



MASTER OF COMPUTER APPLICATION

MCSL - 036 (Section-1 : Object Oriented Analysis and Design) – Lab

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Year / Semester : II / I
Study Centre Code : 2548
Study Centre : Kongu Engineering College

DIRECTORATE OF DISTANCE EDUCATION
INDIRA GANDHI NATIONAL OPEN UNIVERSITY

New Delhi

Certified that this is the bonafide record work done by
Mr. R. Gowtham with Enrolment Number: **187012107** of MCA
(Master of Computer Applications) – **III Semester** in the
Programming Lab – **MCSL-036** in the directorate of Distance
Education, Indira Gandhi National Open University, New Delhi,
during the Calendar year 2019 – 2020

Date:

Submitted for MCA Degree course Practical Examination held
on **08.01.2020** at the center **G.R.D. College of Science,**
Coimbatore.

Date :

Examiners

1. Name :
Signature :
2. Name :
Signature :

Object Oriented Analysis and Design – LAB

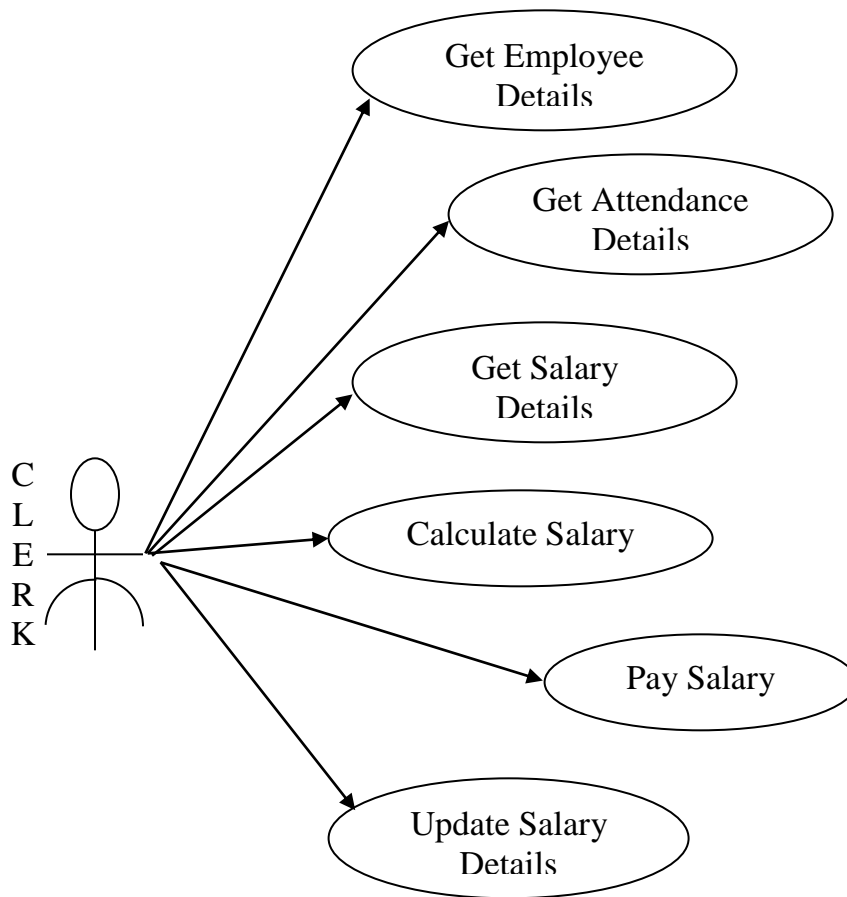
Index

S.NO	DATE	TITLE	PAGE NO.	SIGN
1.	28.07.2019	Section 1,2 & 3: Draw the Use Case Diagrams	01	
2.	03.08.2019	Section 4 & 5: Draw the Sequence and Collaboration Diagrams	06	
3.	17.08.2019	Section 6,7 & 8: Draw the State Transition and Class Diagrams	34	
4.	03.09.2019	Section 9 & 10: Draw the Component Deployment Models	53	

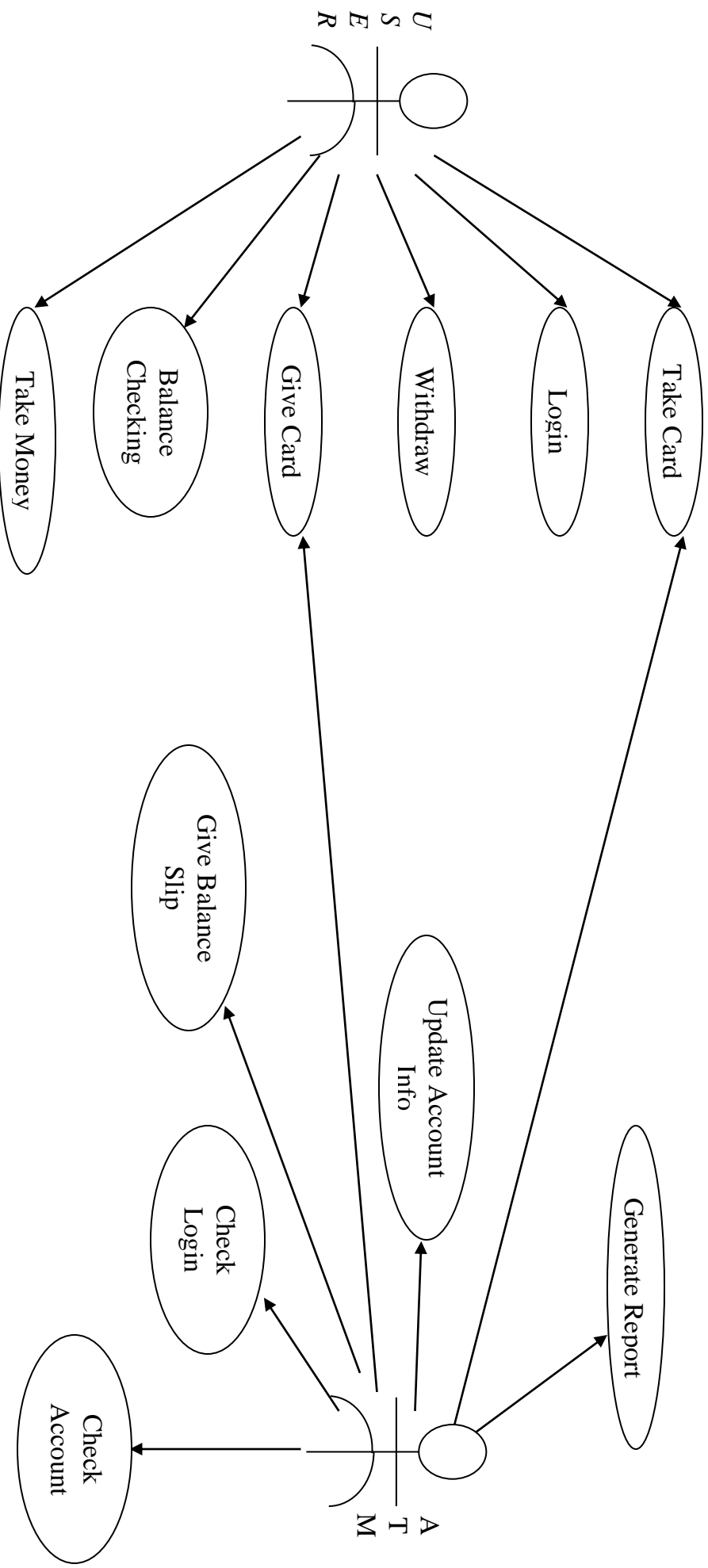
OBJECT ORIENTED ANALYSIS AND DESIGN - LAB

