

SYSTEM DEVELOPMENT



AN INSIGHTFUL INDUSTRIAL TALK 2 BY MS. QISTINA
BATRISYIA BINTI AZMAN SHAH

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PREPARED BY

Group 3: Bernice, Iman,
Liana, Phavanee, Seow Yen
Zhi

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DESCRIPTION

System development in the context of analytics, involves creating and enhancing systems that facilitate the entire analytics process, from data collection to generating actionable insights. The organized examination of data to gain insightful conclusions and make reasonable choices is referred to as analytics. It involves searching over a sizable amount of data to find trends, patterns, correlations, and other important information. Numerous industries, including business, finance, healthcare, sports, transportation, and more, can benefit from the application of analytics. There are some processes that are used in the context of analytics such as collecting database, collecting external data for example source data from government and collecting data from social media. After collecting data, it will go through some process to see, find trends, patterns and correlation of the data. The process includes data collection, data transformation, analytics and modeling data, and prediction and visualization of the data. This will produce the strategic tactical and operational data.

HISTORY

In 2016, the process of pursuing a career in the analytics sector began. From 2016 to 2020, Miss Qistina will be enrolled in UTM's Bachelor of Computer Science (Data Engineering) program. She also obtained industrial training at TMONE in 2019 and 2020 as a Social Media Data Analyst while pursuing her education. She was able to graduate with honors although there were ups and downs during her 4 years of studies. In 2019, she went for industrial training and she is lucky enough to do their industry training with TMONE. After earning her degree from UTM, she worked for TMONE from 2020 to 2022 as a data engineer and social media analyst. Lastly, she is currently an Analytics Delivery, AI Operation at Credence.

Telekom Malaysia Berhad (TM) launched Credence at 6 July 2022, a new cloud and digital services company focused on expanding the capabilities of enterprises and the public sector in their digital transformation journey.

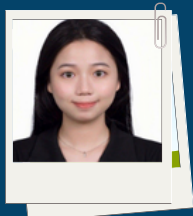
TECHNOLOGY AND TOOL USE IN SYSTEM DEVELOPMENT

There are many technologies and tools that are used in Credence's system. These technologies and tools are basically categorized as four main types, database or known as OLAP, visualization tools, ETL/ELT and programming language. Let us look into the database and OLAP, the main technologies used are PostgreSQL, ClickHouse and Druid. Data analysts and data engineers are those who apply these technologies widely in their job scope. For the visualization tools, Credence's system uses Table2u, PowerBI, Metabase and Superset. These visualization tools can assist BI developers to visualize the analyzed data to the customers. Besides, there are two main tools used in ETL/ELT which are Airflow and Spark. The programming languages applied in Credence's system are SQL, Python and Bash Syntax. All careers in Credence require the skill to master all of these languages especially SQL in Credence.



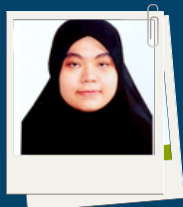
REFLECTION

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As a computing student aspiring to enter the field, Miss Qistina's industrial talk on the prospects for systems development left an indelible mark on my perspective. Her insights illuminate the inherent nature of continuous learning and adaptation in the IT industry. The importance of evolving to meet the ever-changing technology landscape resonates with me. Her emphasis on the critical role of communication skills resonated deeply, emphasizing the fusion of technical prowess with the ability to effectively understand and express client needs. Her experience transitioning into an analytics delivery team highlighted the need for resilience and adaptability in the field. It's not just about acquiring skills, it's about continually honing skills, addressing weaknesses, and embracing collaboration. Her advice encapsulates the essence of a successful systems developer: a combination of technical acumen, a desire to learn, skilled communication, and a deep commitment to self-improvement. Miss Qistina's narrative serves as a guiding light, outlining the various aspects necessary to achieve a career in systems development in an ever-evolving IT environment.

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I am finding myself thinking back on the information and thoughts that were provided during Miss Qistina's industrial discussion. Miss Qistina's in-depth discussion of numerous aspects of system development, including the challenges encountered and unique solutions implemented, has increased my spirit and knowledge about this field. Furthermore, listening about the speaker's experiences and industry methods has motivated me to investigate and go deeper into specific aspects of system development. This talk not only improved my understanding but also ignited my enthusiasm for this field. Moving forward, I am inspired to apply the advice and tips that given by Miss Qistina into my academic and professional endeavors, continually seeking opportunities to learn and grow within the dynamic arena of system development

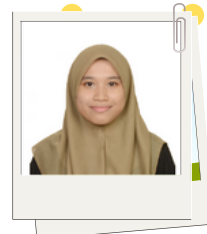
05



After attending the industrial talk given by Miss Qistina, I am inspired and have a clearer picture about the workplace culture as a system developer in the future as a computing student. In this future industry related to IT, it is a continuous learning and developing process. To be a system developer in the next four years, we need to have the eagerness to learn and explore new things to be able to cope with the environment that changes daily. As we are in the role of system developers, we need to always polish our skills in using the technology. Communication is also vital as system developers will always need to communicate in our team and with the customer in the future. Good communication skills are essential to understand customer's needs and convey their requirements to our technician team in future. System developers always need to have the sense of catching up to the trend, learning new technology to adapt with the emerging environment of IT related industries.

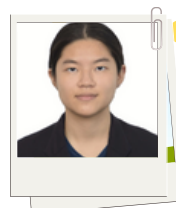
• BERNICE LOU MIN YUN (A23CS0056)
<https://github.com/bernicelou>
• LIANA DARWISYAH BINTI AZMAN (A23CS0102)
<https://github.com/lianadarwisyah>
• NUR IMAN BINTI MOHAMAD ZAHARI (A23CS0158)
<https://github.com/ImanZahari>
• PHAVANEE KATRIYA PHON-AMNUAISUK (A23CS0170)
<https://github.com/phavanee>
• SEOW YEN ZHI (A23CS0177)
<https://github.com/Seowyenzhi>

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Being at the industrial talk given by Miss Qistina changed my life and gave me a fresh outlook on the technology industry. A useful link between theoretical understanding and real-world applications was made possible by Miss Qistina experience and practical insights into system development. I was demonstrated by complex problem-solving abilities and inventiveness needed in this industry. In addition to enhancing my comprehension of the difficulties in creating reliable systems, the talk caught my interest in learning more about cutting-edge technologies. After reading about the Miss Qistina difficulties and the creative solutions she used, I'm motivated to approach problem-solving with more dynamism and adaptability. This experience has reaffirmed my commitment to continuous learning and has motivated me to actively seek opportunities to apply these insights in both my academic and future professional endeavors.

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To achieve a career in system development, Ms. Qistina Azam, a former UTM student explains her journey towards working in an analytics delivery team under Credence. She advises aspiring system developers to not stop learning and picking up new skills to develop themselves. One should keep brushing up on their weaker aspects, be it technical or theoretical. Doing this shows adaptability on your part. Even though there are many careers in the field of analytics, to be a system developer, one should be eager to learn and explore new things, learn to work in teams, build confidence and never give up. Overall, the talk was inspiring and gave me a clearer picture of how to become a system developer.