INDUSTRIAL TALK 2: SYSTEM DEVELOPMENT @ CREDENCE (TM SUBSIDIARY) REPORT

DESCRIPTION OF THE SYSTEM DEVELOPMENT

HISTORY

TECHNOLOGY AND TOOL USE IN CREDENCE'S SYSTEM DEVELOPMENT

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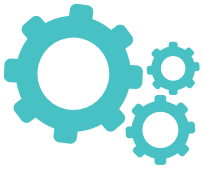
DESCRIPTION OF THE SYSTEM DEVELOPMENT

System Development is a process of creating a new software application or program and the process can be described by a well-known concept which is Systems Development Life Cycle (SDLC). A basic SDLC can be divided into 5 phases: 1. Planning, 2. Analysis, 3. Design, 4. Implementation and 5. Maintenance. The first phase, Planning is the phase that developers identify customer's needs and gather information to do a feasibility study to determine costs estimation, resources required, pros and cons of creating the new system. The second phase,

Analysis is the phase that developers analysing the development goals, breaking down problems into pieces, define what needs to be created to meet the customer's requirements and thus create a blueprint or a model of the system. The third phase, Design is the phase that developers specify the structure of the system based on the blueprint created in the previous phase, providing sufficient details of the system including pseudo-code, screen layouts so developers can move on to the actual code writing. In the fourth phase, Implementation is when the actual source code for the system is written and the system is tested by individual or customer to ensure that the system is functioning correctly.

The final phase, Maintenance including bug fixing during testing process and after implemented based on the feedback from users. Maintenance also including updates of the systems to enhance the system's performance.



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HISTORY

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Established in 1984, Telekom Malaysia Berhad (TM) is a telecommunications company based in Malaysia. Under the Telecommunications Service (Successor Company) Act 1985, a corporatised Syarikat Telekom Malaysia (STM) was founded on January 1, 1987. After changing its name to Telekom Malaysia (TM), STM introduced services like Telestock, a dial-up tool for accessing current share prices, Malaysia Direct for international travel, and TELECAJ, a billing option for frequent travellers. In addition, they also introduced Centrex and video conferencing across the country in 1992.

Following that, the TMB has also launched Streamyx in 2001 and in 2003, TMTOUCH merged with Celcom. Two years later, they introduced the nation's first 3G service. The first HSBB service in the country, unifi, was presented by TM on March 24, 2010. In 2007, TM International Berhad (TMI) was established to oversee TM's local mobile services. TM One is then introduced as an ICT and data services unit in August 2017.

In January 2018, TM launched unifi Mobile brand. On July 6, 2022, Telekom Malaysia (TM) introduced Credence. Credence is a brand-new provider of cloud and digital services with the goal of assisting the public sector and businesses in their digital transformation efforts. Krish Datta, a seasoned technology executive who joined TM in late 2021 is the leader of Credence, who was there to help shape its new digital services division. In general, Credence will offer a range of capabilities, including managed services, cloud advisory, IT landscape migration, SaaS, tech infrastructure, business insights, and analytics.

TECHNOLOGY AND TOOL USE IN CREDENCE'S SYSTEM DEVELOPMENT

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Credence's system development provides a range of database management tools such as PostgresSQL, ClickHouse, and Druid. Each of these tools has its unique strengths and is capable of handling different types of data management requirements. PostgresSQL is an open-source relational database management system that is highly customizable and scalable, while ClickHouse is a column-oriented database management system that is best suited for handling large volumes of data.

Druid is a distributed data store that is designed for handling real-time data streams. When it comes to data visualization, Tableau and PowerBI are the widely used tools, but Credence's system development also provides viable open-source options such as Metabase and Superset for businesses working on a smaller budget. ETL (Extract, Transform, Load), Airflow is the most popular tool used. It enables businesses to automate their data workflows, reducing the time and effort required for data processing. Credence's system development recommends that businesses learn essential programming languages such as SQL and Python, which are crucial for data management tasks. Credence's system development also provides unrelated software such as Cloud Azure and IBM Ware. GitHub is another popular tool that businesses can use for version control and collaboration when working on projects.

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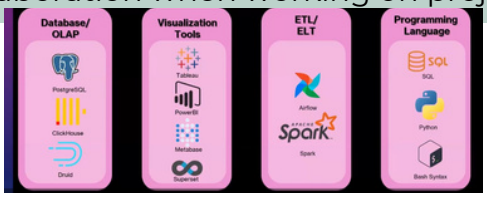

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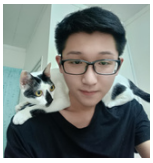
REFLECTIONS: HOW YOU WILL BE A SYSTEM DEVELOPER IN NEXT FOUR YEAR?



BENJAMIN CHEW JUN JIE

To be a system developer, I will try to engage myself more in the industrial activities related to system development whenever I have chance in the next four years to obtain useful insights. Besides that, I will stay updated to emerging technologies and try to adapt to them. I would also like to take part in projects related to system development in the next four years to gain actual developing experiences.

SHAJANNATUL IMAN BT ABDUL MAJID

As a system developer in the future, I will apply continuous learning in my daily life as technology nowadays is developing at a fast pace, and it will be essential for me to stay updated with new programming languages, frameworks, and techniques. In addition, I will also stay vigilant on cybersecurity measures and incorporate strong security procedures and apply it to my application in the future because the more the technology evolves, the security threats will also increase considerably. Moreover, by getting familiar with cloud computing platforms and services, it might help me expand my skills more as a system developer as cloud computing might become even more crucial in the future.

CHUAH HUI WEN

As a system developer in next four years, I will continue to learn new technology to improve myself. One of the technologies that I wanted to learn in next four years is Blockchain Technology. Nowadays, with the rise of Blockchain Technology, Malaysia needs software engineers that can create blockchain-based software to handle and regulate its usage. Hence, I would like to be a blockchain-based system developer in the next four year.

My plan as a system developer in the next four years is to excel academically, gain practical experience through tech projects and internships, and integrate my unrelated knowledge to optimize my workflow and increase efficiency.

FAISAL ABDULHAKIM KHALED BAKOUBAN

RIFQI AHMAD MUSYAFFA

As long as I study in the field, and understand the relevant topics I will be able to use my experience and newly attained knowledge to push myself higher and higher.