Sessions 1,2 & 3: Draw the Use Case Diagrams

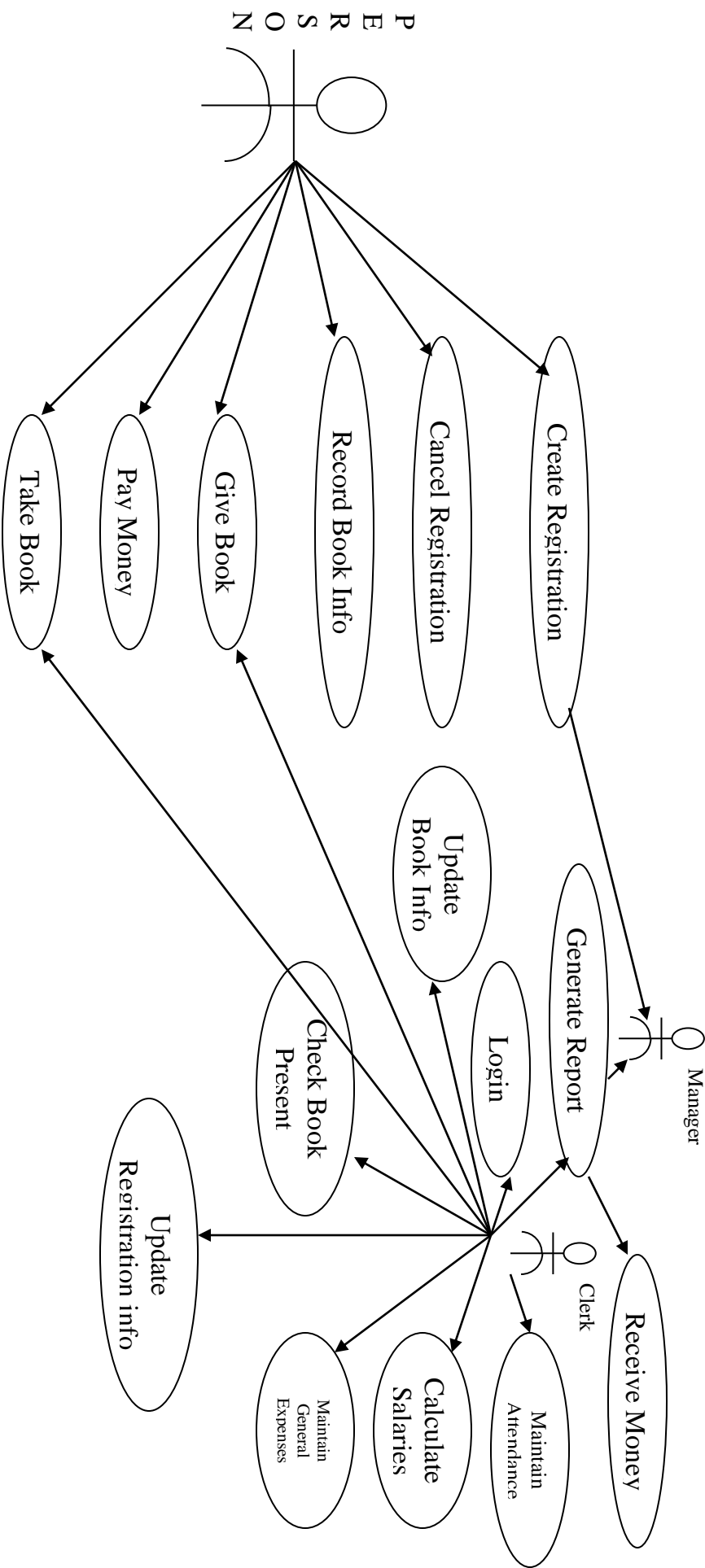
1. Use Case Diagram for Employee Management System



