

Faculty of Computing, Universiti Teknologi Malaysia

SECP1513-01: **TEKNOLOGI DAN SISTEM MAKLUMAT** (**TECHNOLOGY AND INFORMATION SYSTEM**)

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Title: Skills in University and Industry

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Introduction

This report examines the important skills and knowledge required in both university and industry to ensure the success in the field of computer science. The session featured experienced speakers, En Mohd Hakimi Iqmall and inspiring entrepreneur, En Nik Mohd Habibullah ,who shared their insight in job hunting, skills that are highly demanded by the industry, resume preparation and steps to get involved in tech business. The keyword that has been highlighted by the speakers are very important for student when they become the fresh graduates. The importance are included mainly in emphasizing skills such as programming and coding, focus on problem solving and algorithm, communication and well-presented individually based on resume and cv. The entrepreneur speaker also provided the steps on starting the business in Information Technology , and showcasing the products or apps that are valuable in market opportunities. This report are emphasizing more about the information that has been shared by the speakers and it discusses how these insights or information can influence personal growth in the years ahead especially among the fresh graduates.

Speaker Experience

In the first speaker, Encik Hakimi Iqmall has rich experience in system development, project management and multimedia applications. He has a strong educational background in computer science (Graphics & Multimedia) from Universiti Teknologi Malaysia. Not only that, he has contributed to innovative project such as RADIS 4.0, Payroll 2.0 and make a game called Kingdom Ran in roles programmer and responsibility game animator. Encik Hakimi Iqmall and his teammate technical expertise includes coding, API integration and database optimization while their leadership skills are evident in managing cross-functional teams and ensuring successful project execution. The professional has shown adaptability across different industries, demonstrating a balanced combination of technology and management skills that deliver high-quality solutions in the technology sector. In the second speaker, Encik Nik Mohd Habibullah Bin Nik Mohd Nizam has a rich background in entrepreneurship and IT and combining technical expertise with creative problem-solving. He is graduate in Universiti Teknologi Malaysia and he secured assets and employment while gaining recognition for his video montage projects for Malaysian students. After that, He is starting from N.I solution then in company Micro Semiconductor Sdh Bhd and GetMeHired.

The speaker highlighted the importance of preparing a professional resume tailored to industry standards, highlighting the main skills and achievements. Furthermore, the resume should be Application Tracking System's friendly in order for the company to proceed looking up for your information to the interview. The best way to do is use 3C approach for the resume, C for concise, clean and customized that means it is should not be longer than 1 page, make it easier to read to white space, and tailor your resume to the job you are applying for. The review of your work experience are very important and the speakers are highly suggested for the students to participate in internships not only during the study duration but outside of the academic schedule. By having more experiences in industry, it would highly guarantee that the students have higher chances to secure in industry. Besides that, a lot of young graduates make a common mistake in job hunting such as didn't join a lot of activities during the study, students should make up some time to participate in activities in order to shows your value activeness in the resume. Furthermore, students apply for jobs after the study, the speakers suggested that students in 3rd year to start apply for job as early as possible as the competition gets tougher by days, and that case would make sense for students to actively participate during their 1st and 2nd year in university. Lastly, student constrain themselves from exploring. The degree should empower students to pursue opportunities, those who are still in the comfort zone will missing out invaluable experiences and growth also locking one's true potential and achieving success in university and industry.

Key Skills for IT and Software Development

These are highly in-demand technical and managerial talents: software development and information technology. In technical terms, one should have version control systems experience, including Github and Gitlab, at the same time being proficient in programming languages, namely, C, C++, C#, Python, Java, and PHP. Other necessities are vast understanding and experience with databases, table creation, primary key, and schema creation; among the development tools, there is sought experience working with Visual Studio, VSCode, or Sublime, but the most important factor is to be serious about debugging and security expertise in SQL injection protection and cross-site scripting security, analytical mindset, including experience with any of the following:.NET/Laravel Yii. In particular, communication and problem-solving for stakeholder and developer management, besides knowledge of various SDLC methodologies, such as Agile and DevOps, ensure that the processes are well-organized. Testing and quality assurance, risk management, documentation, and leadership have also been mentioned to bring clarity, collaboration, and ultimately project success. Individually too, these skills form a very great basis for success within the technology sector.

Websites speakers developed

To begin with, Encik Mohd Hakimi Iqmall, our first speaker, worked at Okakichi Sdn Bhd as a game programmer in a game called Kingdom Ran in 2018. To be more specific, he is one of the game animators. After that, in 2019 until 2021, he worked at UTM Research Computing as system programmer. He and his team developed Research and Development Information System 4.0 (RADIS 4.0) and ICESys which stands for Industry and Community Engagement System. From 2021 to 2024, he is a project manager or system analyst at UTM Digital. The projects that he developed are Kenaikan Gaji Tahunan (KGT), Clinic Panel System, Welfare Services System, Payroll 2.0, SSPA System that took them only 3 weeks to make and Integrity system. Moving on to our second speaker, Encik Nik Mohd Habibullah, he developed getmehired.io, a website where fresh graduates can visit to make a good CV to make it easier for companies to hire them. There are four categories of CV that they can choose and each of them come with different prices and benefits.

How you started business

To start a business, Encik Nik Mohd Habibullah said we need to know what kind of things we want to sell, it can be services, product or any other type of business. Then, we need to look out for the market size. He said the market size can be big or small depends on the clients demands. For instance, the getmehired io is a large-scale market size because of the collaboration between the company and universities. Then, we need to know what kind of technologies to use to meet the demand. This is crucial because we want to match what the client wants based on the description they gave. He also said networks between other companies and the timeline to develop as well as producing the product or service are one of the important things to take note. Beside networks and timeline, the sustainability of the product or services are also important. Not only that, he also mentions to know the financial status and the risk of develop the product or service. On top of that, he elaborate on the business application flow. He stated IRPA Method is the best way to describe a business flow. The IRPA method stands for Identify, Research, Prepare and Apply.

Reflection

Mohamad Farhan bin Mohamad Hariri A24CS0114

In order for me to be successful in computer science for the next four years, I need to concentrate and focused more on the foundation of computer languages. This mainly because I have a higher chance to get hired by a company based on the skills I honed. I also need to take part in projects, internships, and coding exercises to enhances my soft skills. I also need to keep updated in technology and participate actively in communities and professional networks. Last but not least, I must focus solely on my goals and need to be committed and flexible on my work in achieving the goal.

Nur Anisah Solehah binti Mohd Hamim A24CS0157

This industry talk has provided me a valuable insights that reshaped my understanding in preparing career and skills that are required in IT field. This has motivated me to participate in university activities to ensure my resume would allign with industry standards. In the next 4 years , I would plan myself to develop technical expertise, improve communication skills and expose myself to a networking events. By that , I would hope it would guarantee my success in IT field.

Allisya Maisarah binti Suraizal A24CS0044

To be succeed in computer science field in the next four years, I need to focus more on learning the basics like programming and algorithm. I also need to be more brave to experience hands on activity by creating projects and exploring more tools. Stay curious about the latest trends in technology since the world is getting more advance and new things will occurred. I also need to join more activities regarding computer science to get more knowledge tha can be use in te future.

Mindy Ng Yu Fang A24CS0267

From this speech, one must approach it with a growth mindset. As a computer science student must try on challenging projects, learning from failures and also networking with professionals can lead to overall development. By improving technical mastery with strategic planning and continuous learning, it is possible to achieve success in this dynamic field of computer science.

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