



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA



**Credence**

# SYSTEM DEVELOPMENT

## Industrial Talk 2: Transformation Done Right



**Ms. Qistina Batrisyia**  
CREDENCE BY  
TELEKOM MALAYSIA BERHAD



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## DESCRIPTION

### What is Analytics?

Analytics refers to the systematic analysis of data to extract meaningful insights and make informed decisions. It involves examining large sets of data to identify patterns, trends, correlations, and other valuable information.

Analytics can be applied in various fields, including business, finance, healthcare, sports, transportation and more.

Career in Analytics :

1. Business Analyst
2. Data Architect
3. Data Scientist
4. Data Analyst
5. Data Engineer
6. BI Developed

## TECHNOLOGY & TOOLS USED

Technology and tool use in Credence's system development

There are a few technologies and tools used by Credence during system development. For basic database, they used PostgreSQL, ClickHouse, and Druid.

Next, they also use Tableau, PowerBI, Metabase, and Superset as visualization tools. For ETL and ELT process, the most common used is Airflow. SQL and Python are the most important programming language for system development in Credence and for data engineering has one extra programming language which is Basic Syntax.

## HISTORY

1960s

- Manufacturers develop basic material requirements planning (MRP) systems. eg: IBM

1970s

- More manufacturers use MRP system

1980s

- Manufacturing resource planning MRP II systems debut with more abilities

1990s

- Enterprise Resources Planning(ERP) systems debut

2000s

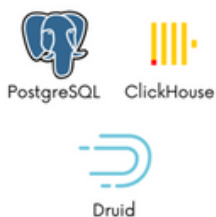
- ERP II systems are developed, cloud ERP gains attention

2010s

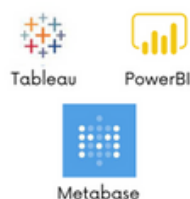
- ERP processes data in real time, starts to support IoT and machine learning

## TECHNOLOGY & TOOLS USED

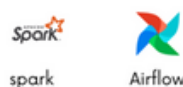
### Database/OLAP



### Visualization Tools



### ETL/ELT



### Programming language



# REFLECTION

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## WELSON



I picked up some skills from Miss Qistina's industrial talk, like never giving up in the face of adversity, believing in my own abilities, learning how to work with others, and having a constant curiosity to learn new things. In the next four years, developing systems will undoubtedly call for a great deal of patience and a meticulous approach to the rapidly evolving field of technology. In my mind, I saw myself as a proficient developer who possesses the know-how to compete with peers. The difficulties that could result from the intense competition are that system developers must consistently adjust and keep up with the pace of development.

## RAVINESH



This industry talks teach me that we should not be passive employees during our internship and to ask lots of questions. We cannot allow our feelings to interfere with our productivity at work. For instance, we cannot act bashful in front of others just because we don't feel comfortable. Rather, we need to demonstrate our desire to learn and absorb as much information as we can while also acting professionally and maintaining our composure in the face of difficulties. Apart from that, we should concentrate more on developing our social skills, such as learning how to collaborate with others, and we should consult our

## SYASYA



The industrial talk emphasized how important it is to work as a team and develop soft skills in the workplace. It made me think about how crucial teamwork, empathy, and clear communication are. I now understand how crucial these abilities are to creating a productive workplace and accomplishing group projects successfully.

## DANISHA



The industrial talk taught me that we need to be bold in our communication with others, ask questions about the issues we are facing, and don't be afraid to ask our manager or supervisor for help if we don't know something. In order to increase trust within our team and strengthen relationships with our coworkers, we must also cultivate positive working relationships. This will lead to a more cohesive team. Subsequently, I came to the realization that I would face numerous challenges in my pursuit of becoming a system developer. Additionally, I need to improve my ability to communicate more pro-actively and maintain composure when faced with challenges.

## PEI WEN



I've learned from the industrial talk 2 that working as a developer can be a fulfilling and exciting career path with lots of chances for advancement and future impact. I've discovered that we must recognize the value of teamwork. Together with our groupmate, we can easily solve problems and get new ideas for our project. In addition, I've discovered that when we go into the workforce, we need to have greater self-confidence. It's because starting a career as a developer can be both thrilling and difficult. To sum up, developing for the future requires a dedication to knowledge acquisition and problem-solving.

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