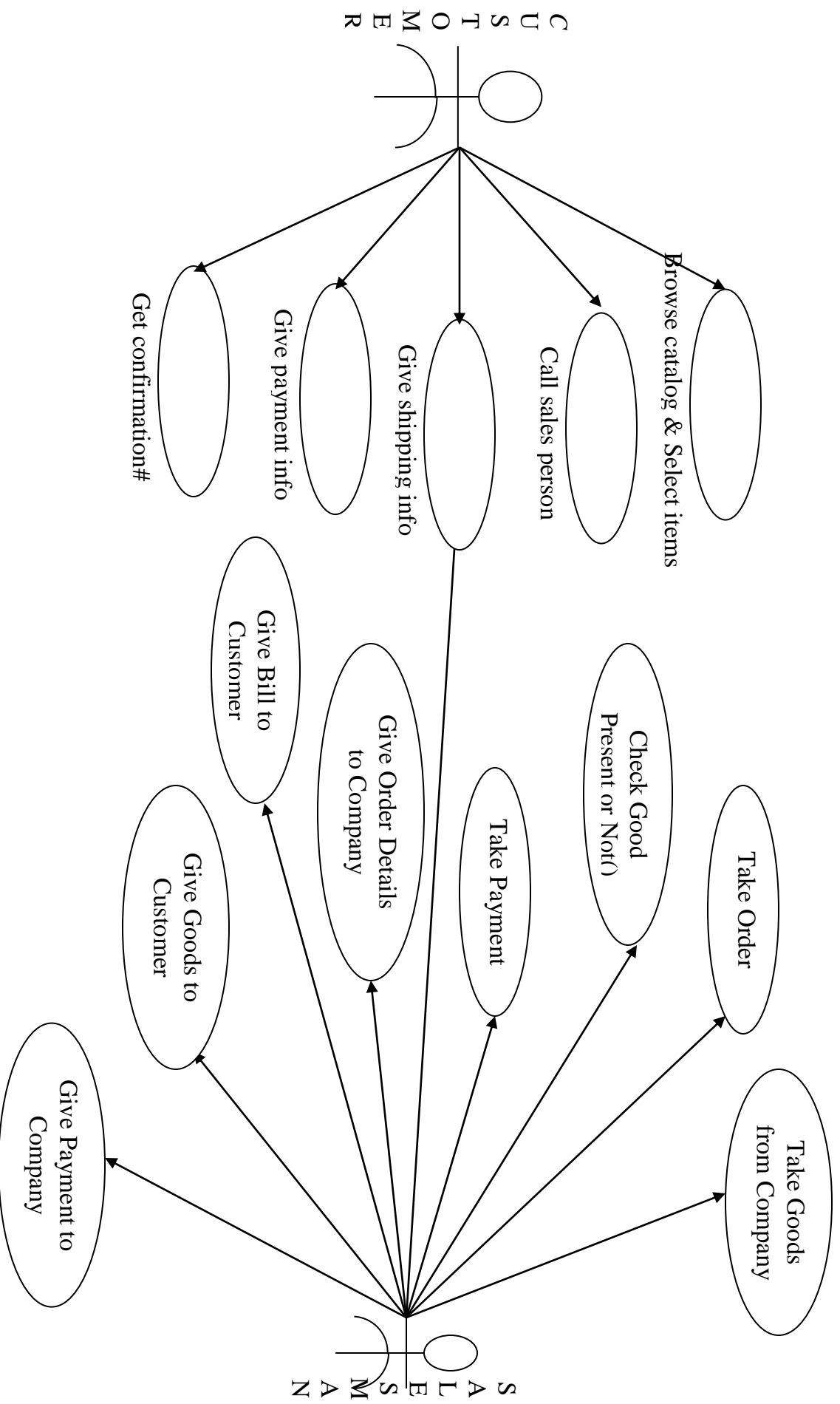
2. Use Case Diagram for ATM



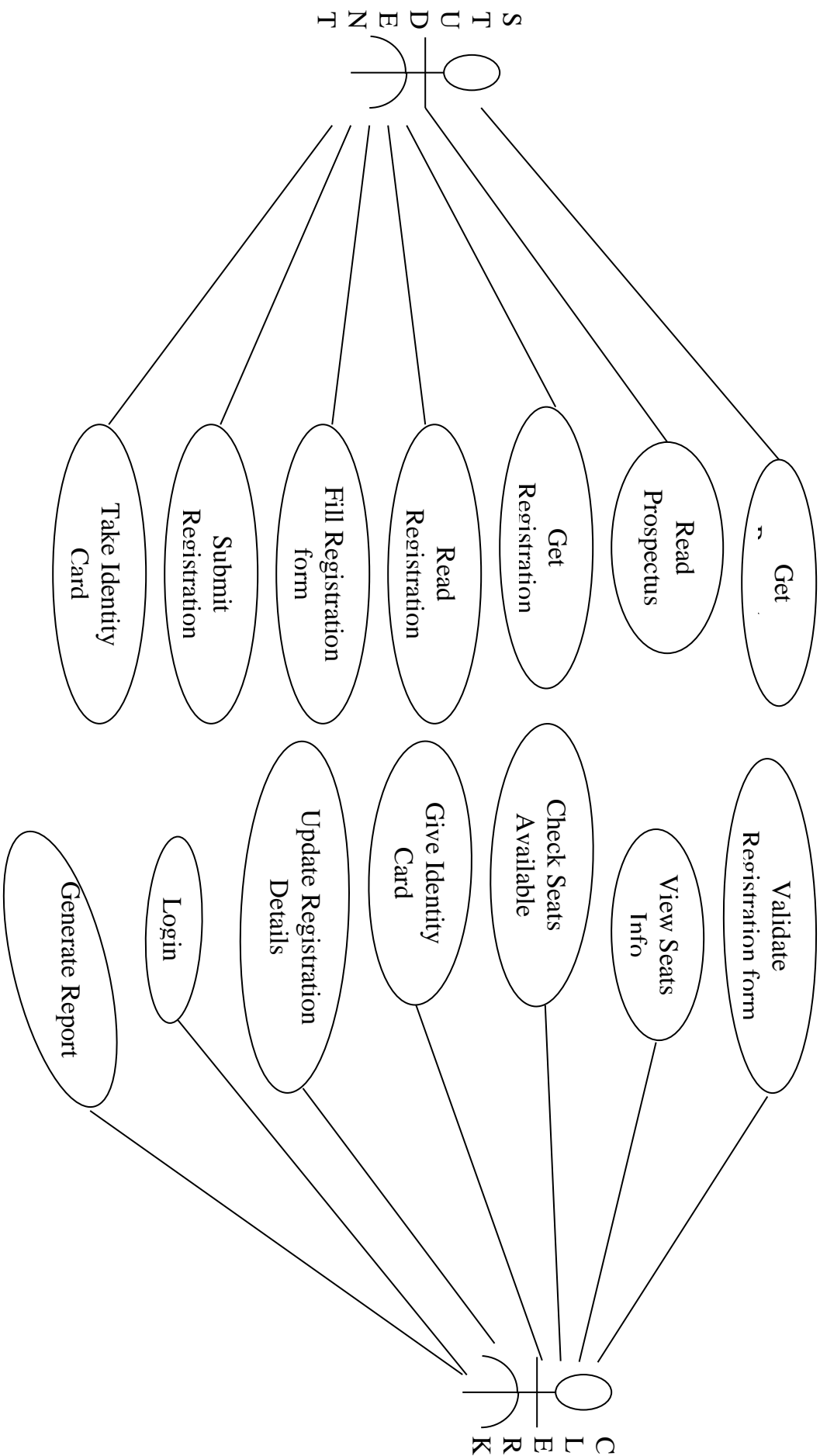
3. Use Case Diagram for Library Management



4. Use Case Diagram for Ordering Processing



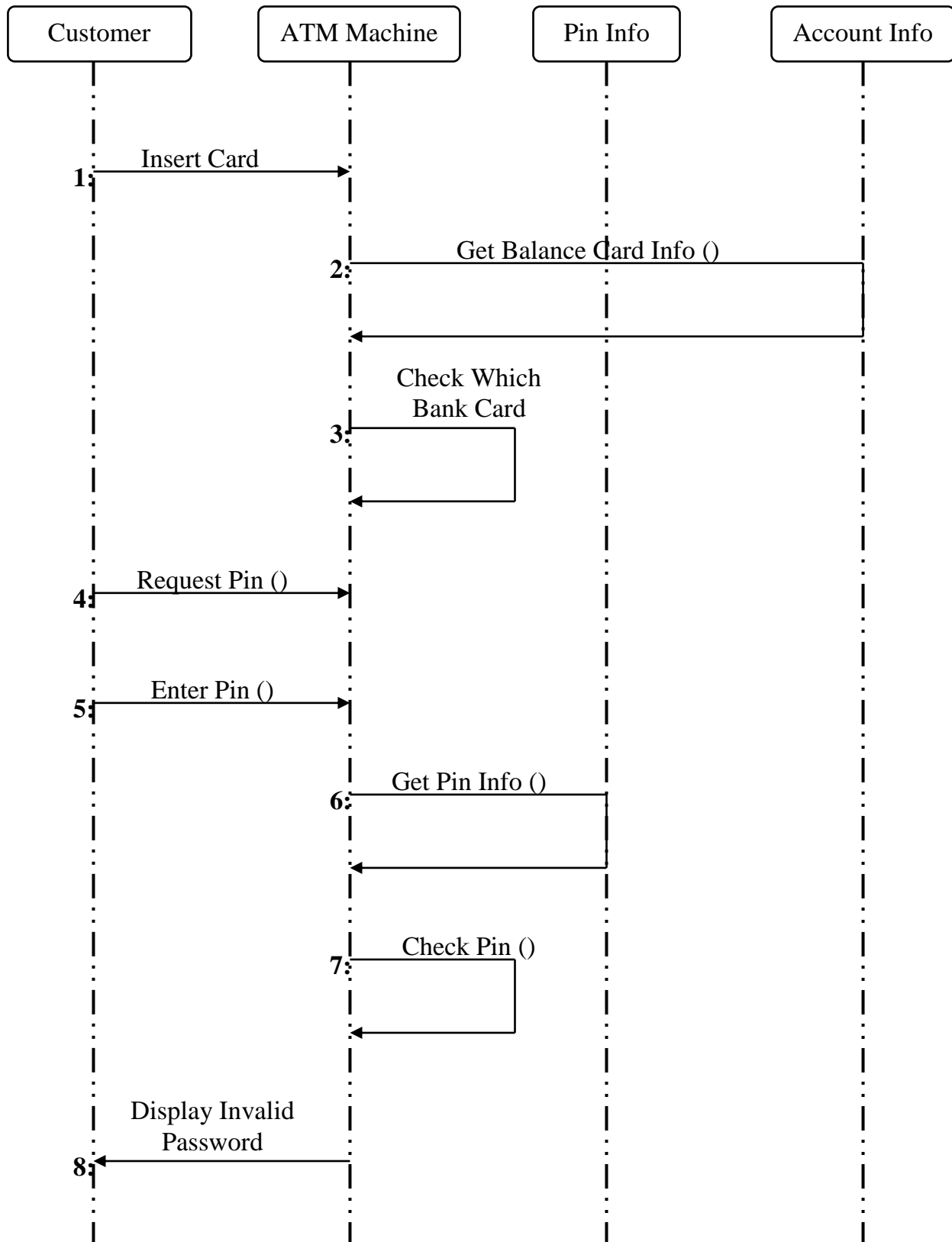
5. Use Case Diagram for Student Registration



