SYSTEM DEVELOPMENT @ CREDENCE

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TEAM MEMBERS

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1. System Development Description

Credence focuses on building systems that help businesses make better decisions using data analytics and technology. The process includes a few key steps:

a. **Requirement Analysis**: Understanding what the business needs.

b. **Design**: Planning the system structure and data flow.

c. **Implementation**: Creating software and tools for analysis.

d. **Testing**: Checking the system to make sure it works correctly.

The team uses Agile methods, including Scrum, to work efficiently and adjust to changes. Tools like Slack and Jira help the team stay connected and organized, making it easier to deliver high-quality solutions on time.

1.1 Core Skills for Analytics Professionals

Analytical Thinking: To derive meaningful insights from data.

Communication: To explain findings effectively to non-technical audiences.

Adaptability: To work with evolving tools and methodologies.

Teamwork: To collaborate in a multidisciplinary environment.

1.2 Roles in Analytics

Business Analyst: Focuses on understanding business problems and proposing data-driven solutions.
Data Analyst: Collects, processes, and analyzes data to support decision-making.
Data Architect: Designs efficient and scalable data systems to store and retrieve information.
Data Engineer: Builds and optimizes data pipelines for seamless data processing.
Data Scientist: Develops predictive models and uses machine learning to extract insights.
BI Developer: Creates tools for data visualization, helping businesses understand their performance metrics.

2. History of System Development

Credence was established to help businesses use data more effectively. Over the years, they have developed systems that handle large amounts of data and present insights through tools like Tableau and Power BI. They later started using advanced

technologies like Apache Spark and Airflow to process data faster and more accurately.

As programming tools improved, Credence adopted Python and SQL to make their systems more powerful. Their focus on learning and innovation has helped them stay ahead in the industry and meet the needs of their clients.

3. Technologies and Tools Used

Credence uses a variety of tools to develop its systems:

1. **Programming Languages**: Python, SQL.
2. **Data Tools**: Apache Spark, Airflow, PostgreSQL, and Tableau.
3. **Collaboration Tools**: Slack and Jira for communication and task management.
4. **Other Tools**: Postman for testing APIs and Power BI for visualizing data.

These tools allow Credence to create effective and user-friendly systems that solve real-world problems.

4. Reflections:

Liu Ruoyang: The talk inspired me to focus on building technical and collaborative skills. Over the next four years, I aim to strengthen my knowledge in system development and work on meaningful projects to grow as a developer.

Liu Wanpeng: This talk helped me understand the importance of technology in problem-solving. In the next four years, I plan to focus on learning modern tools and improving my abilities to develop efficient systems.

Zhao Wei: I gained insights into how teamwork and technology drive innovation. Over the next four years, I aim to enhance my technical skills and contribute to impactful system development projects.

Bu Guoshun: The talk emphasized continuous learning and adaptability. Over the next four years, I will focus on gaining knowledge in system development and applying it to real-world challenges.