

Software Engineering

Object–Oriented Analysis, Design and
Implementation

Case Study – Part III
Software Extension

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Useful material

- ▶ Java: How to Program. 9th ed. by Deitel & Deitel
 - This case study: chapters 12 and 13.

ATM Case Study Part 3: Extension of Software

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Extensions to the ATM

- ▶ More functionalities
 - Transfer amount from one account to another
 - Payment of different types
 - Credit cards (composition)

Transfer amount from one account to another



- ▶ New class Transfer
- ▶ Modify class ATM
 - Constants declaration
 - Method performTransaction
 - Method displayMainMenu
 - Method createTransaction



Payment of different types

- ▶ Interface Payable
- ▶ Invoice class
- ▶ Fine class
- ▶ Modify BankDatabase
- ▶ Modify ATM

- ▶ Payments Inquiry
 - Modify Balancelnquiry



Composition

- ▶ Introduce credit cards
- ▶ An account can be connected with more cards
- ▶ Methods
 - Pay a credit card (from negative balance to zero)

End of class