**DS -598 Week 6 Assignment**

1. What did you do last week?

Proficient in utilizing AGILE and SCRUM methodologies for software development and Test-Driven Development for quality assurance. Skilled in designing and developing client-side, server-side, and middle-tier components using Java/J2EE design patterns and various frameworks such as Spring Boot, Micro Services, AOP, Webservices, Hibernate, JDBC, JPA, JSP, POJO's, JSON, Multithreading, and Junit. Experienced in implementing frameworks like Spring and Spring Boot and using ORM frameworks like Hibernate. Expertise in creating and consuming different types of web services including SOAP and RESTful using SOAP UI, as well as integrating Spring Boot framework and Microservices using Eureka Server. Proficient in working with Java/J2EE 1.7/1.8 with Collections.

1. What do you plan to do this week?

* Planned and executed testing activities including writing unit, functional, and integration test cases for the developed code.
* Ensured code quality by conducting code quality checks after the testing phase using tools such as SonarQube.
* Created branches in Bitbucket with assigned ticket numbers and pushed the developed code to the repository.
* Ran builds in Bitbucket to verify that the code worked correctly in the development environment, and requested code reviews from team members once the build was successful.

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

Interacted with stakeholders to gather requirements and artifacts using Agile Scrum methodology. Utilized multi-tiered J2EE design with Spring Inversion of Control (IOC) architecture and Hibernate and CMS for the development of the Policy Holder Self-Service Quote and Bind Portal, a browser-based web application that enables prospective policyholders to create quotes and bind policies online.

Insurance agencies and specialists may face several challenges during the policy and tough situation process, such as complexity in understanding insurance contracts, competition in the marketplace, compliance with regulations governing the sale and administration of insurance contracts, and integrating technology systems for data validation, underwriting rules, and external system integrations. To address these challenges, insurance agencies must ensure their technology systems are secure and capable of protecting customer data from cyber threats while streamlining the quote and bind process.

4) Which tool/ software/programming you used as part of your work?

For our supply chain management software project, we utilized GitHub for coding and manual testing. We also created technical documentation for requirements and system design, as well as conducted design and code reviews. In order to fulfill all functional and non-functional requirements, we created class diagrams and sequence diagrams. Our development involved coding, testing, debugging, implementing, and documenting moderately complex programs in Java/J2EE, JSP, Spring, and Hibernate. Specifically, we utilized Spring MVC and Restful Web Services to develop the application, with JDK1.7. To meet complex system requirements, we designed systems and programs using Spring framework and Web Services. Once two team members reviewed the code and provided feedback, we moved the code to merge. In case we received any comments, we made the necessary changes accordingly. In the case of any code conflicts during changes, we resolved them and committed the changes to the branch before sending it for review again