INDUSTRIAL TALK

SKILLS *in* University & Industry

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GROUP OF MEMBERS ;
MOHAMAD AMIRUL ASHRAF BIN ANUAR
MUHAMMAD NURAZWAN ARIFF BIN ABDUL WAHID
NURUL NAZIRA BINTI NADRI
NUR FATEHAH BINTI AZMAN
NURHAYATI BINTI SHARIF

EXPERIENCES

From speaker Mr. Mohd Hakimi Iqmall currently holds the position of Project Manager / System Analyst at UTM. Based on his experience, in 2017 he did internship at ME-TECH Solution Sdn. Bhd. In the company he has built a TLDM ship simulator system (3D modelar / animation part). In 2018, he went to the Kingdom Ran company that required him to click boost every evening on the system and at night the system game will down @ server down due to the boost earlier. Also 2018 to 2019 he worked at Okakichi Sdn Bhd located in Johor Bharu after he graduated from UTM. The company made the game and he was only for 1 year at that company. After that in 2019 - 2021, he has been working at UTM as UTM Research Computing (System Programmer) who is currently managing various projects including Radis 4.0 Project, ICESYS Project. In 2021 to 2024 Walfare Service System Project, Clinical Panel System, Annual Salary Increase (KGT), Payroll 2.0, SSPA System (*Sistem Saraan Perkhidmatan Awam*). For the SSPA project, he was only given a period of 3 weeks to complete the project and required a *Pekeliling JPA* and latest Integrity System project.

The next speaker is Nik Mohd Habibullah bin Nik Mohd Nizam, graduated from UTM in 2005. He did an internship at the UTM library and in his final year he made project for the library and launched the *Sistem Pengkatalogan UTM*. When he was in 3rd year studying at UTM, he was offered to make a montage for the Launch of the Digital Library. He was chosen because of the montage of the *Pelancaran Amal Malaysia* that he himself had made. After graduating from UTM, he worked as a Special Officer at the Ministry of Higher Education and then within one year of working at KPM, he went to UTM and held the position of RO (Research Officer). After that, he has developed a new company, which he got the company from his friend. After the establishment of NI Solution, the company started to develop to get more projects from the government. Then he developed a new company which is Micro Semi Conductor Sdn Bhd, a hardware development company located in KL and the latest is that the system built is DatSINI in collaboration with UKM. DatSINI has successfully produced GetMe Hired and Dialysis Manager system. In 2019 to 2020, DatSINI introduced the GetMe Hired system in collaboration with Hazwani, a Management course student. GetMe Hired is a platform to help new students get a job after finishing their studies. GetMe Hired is a carrier development platform, for students to get a CV. In 2014, he launched the new system Dialysis Manager, which was hit by severe flooding in Kelantan and with that he has introduced a new device in a router box using battery, SIM card, wifi and so on. The device is turned on using a powerbank. The Dialysis manager system was initially rejected and now more than 100 centers have used the Dialysis Manager system. Right now he is creating a *Sistem Pengecualian Cukai (DBKL)* which is more challenging because it involves the financial system.

BASIC SKILLS REQUIRED FOR COMPUTER SCIENCE AND INDUSTRY

Hard Skills for Computer Science is Coding/Programming language that is need understanding variety different language from different type application such as Phyton, C++, Java and etc. Then Technical writing and mathematical which required to solve and handle project that mostly rely on mathematics data such as algebra, calculus, data and statistics. The last skills is build software development where creating advance and complex software system and understanding software development methodologies (Visual Studio and VSCode), version control system (Github and Gitlab), testing and debugging techniques. Soft Skills for Computer Science is problem-solving that essential part in computer science for working. It's important on solving issue, understanding problem and able to fix it. Then they need Collaboration and teamwork where working as a team required discipline and proper understanding on the task or project. With the proper teamwork, any problem can be solving much quicker, share all knowledge together and growth as a person together. Communication also skills where it's important to clarify with other especially with working outside of IT team. A good communication is essential to explain and share the issue or idea together with other. Skills Required by Industry is Management Skills which that problem solving, critical in the planning and analysis phases to assess business needs and identify the best system solutions. Technical Skills also essential in the design, development and testing phases to collaborate with developers and assess technical feasibility. Communication Skills is critical in the requirement gathering, planning and implementation phases to bridge the gap between stakeholders, developers and end-users. Skills Knowledge of SDLC Methodologies where guides participation in different types of SDLC approaches (Waterfall, Agile, KanBan, DevOps, etc). Next is testing and quality assurance (QA) skills where essential during the testing phase to validate system performance, then risk management skills also important during the design implementation phases to anticipate potential issues. The documentation and reporting where required throughout the lifecycle to ensue clarity and maintain project alignment. Leadership and TEAM Collaboration skills is important throughout all phases to coordinate and align team effort. Technical Skills is Programming Language such as C, C+, C#, Python, Java, Php. Version Control such as Github ,Gitlab. Development Tools such as Visual Studio, Vscode, Sublime. Database Structure such as Tables, Column, Primary Key, Indexes, Relationship, Schemas, Constraints. Debugging System such as Indentifying And Fixing Issues. Security Awareness such as Sql Injection, Cross-Site Scripting(Xss),Cross-Site Request Forgery(Csrf). Analytical & Logical Skills such as Strong Grasp Of Algorithms And Data Structures and System Framework such as Net, Laravel, Yii.

HOW SUCCESSFUL IN THE COMPUTER SCIENCE IN NEXT FOUR YEAR

There is need to be brave to challenge yourself. Which life begins at the end of your comfort zone and understanding the concept of software/programming and be great in fundamentals example need to explore, learn and involve in Blockchain or AI. Learn Softskill also the point for begin from now and its a lifetime learning process to be one step ahead of everyone else. There you need to take action now and take a step closer to getting your dream job. Furthermore need to know yourself which start from knowing ourself, especially strength and career goals for successful. For now search job application in any online job search where learning the preparation to build CV and portfolio and job interview is ready for interviews and how to handle rejection. Job survival also important to stay relevant in industry and how to jump for next company. Don't limit yourself based in your bachelor's degree. If you want to make change and step into new field, do whatever it takes to get there. Knowing how to position yourself in job. Your degree should empower you to pursue opportunities. Make up some time to participate in activities. Start as early as possible. The competition gets tougher by days. Level up and improve your skills. Be proud to be Neelofar's junior.