Bank Application

Scenario: You are a back-end developer and need to create an application to handle new customer bank account requests.

Your application should do the following:

- Read a .csv file of names, social security numbers, account type, and initial deposit
- Use a proper data structure to hold all these accounts
- Both savings and checking accounts share the following properties:

  deposit()
  withdraw()
  transfer()
  showInfo()

  11-Digit Account Number (generated with the following process: 1 or 2 depending on Savings or Checking, last two digits of SSN, unique 5-digit number, and random 3-digit number)

- Savings Account holders are given a Safety Deposit Box, identified by a 3-digit number and accessed with a 4-digit code
- Checking Account holders are assigned a Debit Card with a 12-digit number and 4-digit PIN
- Both accounts will use an interface that determines the base interest rate.
  Savings accounts will use .25 points less than the base rate
  Checking accounts will use 15% of the base rate
- The ShowInfo method should reveal relevant account information as well as information specific to the Checking account or Savings account.

Learning objectives:

- Learn to develop a robust application architecture
- Use when to use abstract classes and abstract methods
- Use an interface API to receive information from a developer's application
- Explore constructors deeper and use the super() keyword
- Explore access modifiers and when to use public, private, or protected
- Read data from a file and store in an appropriate data structure
- Generate random numbers and work with String API