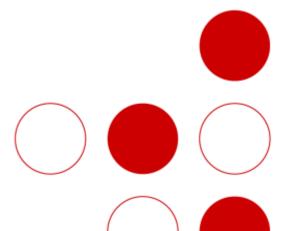
Apprentice Name: Sumeet Bhande Team Name: Product Engineering Curriculum Name: Software Developer Duration: 6 months

30 Jan, 2025

Purpose of the Apprentice Program

- Opportunity to grow, learn, and contribute within the tech industry at Target.
- Transition from basic training to working on advanced projects.
- Hands-on experience with key technologies and tools in software development.



Activities and Practical Experience

- Building a RESTful API with Java, Spring Boot, and PostgreSQL
- Building a Kafka Integration with Spring Kafka: Publishing and Consuming Messages
- End-to-End Integration Testing
- Managing Software Vulnerabilities and Dependencies.
- •Enhancing PI-Score Notification Tool: SCA Fixes, Deployment, and Integration.
- •Elastic Search Indexing, Docker Deployment, and Integration Testing for DMR Popularity Migration
- •Kafka Alerting and Monitoring Setup for Votes Applications with Grafana Dashboards

Building a RESTful API with Java, Spring Boot, and PostgreSQL

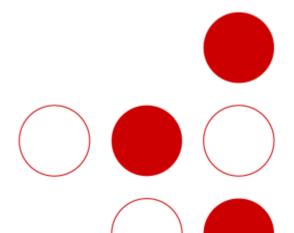
- Java Programming Fundamentals
- Spring Boot Framework
- Building RESTful APIs
- Database Interaction with PostgreSQL
- Database Connection Management
- Error Handling and Validation

Building a Kafka Integration with Spring Kafka: Publishing and Consuming Messages

- Message Publishing
- Message Consumption
- Real-time Messaging
- Hands-on Kafka Basics

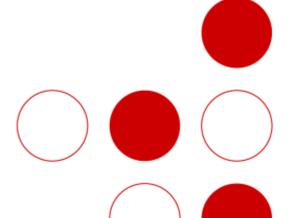
End-to-End Integration Testing

- PostgreSQL & Spring Boot API
- Docker
- Integration Testing
- Unit Testing
- Version Control with Git



Managing Software Vulnerabilities and Dependencies

- Software Composition Analysis (SCA)
- Dependabot Documentation
- CLI Tool Installations
- Version Management with SDK MAN
- Vulnerability Management



Enhancing PI-Score Notification Tool: SCA Fixes, Deployment, and Integration

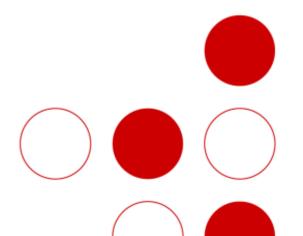
- TAP Console & Target Platform Connector
- SCA Fixes & Java Upgrade
- Fixed Up-coming Count
- Blossom & Tap
- Merging & Testing
- Prod Deployment

Elastic Search Indexing, Docker Deployment, and Integration Testing for DMR Popularity Migration

- ElasticSearch Indexing
- Application Build & Configuration
- Created Docker File and Vela Configuration
- Gradle Task for Docker Deployment
- Integration Testing
- Code Cleanup & Improvements
- Version Control & Merges
- Dev Deployment and Documentation

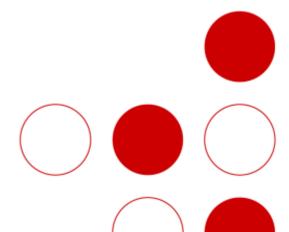
Kafka Alerting and Monitoring Setup for Votes Applications Grafana Dashboards

- Kafka Locksmith Alert for Votes Apps
- High-Level Architecture Review
- Grafana Dashboards
- Monitoring and Alerting



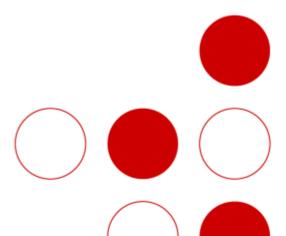
Conclusion

This apprenticeship has been a transformative experience, combining technical skills development with personal and professional growth. I'm now equipped with the knowledge and experience to contribute meaningfully to the tech industry.



Special Thanks to:

- Target: for giving me the opportunity to be part of this amazing apprenticeship journey.
- My Manager: For guiding me throughout the apprentice program, helping me in the technical challenges and giving me the confidence to improve my skills.
- My Team: For your support and feedback throughout the journey.



THANK YOU