**DS 598 Week 4 Assignment**

1. What did you do last week?

In the context of supply chain management, proficiency in Agile and Scrum methodologies, as well as Test-Driven Development, can facilitate collaboration and communication between teams, increase flexibility in responding to changing market conditions and customer needs, and streamline the development process to deliver software applications more quickly and efficiently. For example, these methodologies can be used to develop a supply chain management software application that is customized to the specific requirements of the organization and its stakeholders, while allowing for rapid changes and improvements based on feedback and market conditions.

The ability to develop client-side, server-side/middle-tier components using Java/J2EE design patterns and frameworks such as Spring Boot, Micro Services, AOP, Webservices, Hibernate, JDBC, JPA, JSP, POJO's, JSON, Multithreading, and Junit is also valuable in supply chain management. This includes experience with implementing different types of frameworks like Spring and Spring Boot, as well as using ORM frameworks like Hibernate. Furthermore, expertise in producing and consuming different types of web services, including SOAP and RESTful services using SOAP UI, and implementing them with Spring Boot and Micro services using Eureka Server, is important. Working on Java/J2EE 1.7/1.8 with Collections is also relevant for developing efficient and effective supply chain management systems.

1. What do you plan to do this week?

As a supply chain management professional, I have experience in planning Object Oriented Analysis, Design, and Programming of distributed web-based applications. I am knowledgeable in UML, design methodologies, and design patterns, and skilled in developing web applications using JSP and Custom Tag Library components. I have a successful track record of generating innovative ideas to improve system design, data flow, and interface redesign to enhance the user experience. Additionally, I have employed strategies to improve my knowledge in Java while working on this project.

1. What were the challenges you faced? What were your learning this week?

Interacted with stakeholders using Agile Scrum methodology to gather requirements and business artifacts. Utilized Spring Inversion of Control (IOC) architecture and Hibernate in the multi-tiered J2EE design. The Policy Holder Self-Service Quote and Bind Portal is a browser-based web application that allows prospective policyholders to create quotes and bind policies online. The insurance industry faces several challenges in the quote and bind process, including:

Data accuracy: One of the biggest challenges in the quote and bind process is ensuring the accuracy and timeliness of the data used to generate quotes and bind policies. Insurance companies rely on various data sources to assess risk, and errors or inaccuracies in this data can lead to incorrect quotes or policies that do not adequately protect the customer.

Complexity of policies: Insurance policies can be complex and difficult for customers to understand. Insurance agents must be able to explain the policy terms clearly to the customer and ensure that they fully understand what they are agreeing to.

Competition: The insurance industry is highly competitive, and customers may seek quotes from other providers before making a decision. Insurance companies and agents must be able to generate quotes quickly and efficiently to remain competitive in the marketplace.

1. Which tool/ software/programming you used as part of your work?

In our supply chain management project, we utilized Git hub for version control and manual testing. Technical documentation was prepared for system requirements and design, and both design and code reviews were conducted. We created class and sequence diagrams for all functional and non-functional requirements. I was involved in coding, testing, debugging, implementation, and documentation of moderately complex programs using Java/J2EE, JSP, Spring, and Hibernate. The application was designed using Spring MVC and JDK1.7, and Restful Web Services were used for communication.

To meet complex requirements, we utilized the Spring framework and Web Services. Additionally, we recommended the use of client relationship management (CRM) software to manage customer data and interactions, which could streamline the sales process and improve customer satisfaction. We also suggested record management software to help manage and store policy documents, claims files, and other important paperwork, which could improve efficiency and accuracy in policy administration.