Sr. Back-end Developer Task

Assume you are in an agile team, and you are assigned to set up 2 co-dependent microservices, one responsible for the management of bank customers, and the other responsible for management of customer accounts, the following requirements are given.

Task Request Logic as below:
1. A customer must have a name, associated legal id, type, and address (add any other information you feel is relevant).
2. A customer may have 0 or more accounts.
3. Customer can have the following types: retail, corporate, investment.
4. Accounts at minimum must have a balance, account status.
5. All must be stored in a relational DB (you are free to choose any DB)
6. The spring boot project follows a proper code structure.
7. The Rest APIs must follow the Open API Specification standard.
8. Proper validation in the API request/response, and DB.
   i. Customer ID should be 7 digits.
   ii. Account should be 10 digits starting with the customer ID as the starting 7.
   iii. A customer can have up to 10 accounts.
   iv. One account can be a salary account, and the rest can be saving or investment.
   v. Investment accounts must have a minimum balance of 10,000.
   vi. Retail customers can have only saving account.

Technical Spec:
1. Task should be completed in latest stable spring-boot using Java 17+. You will be graded based on the application of latest features of the versions you use.
2. VCS is required.
3. Maven or Gradle project is required.
4. Proper error/exception handling
5. Proper logging
6. Access to DB should be through Spring Data JPA.
7. It is essential to follow TDD and include Unit testing of your code with coverage report (min 70% coverage expected)
8. In addition to Rest APIs setup events for each service to fulfill an EDA between the two services.
9. Produce a Readme.md that includes your design decisions, shortcomings, and assumptions.
10. Provide the POSTMAN collection for testing.

Bonus:
- Demonstrate understanding of Spring Security.
- Demonstrate understanding & usage of Spring profiles.