

# Week – 3 Report

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**Domain: Core Java**

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**Week Ending: 03**

## **I. Overview:**

### **Exploring Tools Used by Java Full Stack Developers:**

During Week 3, I dedicated time to expanding my knowledge of tools commonly used by Java full stack developers. This exploration allowed me to gain insights into the tools and technologies that streamline the development process and enable efficient full stack application development. Understanding these tools was crucial in building a robust and scalable banking information system.

### **Understanding the StringBuilder Class:**

One of the key learnings in Week 3 was the StringBuilder class in Java. This class provided a more efficient and mutable way to manipulate strings compared to the traditional String class. By leveraging the StringBuilder class, I was able to optimize string concatenation operations in the banking information system, improving overall performance and memory usage.

### **Implementing Deposit Functionality:**

A significant milestone during this week was the successful implementation of the deposit functionality. Users were able to add funds to their account balance through a seamless and secure process. The deposit feature updated the account balance and maintained a comprehensive transaction history, ensuring accurate and transparent record-keeping.

**Implementing Withdrawal Functionality:**

In addition to deposits, I also implemented withdrawal functionality, allowing users to withdraw funds from their accounts. This feature included checking for sufficient funds and updating the account balance accordingly. Proper validation and error handling were implemented to ensure the integrity of the banking system.

Week 3 encompassed valuable learning experiences, including exploring tools used by Java full stack developers and gaining proficiency in the `StringBuilder` class. Furthermore, the successful implementation of deposit and withdrawal functionality reinforced the secure and efficient nature of the banking information system. These achievements brought me closer to the realization of a comprehensive banking solution, enabling users to perform transactions with ease and confidence