and automation technologies, applying these skills to real-world projects like my company’s internal systems and warehouse management solutions.

Khalief: Nik’s talk encouraged me to embrace a balanced approach to professional and technical growth in my computer science journey. As someone fascinated by web development and user experience design, I will focus on strengthening my skills in front-end and back-end programming, mastering tools like React, Node.js, and Figma. Over the next four years, I aim to build a portfolio of innovative projects that prioritize accessibility and seamless design, showcasing my ability to create solutions that cater to diverse user needs. I will also prioritize gaining practical experience through internships and contributing to open-source projects to enhance my problem-solving and coding abilities

5. Reference

https://www.nu.edu/blog/computer-science-skills/ https://dl.acm.org/doi/abs/10.1145/1352135.1352218 by Andrew Begel