REPORT ON SYSTEM DEVELOPMENT @ CREDENCE (TM SUBSIDIARY)

This report will include the description of **system development**, **history**, **technology and tool use** in Credence's system development.

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System Development

System development is an **all-inclusive process** that includes **designing, building, programming and finishing a product**, whether it be software, hardware or a computer. This general idea may be used for many other aspects of development, such as building database systems, specialising internally, or purchasing software that was built outside. All information systems processing processes are built upon written standards and procedures. Computerised information systems and related technologies are developed, acquired, installed and maintained under the guidance of the management of the organisation, which follows a process known as the system development life cycle.

History

Credence is a company powered by **Telekom Malaysia (TM)**. This company was established to focus solely on **analytics** and **cloud services**. Credence offers many job opportunities for any job seekers especially in the IT side. Some of the career opportunities in Credence are **business analyst, data analyst, data engineer, data architect, data scientist and BI developer**. These job opportunities were opened to everyone who is interested in pursuing a career in analytics and system development. Credence will also give guidance to new employees so that they are able to find the best suited role for them to be a part of Credence.

Technology and Tool Use

Credence uses a combination of **database and Online Analytical Processing (OLAP)** to generate insights through data analysis. For example, PostgreSQL, ClickHouse and Druid. To **visualise data**, Credence uses Tableau, PowerBI, Metabase and Superset. Credence also uses **Extract, Transform, Load (ETL) processes**, to schedule & monitor workflows and to combine data from multiple sources. For example, Airflow and Spark. To enable efficient querying, data processing, scripting and task automation, Credence uses **languages** such as SQL, Python, Bash Syntax, etc.

Credence's use of these technologies and tools establishes a comprehensive data ecosystem, enabling informed decision-making and strategic insights.

Reflections

Baraah Alawi Ahmed Mekyash
Motivated by Credence's model, as a third-year student studying network and security, my area of focus will be integrating cloud services and analytics into system development. My main goals will be to become proficient with OLAP, database management, and tools such as Tableau and PowerBI. To obtain real-world experience, I'll look for internships in related fields. My goal is to combine my knowledge of networks and security with cutting-edge technologies in system development.

C**heng Jia Yi**
Over the next four years, I will continuously enhance my expertise and skills in emerging technologies, frameworks and development methodologies. I will also participate in relevant training programs and certifications. Lastly, I aim to contribute actively to open-source projects, engage in collaborative coding endeavours and gain real-world project experiences. Through this, I aspire to be an adaptable and proficient system developer.

Choh Jing Yi
Over the next four years, I will improve my programming skills and explore areas with business potential. I also envision taking leadership responsibilities and motivating my team to accomplish common goals. My ultimate goal is to utilise my determination to do well in dynamic field of system development,culminating in establishing my own company using the skills I have acquired during this period.

Muhammad Rosyid Ridho Indrianto
In the coming four years, I will participate in bootcamps or certifications programs. In order to adhere to responsible ideals, I will incorporate ethical considerations into my development methods. Using flexible collaboration technologies is also crucial given the continued popularity of remote work. As the technology landscape changes, I can position myself as a forward-thinking and influential system developer by embracing new trends with curiosity.

Nur Ayuni Binti Noor Azman
In the next four years, I aspire to enhance my capabilities in system development to work in a renowned company like Telekom Malaysia. Thus, it is vital that I improve my soft skills and development skills. Apart from that, I will gain diverse experiences during my studies at UTM. I will also utilise the knowledge that I learned in developing our own local software, specifically in cloud computing like Google Drive and OneDrive to ensure technological growth in Malaysia.