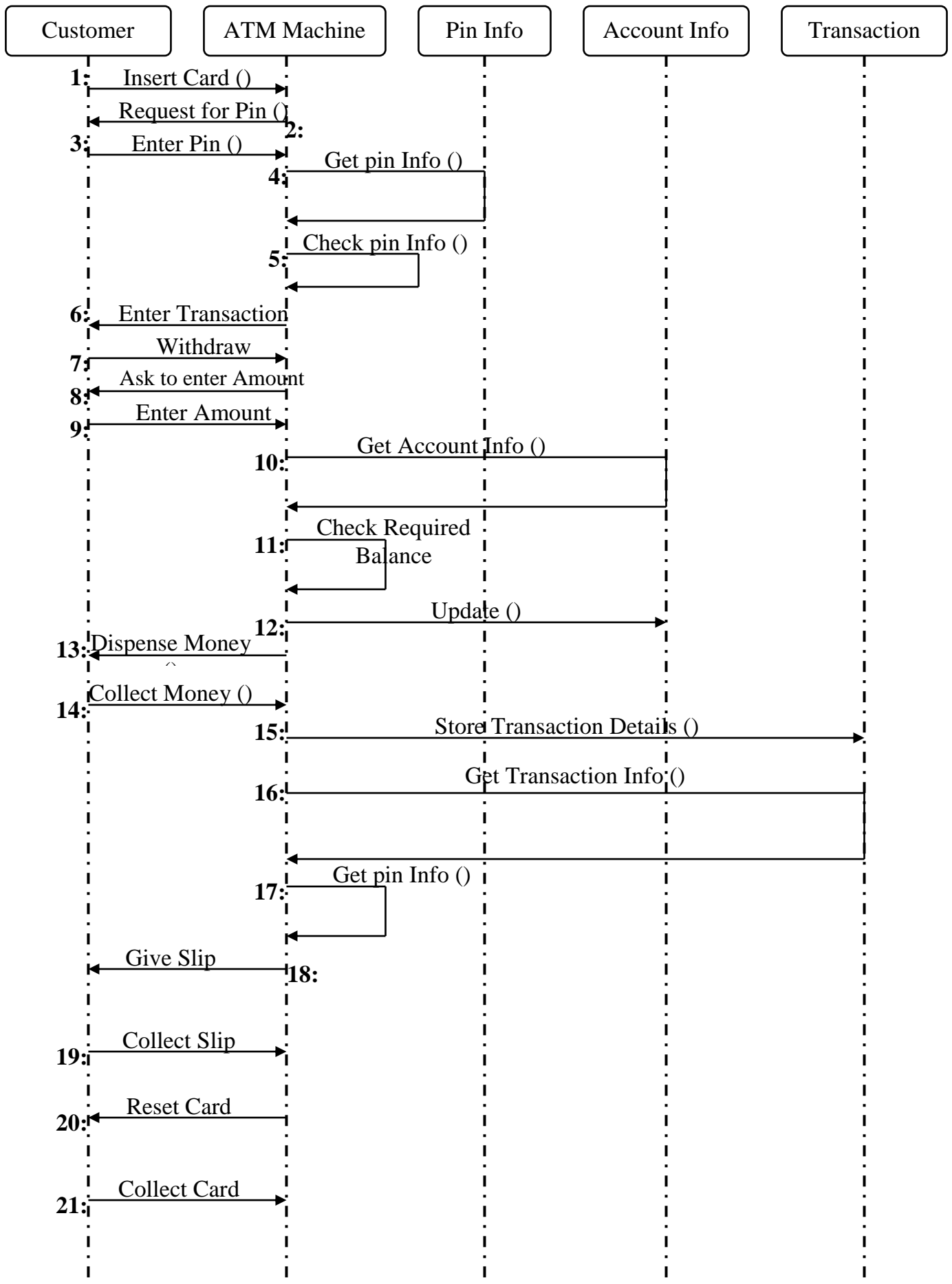
Section 4 & 5: Draw the Sequence and Collaboration Diagrams

