# SYSTEM DEVELOPMENT @ CREDENCE

# (TM SUBSIDIARY)

## INDUSTRIAL TALK 2 REPORT

**Ms. Qistina Batrisyia Binti Azman Shah**

**Professional AI Operation**

2.30-4.30pm  28th Dec 2023

Group 01 Member:
Wongs Shi Yun (A23CS0198)
Yong Jing Wen (A23CS0202)
Mohammad Irfan Danial Bin Kefli (A23CS0113)
Muhammad Gibran Dzikry (A22EC4036)

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## DESCRIPTION

## HISTORY

Ever wondered about how large amount of data is handle? The world of analytics have expanded tremendously in recent years. But, what is analytics? **Analytics** refer is the process of extracting meaningful insights and make informed decisions by examine the data obtained (from **database**, **external data** and **social media)** to identify patterns, trends and correlation which can be applied in various fields such as business and finance. Few steps have been implemented in the process which are **data collection**, **transformation**, **analytics & modelling**, **prediction & visualization.** This have created a valuable insights in scope of **strategic**, **tactical** and **operational**.

Telekom Malaysia Berhad (TM) has launched Credence on 6 Juy 2022 at Kuala Lumpur. TM Credence is a recently established company specializing in cloud and digital services that aims to enhance the digital transformation efforts of both enterprises and the public sector by expanding their capabilities. Credence will deliver a range of services, spanning from technological infrastructure to business insights, cloud advisory, migration of IT landscapes, Software as a Service (SaaS), managed services, and analytics and insights.

## TECHNOLOGY

## TOOLS

PostgreSQL      Clickhouse      SQL

Druid      Python      Bash Syntax

Power BI      Superset      Airflow

Metabase      tableau      Spark

### Database / OLAP

**PostgreSQL** - an open-source object-relational database management system (ORDBMS). It stores and scales the most complicated data workloads. It is also highly extensible.

**Clickhouse** - an open source, column-oriented database management system (DBMS). It allows users to generate analytical reports using SQL queries in real-time.

**Druid** - a real-time analytics database designed for fast slice-and-dice analytics ("OLAP" queries) on large data sets.

### Programming Language

**SQL** - a standard language for storing, manipulating and retrieving data in databases.

**Python** - an interpreted, object-oriented, high-level programming language with dynamic semantics. It emphasizes code readability with the use of significant indentation.

**Bash Syntax** - used to automate software development tasks such as code compilation, debugging source code, change management and software testing.

### Visualization Tools

**Tableau** - A software that helps the user to visualize data in various forms like chart, graphs and maps. It provides an intuitive interface that allows you to connect to almost any database, drag and drop to create visualizations, and share them with a click.

**PowerBI** - A Microsoft product that allows user to create and interactive reports and dashboards using user's data. PowerBI also offers a code-free visualization builder and a state-of-the-art SQL IDE, making it a powerful tool for data exploration.

**Metabase** - An opens-source tool that helps the user to understand the data by creating simple queries and dahsboards. Metabase is designed to be user-friendly, making it accessible to individuals with varying levels of technical expertise.

**Superset** - An open-source tool that allows the user to explore and visualize large amount of data. It's fast, lightweight, intuitive, and loaded with options that make it easy for users of all skill sets to explore and visualize their data.

### ETL/ELT

**Airflow** - An open-source platform used by data teams to manage and schedule their workflows, including ELT pipelines.

**Spark** - A ditributed data processing framework and analytics engine used for ETL jobs on large-scale data.

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# REFLECTION

### YONG JING WEN

Throughout the whole industry talk , i had learned that not only the programminh skills is important step to become a system developer.Besides , communication skills and teamwork also is the main key to become a successful system developer.To become a system developer , i need to study hard and do a lot of exercises to enhance my programming skills. In addition, I am always alert about the update of technology to prevent me from falling behind on the latest technology. Furthermore , internship is a chance for me to improve my programming skill、communication skill and learn how to do a project in a team. This is a time that i can make good use of learning a new knowledge that is beyond our school gate and try to apply the knowledge that I learn in the university into practice.

### WONG SHI YUN

From this industrial talk, the speaker shared how she got into this field and became a member of Credence. It got me thinking of my journey to be a future system developer in the next 4 years throughout university life. It is essential to learn a variety of programming languages such as Python and Java as it is the fundamental skills for a system developer. Besides, I should improve my soft skills such as analysis, problem-solving, and critical thinking as those are indispensable skills for a system developer to meet clients' demands. I plan to join projects and workshops available at the university to enhance my soft skills. During my leisure time, I will do some self-study to have a better understanding of basic computer science principles, including data structures, algorithms, and programming languages.

### MOHAMMAD IRFAN DANIAL BIN KEFLI

Given the current industry trends that were mentioned in the industry talk, I find myself wondering about how I will become a system developer in the next 4 years. It has made me reconsider my strategy to excel in system development. My initial thought is that, it is important to adapt to new software as the realm of computer science is ever-changing. Perhaps I can achieve this by self-learning as there are many resources on the internet like Udemy. Later, I am thinking of solving as many programming problems as much as I can to develop critical thinking skills as this is the most crucial step to becoming a system developer. Afterward, I planned on improving and developing interpersonal skills such as communication as the jobs required to work in a team.

### MUHAMMAD GIBRAN DZIKRY

For me, this industry talk was enlightening. It helped me reflect on my career path and expand my knowledge of analytics and system development. The talk about pursuing a career in analytics was really insightful. It helped me understand how important it is to keep up with new trends and technologies. I was intrigued by the way analytics transforms unstructured data into deep knowledge and motivates creativity and decision-making. My goal is to work as a system developer for the next four years. I intend to acquire the necessary technical skills and industry knowledge. It is necessary for me to work on projects that will push my intellectuals and allows me to utilize what I have learned. This has influenced my professional goals and provided a better understanding of what I want to achieve in systems development. I am eager to make a significant contribution to the sector and am excited about the journey ahead.

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