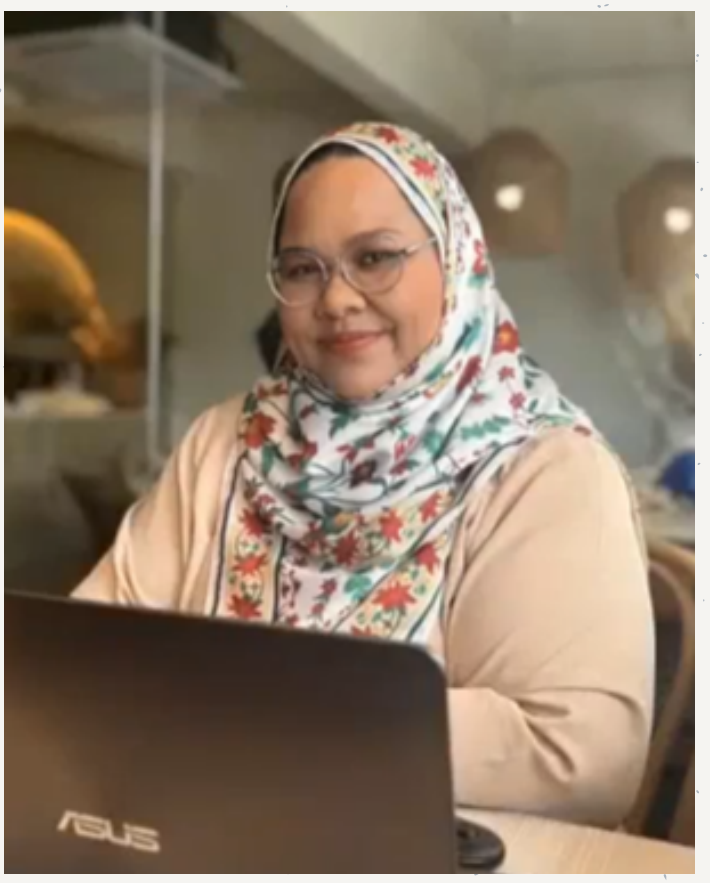
INDUSTRY TALK 2 REPORT

SYSTEM DEVELOPMENT @ CREDENCE (TM SUBSIDIARY)



Speaker:

Ms.Qistina Batrisyia Binti Azman Shah

Topics in Report:

- **Description of system development**
- **History**
- **Technology and tool use in system development**
- **Reflection**

Subject:

Technology and Information System (SECP1513)

Section 5 Group 6 Member

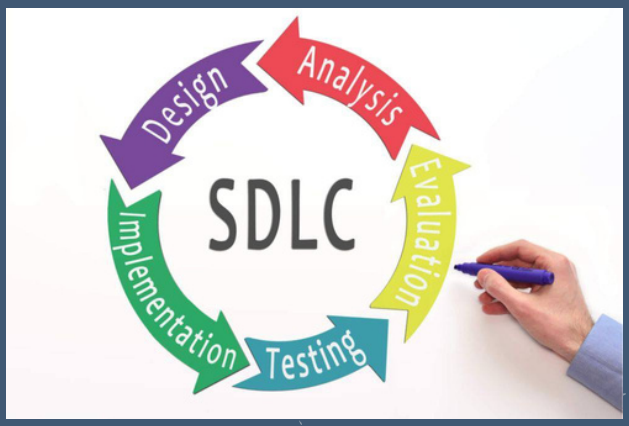
Kok Wei Yee (A23CS0094)

Adam Iskandar Bin Norsham (A22EC8025)

Mavis Lim Hui Qing (A23CS0110)

Yap Kar Ying (A23CS0200)

28 December 2023



DESCRIPTION OF SYSTEM DEVELOPMENT

System development is the process of building and creating a new product. It could be developing software, hardware, or a computer. It follows a cycle of activities called the System Development Life Cycle (SDLC), which includes planning, analyzing, designing, implementing, and maintaining a product. The first phase, which is planning, is a process through which the developers identify the problems and needs of the client. The second phase is analysis. In this phase, the developers will determine the most suitable solution to the problem after evaluating the requirements and needs of the client. The next phase would be design; this is where the developers would often use a flowchart to identify the flow of the system and to develop a prototype for the system that they are developing. This can help the team visualize the look of the actual product that they are building so that it is easier to implement what they need to do in the future. The fourth phase, which is implementation, is where the developers utilize the tools and technology they have to build the system. This is where coding is being done to implement the system. Testing is also done in order to make sure that the system runs without errors. Lastly, maintenance would be done from time to time to fix bugs and improve the system to provide a better user experience. Then, it might go back to the first phase again and keep recycling to upgrade and improve the whole system.