6. a) Sequence Diagrams for ATM

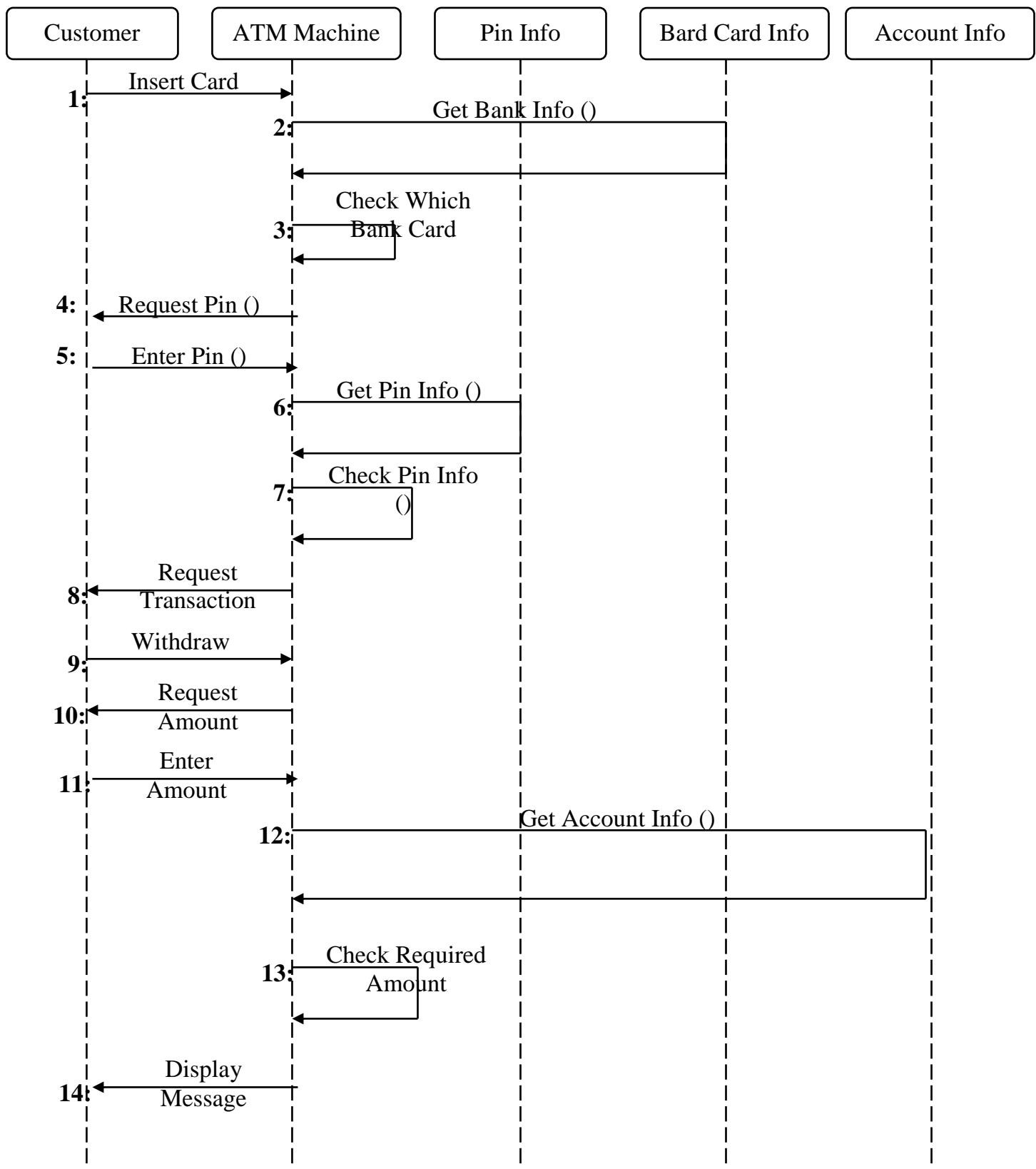
Sequence Diagram for Invalid PIN Code



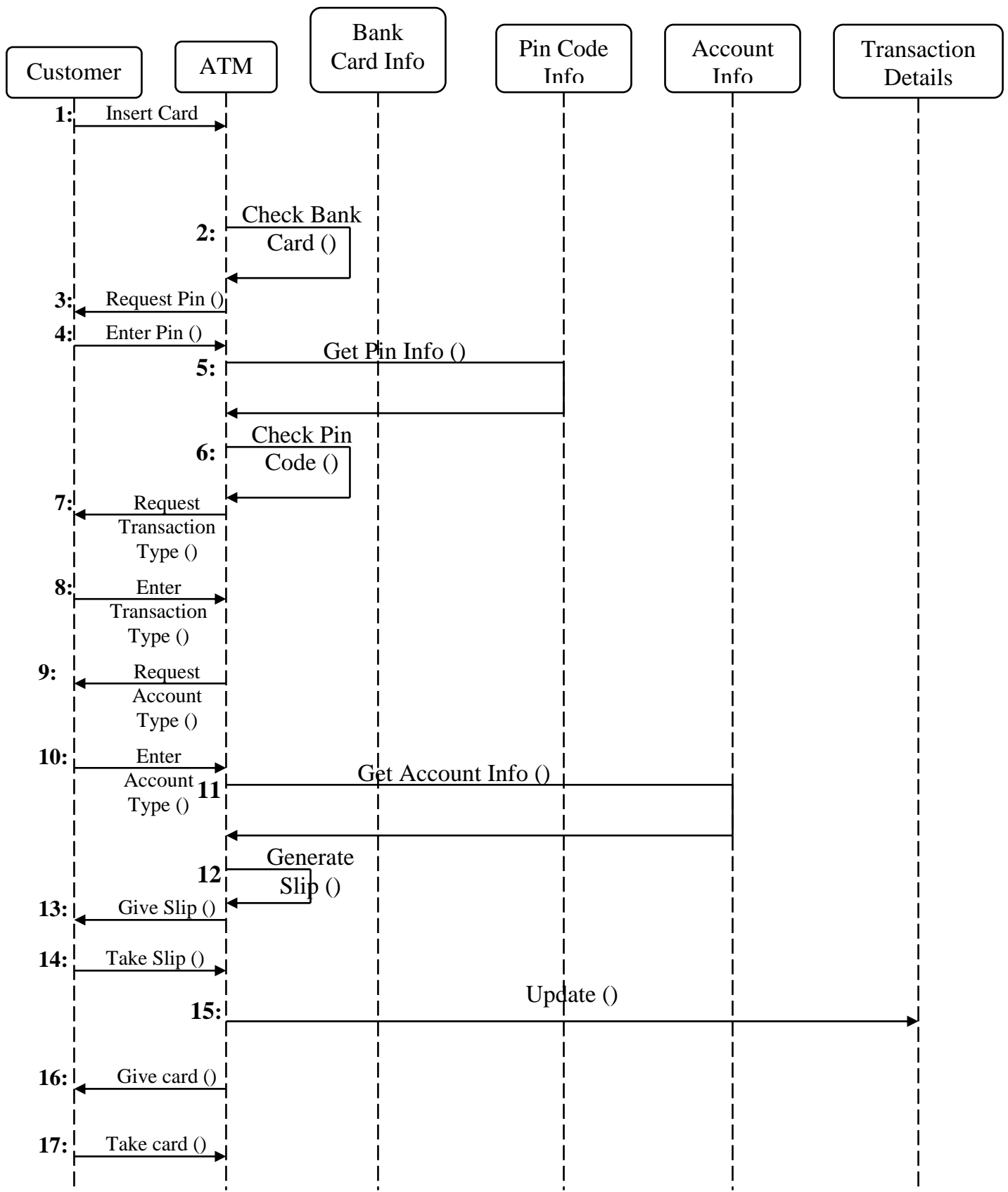
Sequence Diagram for Withdraw



