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| **Customer** |
| - string name  - string address  - int age  - string telephone\_number  - string customer\_number |
| + Customer(string name, string address, int age, string telephone\_number, string customer\_number)  + string get\_name()  + string get\_address()  + int get\_age()  + string get\_telephone\_number()  + string get\_customer\_number()  + void set\_name()  + void set\_address()  + void set\_age()  + void set\_telephone\_number()  + void set\_customer\_number() |

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| **Senior** |
| const string SAVINGS\_INTEREST  const string CHECK\_INTEREST  const string CHECK\_CHARGE  const string OVERDRAFT\_PENALTY |
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| **Adult** |
| const string SAVINGS\_INTEREST  const string CHECK\_INTEREST  const string CHECK\_CHARGE  const string OVERDRAFT\_PENALTY |
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| **Student** |
| const string SAVINGS\_INTEREST  const string CHECK\_INTEREST  const string CHECK\_CHARGE  const string OVERDRAFT\_PENALTY |
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| **Bank** |
| - vector<Account \*> accounts  - vector<Customer \*> customers  - int account\_id  - int customer\_id |
| - vector<int> find\_accounts\_by\_name(string name)  - Customer \*find\_customer(string name)  - Account \*add\_account(Customer \*cust, string account\_type)  + Bank()  + Account \*add\_account(string name, string account\_type)  + Account \*add\_account(string name, string address, string telephone, int age, string cust\_type, string account\_type)  + void make\_deposit(int acct\_number, double amt)  + void make\_withdrawal(int acct\_number, double amt)  + vector<int> get\_accout(string name)  + Account \*get\_account(int acct\_number) |

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| **Checking\_Account** |
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| + void deposit()  + void withdraw()  + void add\_interest() |

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| **Account** |
| # Customer \*customer  # double balance  # int account\_number  # vector<Transaction \*> transactions |
| # string get\_fees()  # void add\_interest(double interest)  + Account(Customer \*cust, int id)  + Customer \*get\_customer()  + void set\_customer(Customer \*cust)  + int get\_account()  + void set\_balance(double new\_balance)  + void set\_account(int account\_number)  + double get\_balance()  + virtual string to\_string()  + virtual void deposit(double amt)  + virtual void withdraw(double amt)  + virtual void add\_interest() |

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| **Transaction** |
| - string customer\_number  - string transaction\_type  - double amount  - string fees |
| + Transaction(int customer\_number, string type, double amt, string fees)  + string process\_tran() |

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| **Savings\_Account** |
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| + void deposit()  + void withdraw()  + void add\_interest() |