



INDUSTRY TALK ON SKILLS IN UNIVERSITY AND INDUSTRY

Topics

- **Speaker's Experience**
- **Basic Skills required in Computer Science**
- **Skill required by Industry**
- **Reflections**

GROUP 8

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Introduction

On 17 December 2024, students from the course Technology and Information System Section 08 had attended an industry talk “Skills in University and Industry”. This academic writing will summarise the speaker's experience in industry, the basic skills required for computer science, the skills required by industry and reflection of students on the industry talk.

Speaker Experience

The speaker for the industry talk is Nik Mohd Habibullah bin Nik Mohd Nizam. He is currently an entrepreneur with many achievements. He is currently the CEO of Micro Semiconductor Sdn. Bhd. , Co-Founder of GetMeHired and Dialysis Manager, owner of company NI Solution and DatSini Sdn. Bhd. His journey in the IT industry begins during his third year as a student in diploma at Universiti Teknologi Malaysia (UTM). His team was chosen to accomplish a job offered by UTM Library to create a 3-minute montage for the launch of the digital library. His team was chosen due to their past work, a montage on Aman Malaysia had gained the attention of the UTM Library team, hence trusting his team for this job. His connection with UTM Digital deepens when he decided to undergo his internship with UTM Library and also conduct his final year project in collaboration with UTM Library, that is a cataloguing system for the library using STEMI method or machine learning. He was active in academics, non-academics and association during his time as a student. After graduating from UTM, his career started with him being a special officer at the Ministry of Higher Education followed by being a Research Officer (RO) at UTM. At this stage, his desire to commercialise his innovative ideas sparked which brought him to purchase an enterprise from a friend. His journey as an entrepreneur begins with his first company that is NI Solution and his company has been given the opportunity to handle government projects. One of his products is GetMeHired, which is a support system to help fresh graduates to get employment by aiding students in preparing for CV and interviews. Another product of his is Dialysis Manager which was developed from an idea he had for a hackathon that is Vital Box.

Basic Skills required in Computer Science

In Computer Science, there are several important skills that students have to master to be able to master this course in university. Generally, there are two categories of basic skills that are required by students taking Computer Science which are technical skills and soft skills. Technical skills compromise skills that require students to be proficient in programming languages and tools used for development of projects. Examples of technical skills required in Computer Science are:

1. Programming Language
2. Database
3. Operating System
4. Security and Networking
5. Awareness of IT technology

Soft skills are also required in Computer Science and soft skills comprise skills to allow students to work as a team and expose students to the design and development process. Example of soft skills required in Computer Science are:

1. Communication skill
2. Able to work in teams and collaboration
3. Creative and analytical thinking
4. Adaptability and continuous learning
5. Attention to details

These skills are required by students taking Computer Science because these skills may help ease the development process of projects and expose students to industry-like environments.

Skills required by Industry

In the industry, there are skills that workers are required to acquire if they want to be employed in the industry. Technical skills and soft skills which are basic skills of Computer Science are equally important skills in industry and have to be mastered by graduates if they want to be employed in the industry. Apart from basic skills of Computer Science that were obtained during the time as a student, graduates are also required to obtain certain skills to excel themselves in the IT industry and boost their employability. In the university, skills such as organisation and managerial skill, experience and academic achievement are usually elective and not mandatory for all students, but these skills are important for industry because graduates who have these skills can adapt better in industry. Example of organisation and managerial skill are:

1. Project management skill
2. Knowledge of primary business function
3. Leadership skill
4. Knowledge of company and specific industry

Organisation and managerial skills are essential in the industry as most of the time, tasks have to be done in groups or teams. For experience and academic achievement, industry has a higher chance of hiring graduates that have relevant working experience, co-op experience and high GPA in IT related courses. Graduates that have more work experience or experience working in a team are more likely to be employed than those that have lesser experience.

Reflection

GOA WEI SIANG:

The talk had provided me lots of insight on how to build a career in the IT-related industry. From the talk, I acknowledge that I have to start taking initiative now to build up my career opportunities by participating in IT-related activities and competitions such as hackathons. Initiative has to be taken as soon as possible as a student is precious and limited but important in starting our career journey. By taking part in a hackathon, I can then convey my ideas to others and at the same time build a trustworthy and capable team that may give me valuable experience and also build up my e-portfolio. Moreover, I will also pour my energy into my studies to ensure that I may master technical skills in computer science and achieve a high GPA to boost the chance of getting employed in a prestigious company in the coming future.

SALEEM:

The industry talk has been a significant eye-opener for me, shedding light on the critical skills and competencies required to thrive in the IT industry. I realized that building a successful career in this field requires a balance between technical expertise and soft skills. Mastery of programming languages, database management, and security are essential, but equally important are communication, teamwork, and adaptability.

One of the key takeaways for me is the importance of taking initiative as a student. I plan to actively participate in hackathons, internships, and other IT-related activities to gain hands-on experience and develop my problem-solving and analytical skills. Additionally, I will focus on improving my collaboration and leadership abilities by engaging in group projects and taking on responsibilities within my academic and extracurricular activities.

This talk has motivated me to prioritize continuous learning and self-improvement. I now understand the importance of building an e-portfolio and networking with industry professionals to enhance my employability. Moving forward, I am committed to working hard in my studies, honing my technical skills, and seizing every opportunity to prepare myself for a fulfilling career in the IT industry.

MOHANNAD:

The discussion gave me a much better understanding of the essential competencies required to build a successful career in the information technology sector, bringing into limelight the technical as well as the interpersonal competencies. I have concluded that the mastery of programming, knowledge in databases, and keeping abreast with modern developments in IT are all prerequisites to succeed. What the presentation really brought home was the importance of soft skills: collaboration, communication, and leadership without which one can never work effectively within any work environment.

This motivated me to give focus to how to work collaboratively with peers and take up responsibility within a team. Besides, I have come to realize the importance of gaining

practical experience through internships, projects, and participation in industry-related activities like hackathons. Such experiences not only give me a chance to put into practice what I have learned but also help in developing my problem-solving skills, creativity, and adaptability.

In the future, I hope to gain from my university experience through engagement in activities with substance that could be beneficial for my technical expertise and personal development. With this in mind, I look forward to equipping myself more towards what this profession has called for by taking up other future endeavors related to the information technology sector and ensuring better prospects in a fulfilling profession thereafter.

RUSLAN:

Hello, the topic of the question is how I will achieve success in the next 4 years, in fact, I have a lot of plans, and they are all grandiose, I understand that I need to write everything down and keep a list, for me it is already great that I already have a lot of experience in the IT field, for example, I have already participated in at least 10 different competitions, of which 5 hackathons and I won one hackathon with my team, everything else was an attempt to create a startup.

I can say that each failure was very useful, each attempt also gave me a lot of experience, at the moment I am studying in the specialization of Information Security, and I can say that I am interested in this area, but in myself I saw more experience in building products than in monitoring information, and therefore I decided that I will develop further as the creator of a new business in the IT field, because I know how to find a team, I know how to work in a team, especially after all the mistakes, there are also already successful cases in which I earned and will earn millions, you just need not stop and It is necessary to move forward, that is what I think, and even if I speak honestly, to take all the knowledge and all the experience, even walking over heads, I think in a few years you will see a new global product from me personally!

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