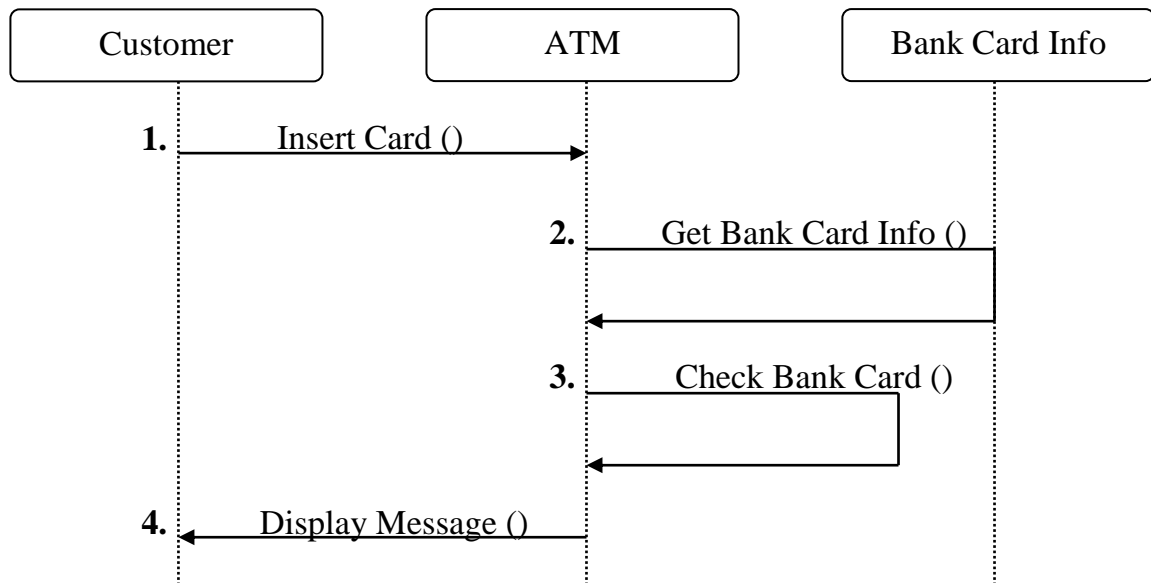
Sequence Diagram for Invalid Amount



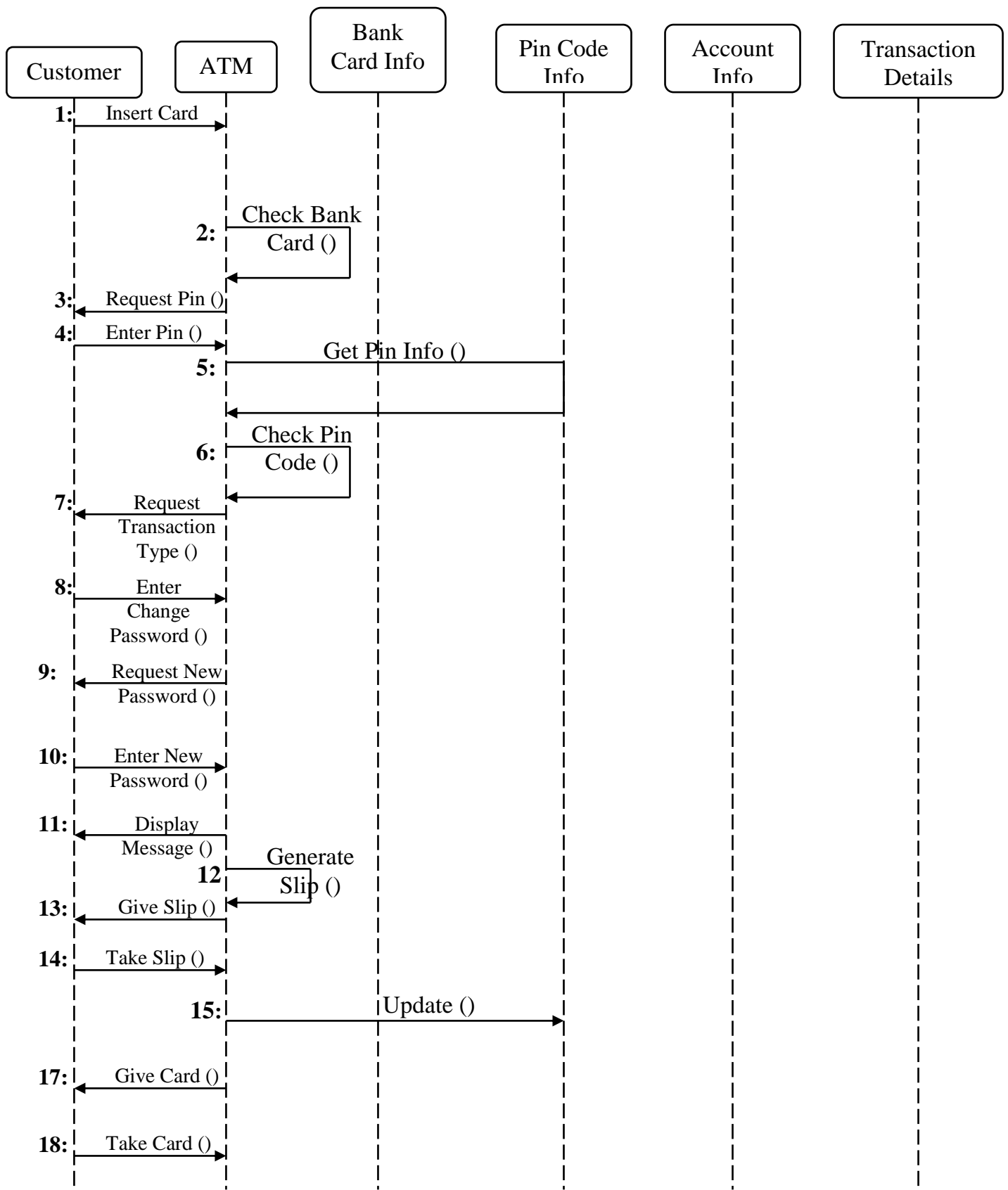
Sequence Diagram for Balance Check



Sequence Diagram for Invalid Bank Card

