



# SYSTEM DEVELOPMENT@ CREDENCE (TM SUBSIDIARY) REPORT

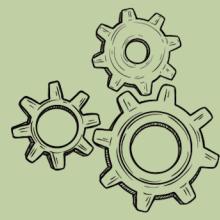


## Topics :

- **Description of System Development**
- **History of Credence's System Development**
- **Technology and Tools used in Credence's System Development**
- **Self-Reflection**

Prepared by MIRACLE WORKERS:  
Mahmoud Mustafa Elganzory (A23CS0291)  
Fouad Mahmoud Fouad (A23CS0017)  
Adham Fathy Mansour (A23CS0006)  
NG JIN EN (A23CS0146)  
CORNELIA LIM ZHI XUAN (A23CS5044)  
YEO WERN MIN (A23CS0285)

# **DESCRIPTION OF THE SYSTEM DEVELOPMENT**



Credence is a service-based company with a team of experts working together to deliver a specific task for their customers. The system development of Credence requires the study of analytics. Analytics is examining a large set of data to extract or discover meaningful insights such as patterns, trends, and relations. Analytics is used in many fields: business, healthcare, sports, transportation, etc... There are many careers in the study of analytics e.g.: Business Analyst, Data Analyst, Data Architect, Data Engineer, and Data Scientist. Every career is used in a specific job. The data Analyst's Job is to analyse large set of data, and the Data Engineer's job is to gather all the data needed from the customer and prepare it for the Data Analyst. Some of the technologies used daily are Click house for database, Power BI for Visualization, Spark for ETL, and Python for programming.

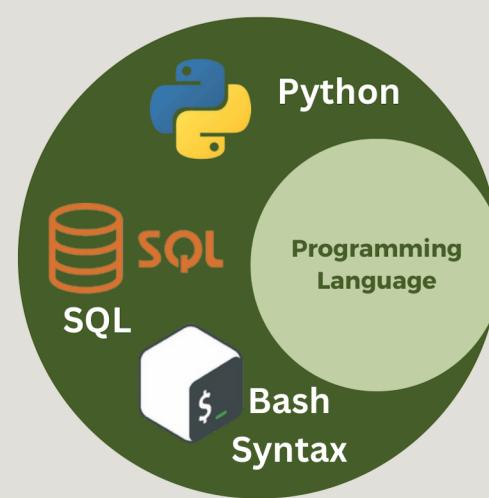
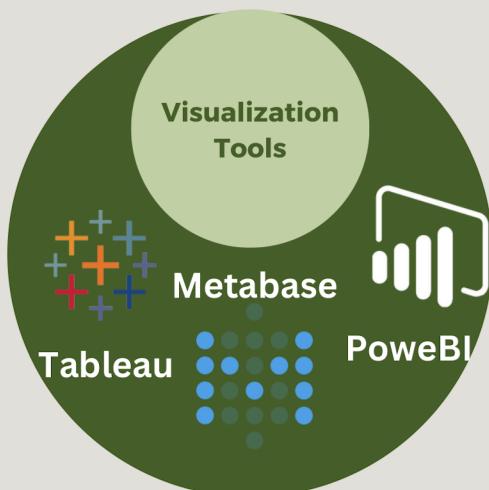
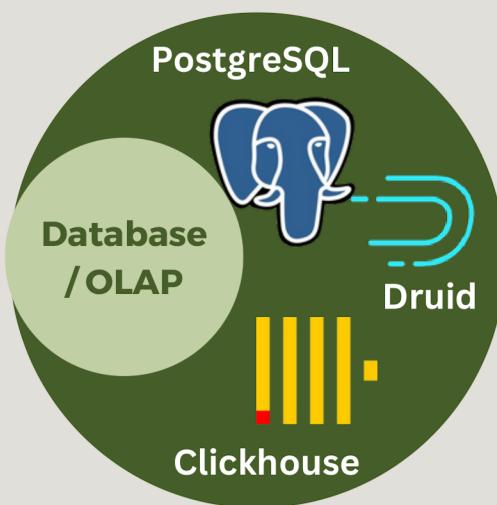


## **HISTORY OF CREDENCE'S SYSTEM DEVELOPMENT**

Credence Systems Corporation was a manufacturer of test equipment for the global semiconductor industry. In the 1900s, a system was developed manually on papers, ledgers, and spreadsheets. A significant machine designed during that era was the census counting machine. In the 1950s and 1960s, computers were invented, and a few computer languages were invented, such as COBOL, FORTRAN and so on. Then, database management systems are invented and upgraded so more systems are developed, such as banking, manufacturing, and insurance systems. Credence's system was founded in 1978 by David Mees as Semiconductor Test Solutions, the company changed its name to Credence after acquiring Axiom and ASIX in 1990. The company's initial public offering was completed on October 28, 1993. Until now, system development has become more common, resulting in the introduction of "agile" or "extreme programming" methods to meet the high demand.



# TECHNOLOGY & TOOLS USED IN SYSTEM DEVELOPMENT



## REFLECTION

### Mahmoud

Learning is the most important step, in Ms. Qistina Batrisyia binti Azman Shah's opinion, particularly when a new technology is being introduced. My understanding of the difficulties faced by system developers has improved since this talk. Through practical projects and internships, I hope to hone my programming skills over the next four years in preparation for becoming a competent and professional system developer in the field of network security. In addition, by keeping up with the system developer community and increasing my exposure to system developers' activities, I will continue to follow this new trend in system development.

### Adham

Learning is crucial when introducing new technology, as highlighted by Ms. Qistina Batrisyia binti Azman Shah. Practical projects and internships have deepened understanding of system developers challenges. The four-year plan contains programming skills, engaging in projects, and connecting with professionals to become a competent system developer in network security. Improving soft skills, such as communication, is also a focus. This involves staying updated, seeking mentorship, and maintaining work-life balance.

### Zhi Xuan

As a first-year university student in network security, my focus over the next four years is to build a robust foundation in system development. I plan to excel in programming languages, software engineering, and security protocols through coursework, hands-on projects, and internships. Staying updated on industry trends and participating in relevant activities, I aim to become a skilled and adaptable system developer ready to tackle the evolving challenges in network security.

### Fouad

As a first-year student, I want to be a system developer in four years. I'll focus on learning programming languages and doing well in my courses. I'll work on projects, join communities, and connect with professionals to gain practical experience. Improving soft skills like communication is on my radar too. Keeping an updated portfolio, staying in the loop with industry trends, and getting advice from mentors are part of my plan. I'll stay flexible and balance work with a healthy life.

### Jin En

According to Ms. Qistina Batrisyia binti Azman Shah, the learning process is the most critical path, especially when we are introduced to a new technology. Through this talk, I clearly know the challenges face by a system developer. To become a skilled and professional system developer in network security field in future, I will try to sharpen my programming skills in next 4 years through hands-on projects and internships. Beside that, I will follow up the new trend of system development by staying updated on the system developer community and exposing myself more on system developer's activities.

### Wern Min

Throughout this talk, I have gained a clear vision of my plans for next four years. I think the first step of becoming a professional system developer is laying a solid foundation in system development. I will start by mastering some fundamental programming languages like C++. Next, creating a portfolio to upload project and attending workshops and forums so that I can keep myself updated on the latest industry trend. I will also train my hands-on experiences on solving problems related to system development. I believe if I know how to apply my learnt knowledge correctly that is the time that I truly gain knowledge.