



TECHNOLOGY AND INFORMATION SYSTEM (SECP1513)  
ASSIGNMENT 3 SECTION 5 GROUP 2

# Report on INDUSTRY TALK 2



Title : System Development @ Credence (TM Subsidiary)  
Session : 2023/2024 Semester 1

## CONTENT

- System Development at Credence (TM Subsidiary)
- History of Credence's system development
- Technology and tools used in Credence's system development
- Reflections

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## ABOUT US



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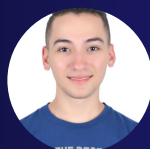
**HU HAO**  
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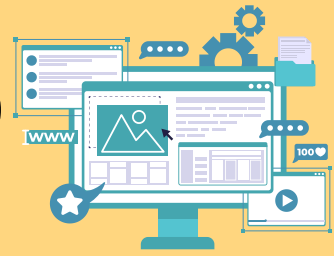
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GROUP 2

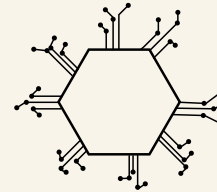
# Industry Talk 2 [28 December 2023] System Development @ Credence (TM Subsidiary)



## DESCRIPTION OF SYSTEM DEVELOPMENT

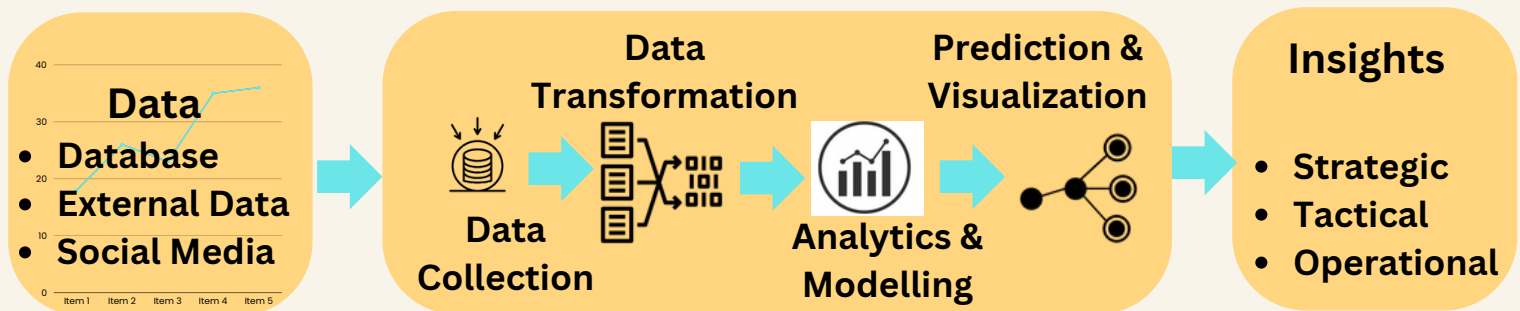
### Analytics Overview:

Analytics involves systematically analyzing data to **extract insights** for **informed decision-making**. It includes examining large datasets to identify patterns, trends, correlations and valuable information. Applied across diverse fields like **business, finance, healthcare, sports, transportation and more**.



### Career in Analytics :

- Business analyst
- Data architect
- Data scientist
- Data analyst
- Data engineer
- BI developer

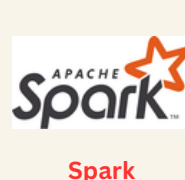
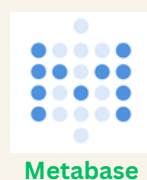
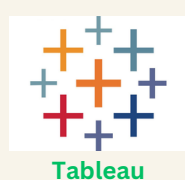


## HISTORY OF CREDECENCE'S SYSTEM DEVELOPMENT

**Credence**, a subsidiary of TM, established itself as an innovative force in system development through **Clarity Techworks**, offering diverse ICT job opportunities. Credence's Mahathir bin Said discussed the potential of analytics in Malaysian manufacturing at the 2022 TM One Leap Forward event. McKinsey studies emphasize AI's value, yet adoption faces challenges like strategy and talent shortages. Credence aims to be an **analytics partner**, investing in talent and cloud infrastructure. Their end-to-end solutions, covering **consulting and implementation**, position them to address local challenges and accelerate businesses' analytics journey.

## TECHNOLOGY AND TOOL USED IN CREDECENCE'S SYSTEM DEVELOPMENT

Credence's system development relies on **PostgreSQL, ClickHouse and Druid** for **database/OLAP functions**, ensuring robust data management and advanced analytics. **Visualization** is achieved through **Tableau, PowerBi, Metabase and SuperSet**, converting data into accessible charts and graphs. **Airflow and Spark** handle **ETL/ELT processes**, facilitating smooth data extraction, transformation and loading. The **programming languages** includes **SQL, Python and Bash syntax**, forming the foundation for diverse system components. Together, these tools seamlessly integrate to manage data efficiently, offer insightful visualizations and implement diverse functionalities in Credence's system development.



# Individual Reflection & Future Aspiration as a system developer in the next four years



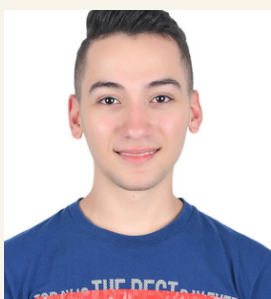
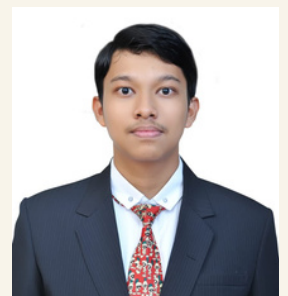
HU HAO: 'I learned that review your academic performance in the course and see if there is any area that needs further improvement is helpful. At the same time, refer to the project experience you have participated in to understand how to solve the difficulties encountered in the project. Effective teamwork is also important. Finally, self-learning ability is very important for a system developer, so you need to have the habit of actively learning new technologies, new tools and frameworks.'

EN THONG: 'The talk underscored the importance of resilience, highlighting how perseverance is crucial for a student on the path to becoming a successful and adaptable system developer. I'm eager about continuous learning and embracing challenges. Confidence emerged as a vital and empowering trait and teamwork's significance for success was emphasized. My aspiration is to be a future team player, gradually gaining leadership skills and contributing creatively. Mastery of programming languages such as Python and SQL, is a goal for my evolution as a proficient system developer over the next four years.'



SHU YAN: 'My personal perception on this matter is I should be sensitive on the latest technologies and programming languages relevant to system development and stay updated. I will gain hands-on experience by working on real-world projects, either through internships, personal projects, or open-source contributions and develop my soft skills such as teamwork, communication skills and flexibility so that I has high capability to being employed.'

ADLI: 'This Industry seminar made me learn how important it is to look back on my academic performance and use past project experience to overcome challenges. The speakers emphasized the value of teamwork and confidence in our journey to becoming successful system developers. I am now motivated to keep learning, mainly focusing on programming languages, and apply my knowledge to real projects. Developing good communication and teamwork skills is also a priority as I prepare myself for success in the world of systems development.'



Ahmed Kassem: 'The Credence System Development seminar stressed adaptability and continuous learning as essential in this field. It highlighted the importance of assessing academic performance and leveraging project experiences for personal growth. Teamwork was underscored as pivotal. Over the next four years, I aim to deepen expertise in Python and SQL, engaging in real-world projects and honing soft skills like communication and teamwork for a successful career as a system developer.'