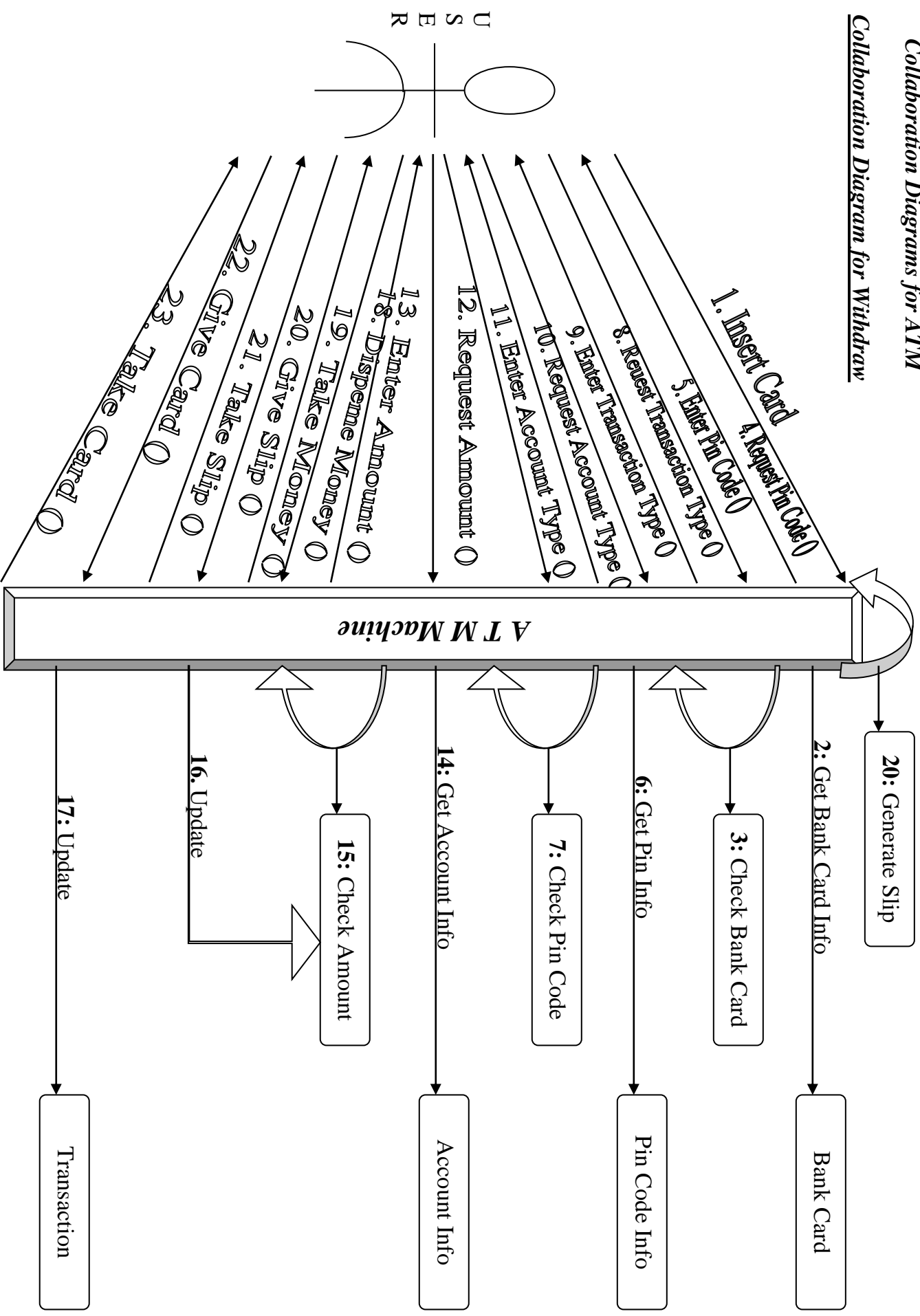


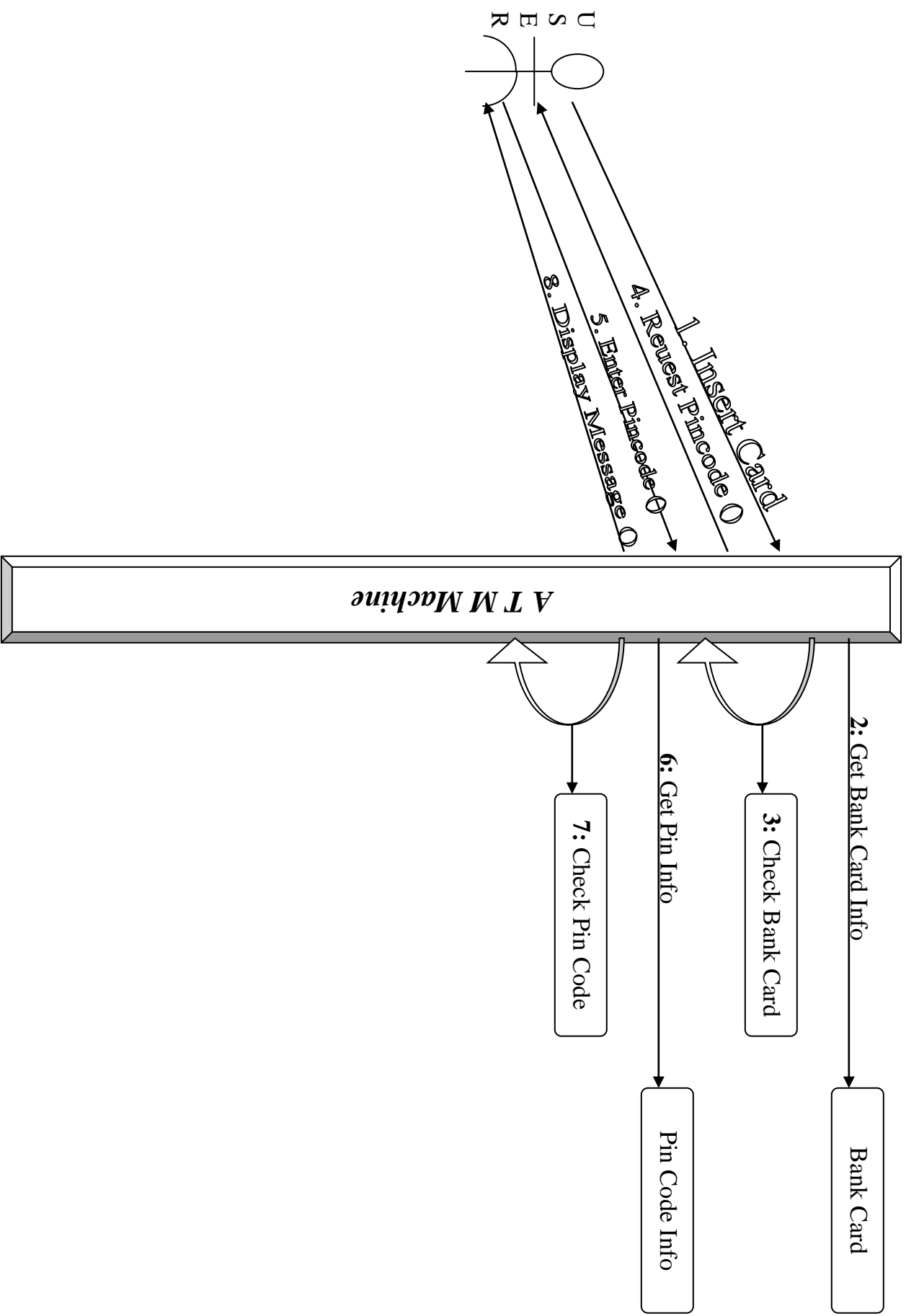
Sequence Diagram for Changing Password



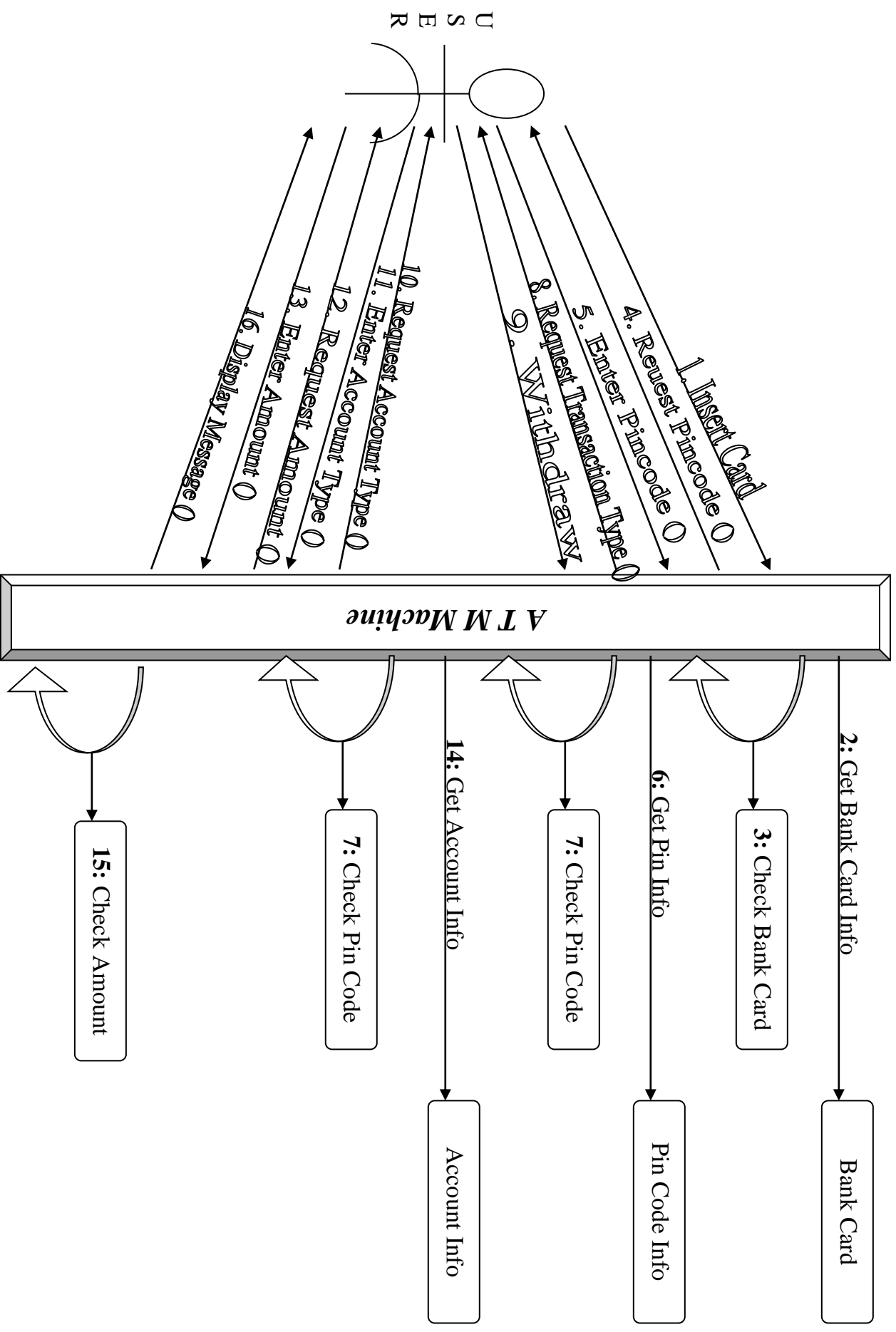
b) *Collaboration Diagrams for ATM*

