UTM
UNIVERSITI TEKNOLOGI MALAYSIA

INDUSTRY TALK 2:
SYSTEM DEVELOPMENT CREDENCE

TM SUBSIDIARY

ABOUT CREDENCE'S
- DESCRIPTION OF SYSTEM DEVELOPMENT
- HISTORY
- TECHNOLOGY
- TOOL USED

MS. QISTINA BATRISYIA BINTI AZMAN SHAH
(PROFESSIONAL, AI OPERATION)

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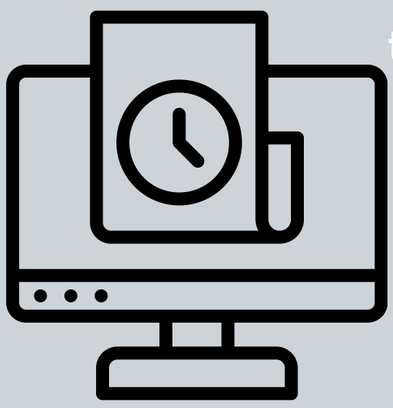
CREDENCE

Description

System development is the process of creating, optimizing, and maintaining intricate systems that often involve software development, database management, and integration of diverse technologies. In the context of the speaker's experiences, their journey in analytics, particularly in data engineering, showcases a connection to system development through the creation and enhancement of systems for effective data analysis. The speaker's discussions about technologies like PostgreSQL, Perl SQL, ClickHouse, Druid, Apache Airflow, and OLAP highlight the integral role of various tools and components within the broader realm of system development.

History



Ms. Qistina talks about her experiences in academia and the workplace in the analytics field, beginning with her enrollment in UTM's Database Administration programme. She finished with honours after four years of study, despite early doubt and difficulties. She completed industrial training in the analytics department in 2019 and gained hands-on experience with Tableau-based social media data analysis projects.

Analytics and its applications in a variety of industries, including business, finance, healthcare, sports, and transportation, are of great interest to Ms. Qistina. She also emphasises the fundamental steps in analytics, which include data transformation and collecting, modelling, prediction, and visualisation.

Moreover, she speaks about going into data engineering after receiving recognition from her supervisor for her skills. She presents details regarding Credence's focus on analytics and cloud services. She is currently working in the analytics delivery team. She highlights the many applications of analytics and outlines it as the methodical analysis of data to produce insightful conclusions and make justifiable decisions.

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Technology

The technology mentioned includes various tools and platforms related to data engineering and analytics. Some specific technologies highlighted include PostgreSQL, Perl SQL, ClickHouse, Druid, Apache Airflow, and OLAP. These technologies play a role in the speaker's experiences, showcasing their involvement in analytics, data engineering, and system development. The emphasis on open-source databases, performance optimization tools, and collaboration between data scientists and data engineers reflects the technological landscape within the field of analytics and system development.

Tools used

Database / Olap:

PostgreSQL

ClickHouse

druid

Visualization Tools:

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Apache Superset

Power BI

Metabase

ETL/ELT:

Apache Airflow

APACHE Spark

Programming language:

SQL

SYSTEM DEVELOPMENT @ CREDENCE (TM SUBSIDIARY)

REFLECTION

Having absorbed insights from the talk, it's clear that sharpening problem-solving skills and mastering algorithms is important for aspiring system developers. To enhance my prospects, I'll go beyond my academic syllabus, learn additional programming languages, and actively build a diverse portfolio during my studies at Universiti Teknologi Malaysia. This approach ensures not only versatility but also a smooth entry into the dynamic world of system development.

After listening to this discussion, I now have a better understanding of how to progress as a system developer over the next four years. My primary focus should be on diligently performing in my current position, where I can enhance my foundational knowledge in computer science. It is crucial to continue honing my skills in programming languages such as C++ and Python. Concurrently, I aim to improve my soft skills, including becoming an adept leader and fostering positive relationships with my team members.

From this talk, it underscores the importance of continuous learning and adaptability in navigating the complexities of managing and optimizing data for meaningful and actionable insights. Through this, I have been inspired to learn more about data analysis skill. So, now I have to enhance my programming skill in order to lay a solid foundation. I also get know of many specific technology used in database such as PostgreSQL, ClickHouse and so on to have deeper understanding about the field of data egineering.

This talk inspires me to keep striving towards my goal of becoming a data analyst, which is within the analytics profession. The speaker's path demonstrates the value of determination, flexibility, and continuous learning in the analytics industry. I learned throughout the talk that I need to understand and be able to use the required technologies, including databases, visualisation tools, and ETL, in order to enter this domain. Being capable in programming languages, such as SQL and Python, is crucial for becoming a capable data analyst.

As system developer, I will keep continuous learning as the technology is constantly evolving. From the talk, I get to know many tools and technologies required in this industry and I will try my best to quickly familiarize myself with those technologies. I will also always improve my skills in some aspects such as databases, computational, statistical and programming techniques. I will also develop my communication skills since it is a necessary skill for me to reach my full potential in this industry.