TECHNOLOGY AND TOOLS

The common technologies utilized by Credence in their daily work can be categorized into four main groups: Database/OLAP, visualization tools, ELT/ETL, and programming languages. In the realm of databases, PostgresSQL, Clickhouse and Druid are applied. These databases serve as organized data collections managed by a Database Management System (DBMS), facilitating data analysis and interaction with end-users and applications. A visualization tool is a software application or platform that enables users to create graphical representations of data. For visualization, Credence utilizes Tableau and PowerBI, while recommending alternatives like Metabase and Superset for customers with budget constraints. Extraction, Load and Transform (ELT) techniques involve extracting raw data from sources, storing it in a data warehouse, and transforming it for endstream users, while ELT change the order. Credence use Airflow and Spark for ELT/ETL processes. SQL and Python emerge as pivotal programming languages, demanding robust skills for effective work at Credence. Data engineers also require proficiency in Bash Syntax to enhance efficiency in automating customer data, managing files and directories, and overseeing various system-level operations. In addition, system developor have opportunities to utilize cloud platforms like AWS (Amazon Web Services), VMware and Microsoft Azure.

28 December 2023

HISTORY

On the 6th of July 2022, Telekom Malaysia Berhad (TM) launched and powered Credence, a cloud and digital services company. Credence also announced its key partnerships with VMware, AWS, and Huawei.

Being led by Krish Datta, he explained that Credence will provide capabilities from tech infrastructure to business insights, cloud advisory, IT landscape migration, SaaS, managed services as well as analytics and insights. Such is offered to outside organizations to embark on their digital journey with better predictability, lesser concern, and disruption while choosing the best tech solutions that suit their needs and priorities, enabling them to focus on their core business.

Credence, hopes to nurture a pipeline of next-generation tech and digital talents, and equip Malaysians for a digital future by upskilling them with digital capabilities, and providing them access to the right data and tools. This will not only benefit organizations but our collective progress as a nation, solidifying our Digital Malaysia aspirations

REFLECTION

KOK WEI YEE :

Through my exploration of Credence Company and insights into analytics, I have gained a comprehensive understanding of the role analytics plays in decision-making. I've learned the importance of cooperation and interaction of different career in analytic industry delivering successful projects. My exposure to diverse technologies and tools, crucial for a system developer, has heightened my awareness of the dynamic landscape of this field. As I envision my probability in future as a system developer, I am inspired by the prospect of solving complex problems, contributing to innovative solutions and staying at the forefront of technological advancements. I will stay updated with the latest information on my learning journey and engage in internships to gain firsthand experience in real-world work. With a passion for system development and a proactive mindset, I look forward to learn hard skills and embracing opportunities for growth.

MAVIS LIM HUI QING :

As a first-year student, I'll always self-study to gain extra knowledge regarding system development. I'll learn different programming languages that are useful for a system developer and also always keep myself updated with the latest technology. For example, I would learn through websites such as Coursera to get certificates that are authorized to make sure that my skills can be validated when I apply for jobs in my future career. Besides that, I will practice my soft skills, such as communication skills and leadership skills, by attending camps and webinars to learn from those who are more experienced and improve myself. I would also look for internships so that I can learn more actual hands-on knowledge and gain more experience so that I can adapt more easily to the working environment after I have graduated.

ADAM ISKANDAR BIN NORSHAM :

After a thorough explanation from Ms.Qistina Batrisyia Binti Azman Shah and reading through news articles and websites, Credence is an example of how technology evolves as well as the role of analysts. The growing search for analysts proves the points presented by the speaker as analysts are versatile and help in providing insights for strategic, tactical, and operational means. This has brought forth the realization to broaden my skill set in analysis skills and also the need for me to expose myself to multiple tools and projects. With this in mind, I have more reason to push myself further in this world of technology.

YAP KAR YING :

To become a system developer, I plan to start by gaining basic knowledge and understanding of system development to ensure a strong foundation. It is also very important to keep updated on the technology trend as it evolves rapidly, if we fail to keep pace with it, will be challenging for us to adapt to the changes. Besides, developing strong communication and collaboration skills is also essential to being a system developer. Building a professional network with peers can provide opportunities for us to improve our soft skills and gain more valuable experience in the system development. Moreover, I will also attend some online courses or talks to let myself be exposed to more details and information about becoming a successful system developer and further enhance my knowledge and skills.