SKILLS IN UNIVERSITY AND INDUSTRY

ASSIGNMENT 3: ACADEMIC WRITING REPORT

SECP1513-02 TECHNOLOGY AND INFORMATION SYSTEM

GROUP 4

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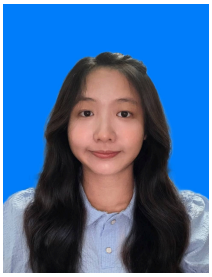
 Name: MUHAMMAD UMAR RUSYAD BIN SHAHRUL IZZAN Matric No: A24CS0283	 Name: LEONG JIA LING Matric No: A24CS0104	 Name: AZDAYANA BATRISYIA BINTI AZAHARI Matric No: A24CS0230
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Skills in University and Industry

Introduction

On 17 December 2024, SECP1513 students attended an industry talk at Bilik Kuliah 1, N28. The session featured two distinguished speakers who shared their professional journeys and provided valuable insights to support students in navigating careers within the information technology (IT) sector.

Speakers' Experiences

The first speaker, Mr. Mohd Hakimi Iqmall, currently serves as an Information Technology Officer at UTM Digital. He detailed his progression from a graduate in graphic multimedia to a leader in project management. His career began in 2017 at ME-Tech Solution Sdn. Bhd., followed by a role as a game programmer at Okakichi Sdn. Bhd. from 2018 to 2019. Subsequently, he worked as a system programmer at UTM Research Computing from 2019 to 2021 before joining UTM Digital in 2021. He emphasized the importance of technical and managerial skills for computer science students to excel in the information technology field.

The second speaker, Mr. Nik Mohd Habibullah, is the Chief Executive Officer of Micro Semiconductor Sdn. Bhd. He began his career with NI Solutions but transitioned to entrepreneurship due to government policies and project restrictions. In 2019, he co-founded *getmehired.io* and *dialysis.io*. Reflecting on these ventures, he remarked, "That's what we did for a living during the Covid-19 era". He also emphasized that his active involvement in various college activities played a significant role in shaping him into a successful entrepreneur.

Skills Required by Computer Science

To meet the dynamic demands of the industry, the possession of technical skills by entry-level IT professionals is considered essential. It has been observed that technical skills are the most desired in new hires (Cheryl.L, et al., 2009). These skills are understood to include operating systems, databases, web development languages, Systems Development Life Cycle (SDLC) methodologies and programming languages. Mastering programming languages such as C++ equips graduates to solve complex problems and develop software solutions. These skills, combined with awareness of emerging trends like cloud computing and artificial intelligence, prepare graduates for diverse roles and ensure they remain competitive in the evolving IT landscape.

Skills Required by Industry

IT project success requires not only problem-solving skills but also technical knowledge, teamwork, communication, and leadership. These skills can bridge the gap between developers and end users by addressing business concerns and offering workable solutions. Clear

communication ensures understanding between parties, and technical cooperation promotes agreement on design and viability. When managers are familiar with the distinct SDLC procedures, they can easily merge workflows like Waterfall and Agile. Thorough documentation improves clarity and alignment, and active risk management brings acuity problem forecasting. Managers guarantee systems function as expected by ensuring the quality through monitoring and testing. Lastly, even in a changeable IT environment with short turnaround times, teams keep motivated, coordinated, and productive when there is strong collaboration and competent leadership.

Communication skills are also very essential for success in university as well as industry. In university, communication skills can allow for effective collaboration in group projects as students can learn to present their ideas clearly, be articulate, as well as critical-thinking among other benefits. These skills are key factors to being successful in the real world industry as professionals are expected to convey technical concepts to collaborators and audiences as well as clients which makes them equally important in the industry (Cheryl.L et al., 2009). In short, adaptability in communication as well as courage in stepping up to applying for new positions that challenge those skills are key traits for thriving in both academic and professional environments.

Conclusion

In conclusion, both the talk provided valuable insights into skills required for academic success and career readiness. Having basic technical skills required for computer science, management capabilities, and communication ability are critical to thrive in both university and industry environments. Developing a well-rounded ability and committing to lifelong learning (Mohd, et al., 2012), students and professionals can easily, and confidently transition between academia and industry, achieving their goals with confidence and resilience.

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

TAY XIN YING (A24CS0200)
To succeed in the computer science field over the next four years, emphasis will be placed on enhancing technical and managerial skills, as emphasized by the speaker, Mr. Hakimi. Efforts will be made to adapt to the evolving demands of the industry, and updates on emerging technologies will be consistently sought to ensure knowledge remains relevant and current. Additionally, strong academic performance will be maintained, and the knowledge imparted by lecturers will be diligently understood. Through these efforts, a solid foundation for a successful career in the computer science field will be built.

LEONG JIA LING (A24CS0104)
The term "successful" is defined as having no regret for the passing performance throughout the degree journey. A strong academic foundation will be built, and practical experience in the computer science field will be increased by participating in workshops, seminars, and competitions to enhance professionality. By maintaining discipline, curiosity, and proactivity, goals are believed to be achievable, ensuring readiness to contribute meaningfully to the tech industry.

AZDAYANA BATRISYIA BINTI AZAHARI (A24CS0230)
Over the next four years, efforts will be made to refine all necessary skills to ensure career readiness. A strong academic background will be prioritised as the utmost focus during studies. Furthermore, engagement with societies and clubs will be pursued to build connections and networks. A balance between academic and practical aspects will be maintained to create a promising and successful career in computer science.

NUR ALIAH IZZATI BINTI AZHARI (A24CS0154)
To succeed in the computer science industry over the next four years, a focus will be placed on strengthening technical skills and building a strong foundation. Academic excellence will be prioritized while professional connections will be expanded through participation in internships, hackathons, and industry-related programs. The journeys of Mr. Hakimi and Mr. Nik serve as inspiration, emphasizing the importance of beginning at entry-level positions and gaining valuable experience over time.

MUHAMMAD UMAR RUSYAD BIN SHAHRUL IZZAN (A24CS0283)
Focusing on building a strong foundation in the basics of computer science which includes coding languages like C++ as well as knowledge about the data engineering industry is essential for success. Alongside that, another factor is partaking in events like hackathons to ensure experience and knowledge about collaborations, teamwork and creativity. With this, a balanced environment for both academically and also in real-life work can be established.

References

Cheryl L. Aasheim, Lixin Li, Susan Williams (2009). Knowledge and Skill Requirements for Entry-Level Information Technology Workers: A Comparison of Industry and Academia. *Journal of Information Systems Education, Vol. 20(3), 349 - 356.*

Mohd Adam Suhaimi, Muhammad Rabiul Hasan, Husnayati Hussin and Asadullah Shah (2012). Information and communication technology workforce employability in Malaysia. *Campus-Wide Information Systems Vol. 29 No. 2, 2012, 80 - 89.*