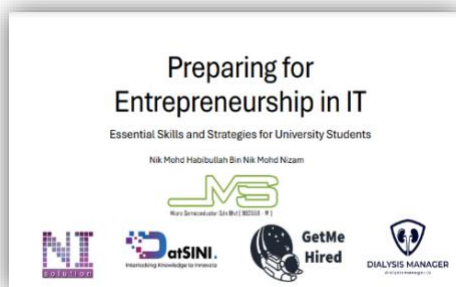# FACULTY OF COMPUTING
UTM Johor Bahru

SECP 1513: Technology Information System
Semester 01, 2024/2025

ASSIGNMENT 3

ESSENTIAL SKILLS FOR SUCCESS IN COMPUTER SCIENCE AND INDUSTRY

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1.Speaker experience: Encik Nik Mohd Habibullah

Encik Nik Mohd Habibullah bin Mohd Nizam, was a student of UTM graduate at 2005. For his first project, he has been cooperated with Library UTM and team Graphic UTM to do an Education Montage "Digital Library". After that, He started his carrier with NI Solution, then he developed in Micro Semi-Conductor Sdn.Bhd in 2014 and the latest one is DatSINI. He also has developed a few projects which is GetMe Hired and Dialysis Manager in 2019. He currently doing a project which is Tax Reassessment System under DBKL. Encik Nik advises students to focus on three major decisions in life: career choice, where to live, and selecting a life partner. He also said that student is not guarantee to get the job that is same field with your course. He advised student to find your own personality to find a job and your working style. He highlights the importance of early job exploration, participation in college activities for skill-building, and improving communication skills.

2. Speaker experience: Encik Mohd Hakimi Iqmali

Encik Mohd Hakimi Iqmali, was a student of graphics and multimedia software in UTM 2014. In 2017, he worked in Me-Tech Solution Sdn.Bhd. From 2018 to 2019 he worked as a game programmer and animator in Okakichi Sdn.Bhd. And at 2019 to 2021 he worked in UTM Research Computing. Currently, he is working in UTM Digital. He stated that skills that are needed to succeed in this field are both technical and management. For technical skills, he advised the listeners to master programming languages, version control, development tools, database structure, debugging system, security awareness, analytical and logical skills and system framework. On the management skill, he advised the listeners to master skills such as problem solving, technical skills, communication skills, knowledge of SDLC methodologies, testing and quality assurance skills, risk management, documentation and reporting and leadership and team collaboration skills.

3. Skills Required for Computer Science

The skills required for computer science include both technical and soft skills that lead to success within the field. These include mastery of programming languages in C, C++, Python, and Java. Version control systems are also a vital component of modern-day software development. It helps maintain a reliable source code repository and ensures accountability no matter who works on the code (BasuMallick, 2022). Debugging skills come in handy while finding and fixing the problem within software. Moreover, soft skills are also important for computer science. All careers in computer science require collaboration to excel at their work.

4. Skills Required for The Industry

The skills required in the industry can be separated into two categories, technical skill and Management skill. Technical skills for example are the ability to have proficiency at programming languages (ie. Python, c++), familiarity towards development tools, and the skill to debug and fix systems. Management skills are also as important. Such as problem-solving skill to stand against challenges, communication skill to reach an understanding with collaborators, knowledge of SDLC (system development life cycle) which will come in handy to handle projects, risk management, Testing and QA skill and Leadership & Team collaboration to manage a harmonious work environment.

Reflection: How you will be successful in the computer science in next four year?

Muhammad Afiq Shahir Bin Abdul Rahim

The talk made me realize that in order to be successful in this line of work, I'd have to work harder in mastering my technical skills and management skills. This would make me a more flexible worker that can be relied on a wide variety of task. I also will work more on my soft skill and my critical thinking about ways of facing problems in order to prepare myself for the industry. Lastly, I will build professional relationship by attending tech meetups, conferences and joining online communities like LinkedIn or GitHub will help me connect with industry professionals.

Muhammad Haiqal Razeeq bin Mohd Zaidi

During the talk, it made me realize to always get the knowledge in every platform. I need to level up my knowledge skill, communication skill, and every skill that required in my job scope. I also need to take opportunity to cooperate with people that have a better knowledge so that i can improve my skill and doing the best for my upcoming internship. I will work hard in every single thing in order to achive my dream to be the professional programmer.

Rafly Salim Kaaffah Abdillah

Based on the information i got from this talk, it made me realize there are more than just a specific type of skill that i need to hone in order to reach success in the industry that i am going to enter soon.

Hanis Sofiya binti Badrul Ehsan

The most important advice from the industry talk for university was about how to manage time and working in a team. I would also focus on key areas such as network architecture and cybersecurity during the next four years. I will try to learn through practical experience also through projects and internship. I will stay updated with knowledge on new technologies at workshops and on online courses on relevant topics such as ethical hacking and cloud security. My goal is to get prepared for a career of cybersecurity analyst or network engineer by overcoming challenges and making networks safer and more efficient.

Reference:

1. Spiceworks. (n.d.). What is version control? A comprehensive guide. Spiceworks. Retrieved from https://www.spiceworks.com/tech/devops/articles/what-is-version-control/