Collaboration Diagram for Withdraw

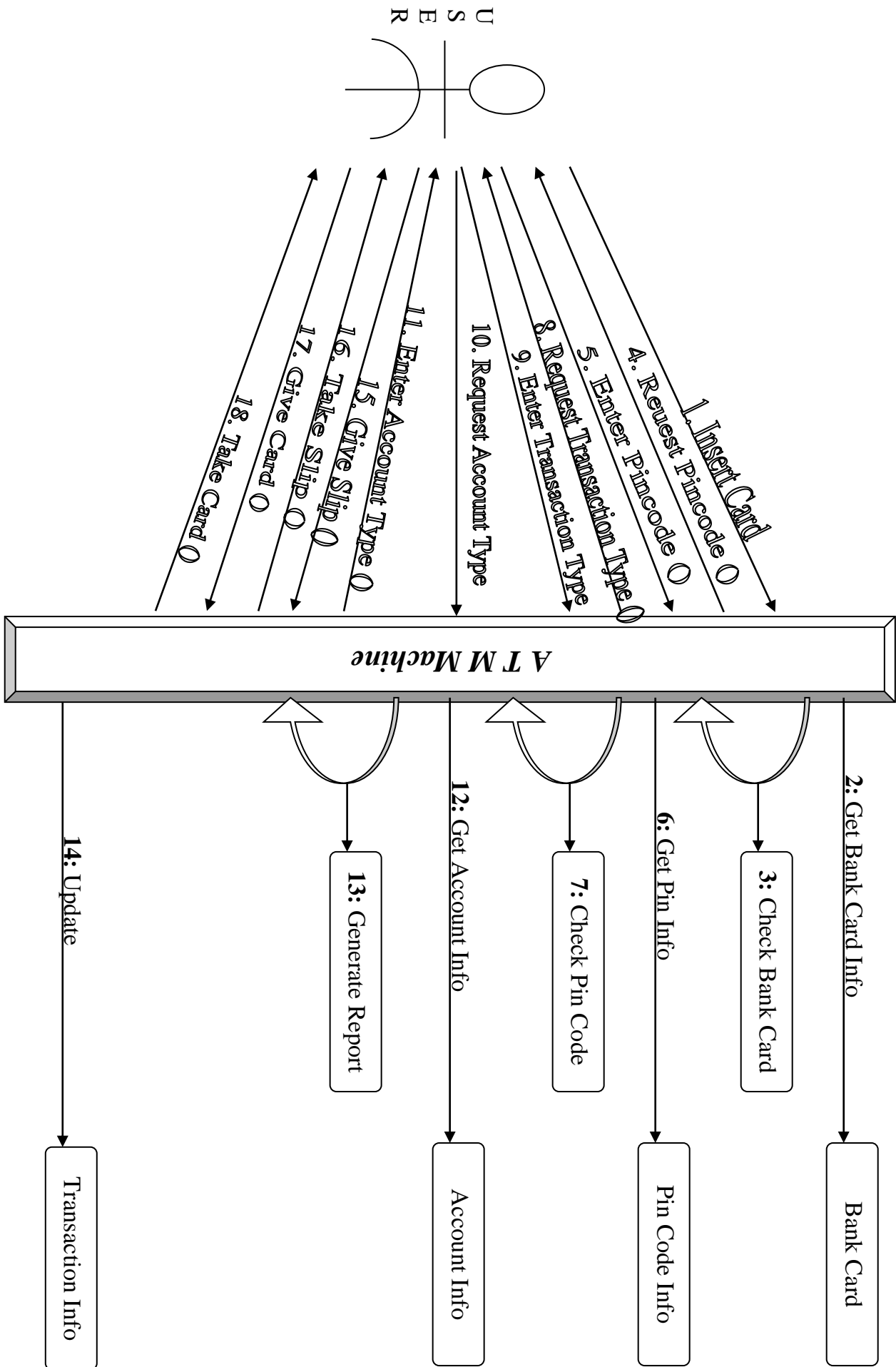


Collaboration Diagram for Invalid PIN Code

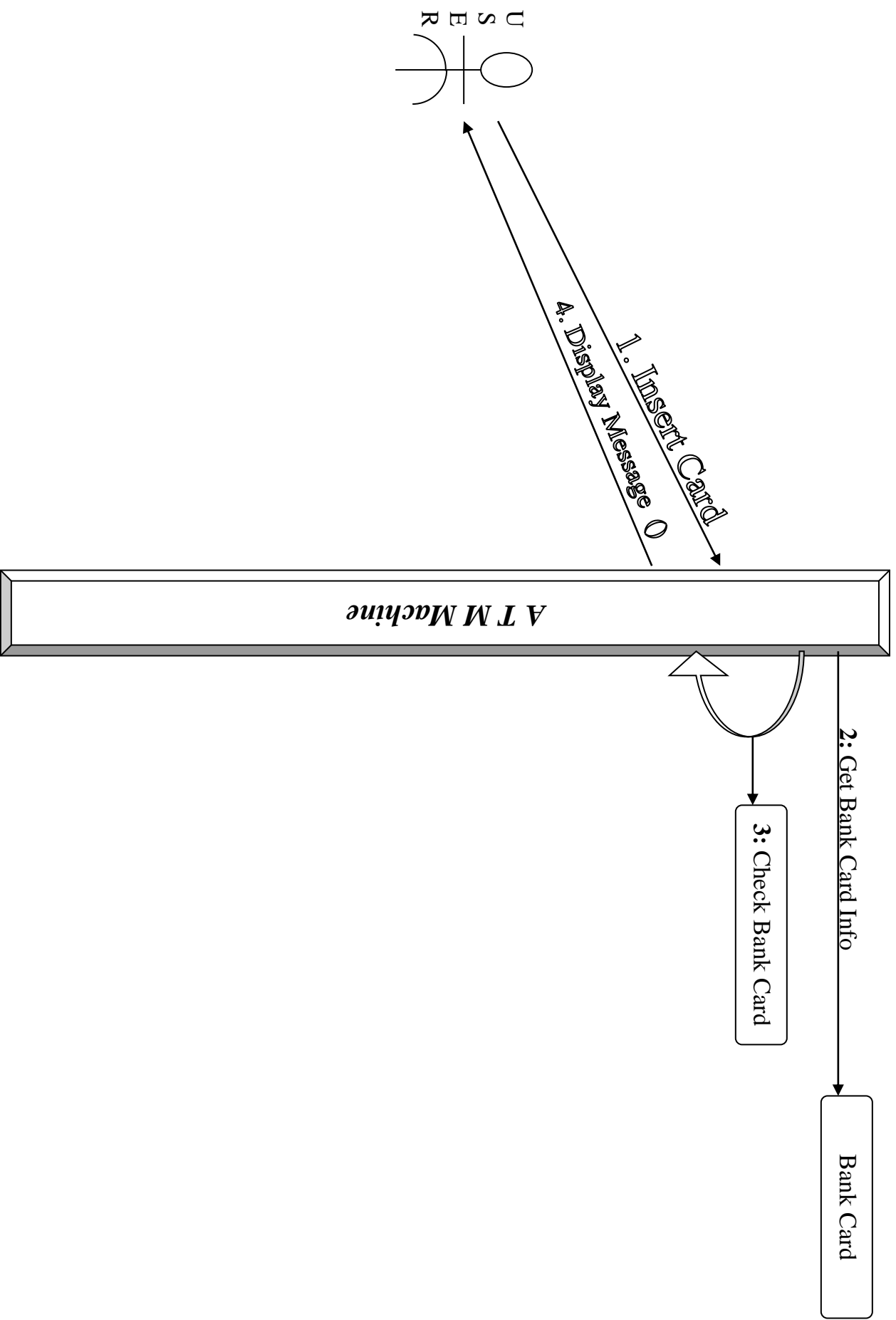
Collaboration Diagram for Invalid Amount



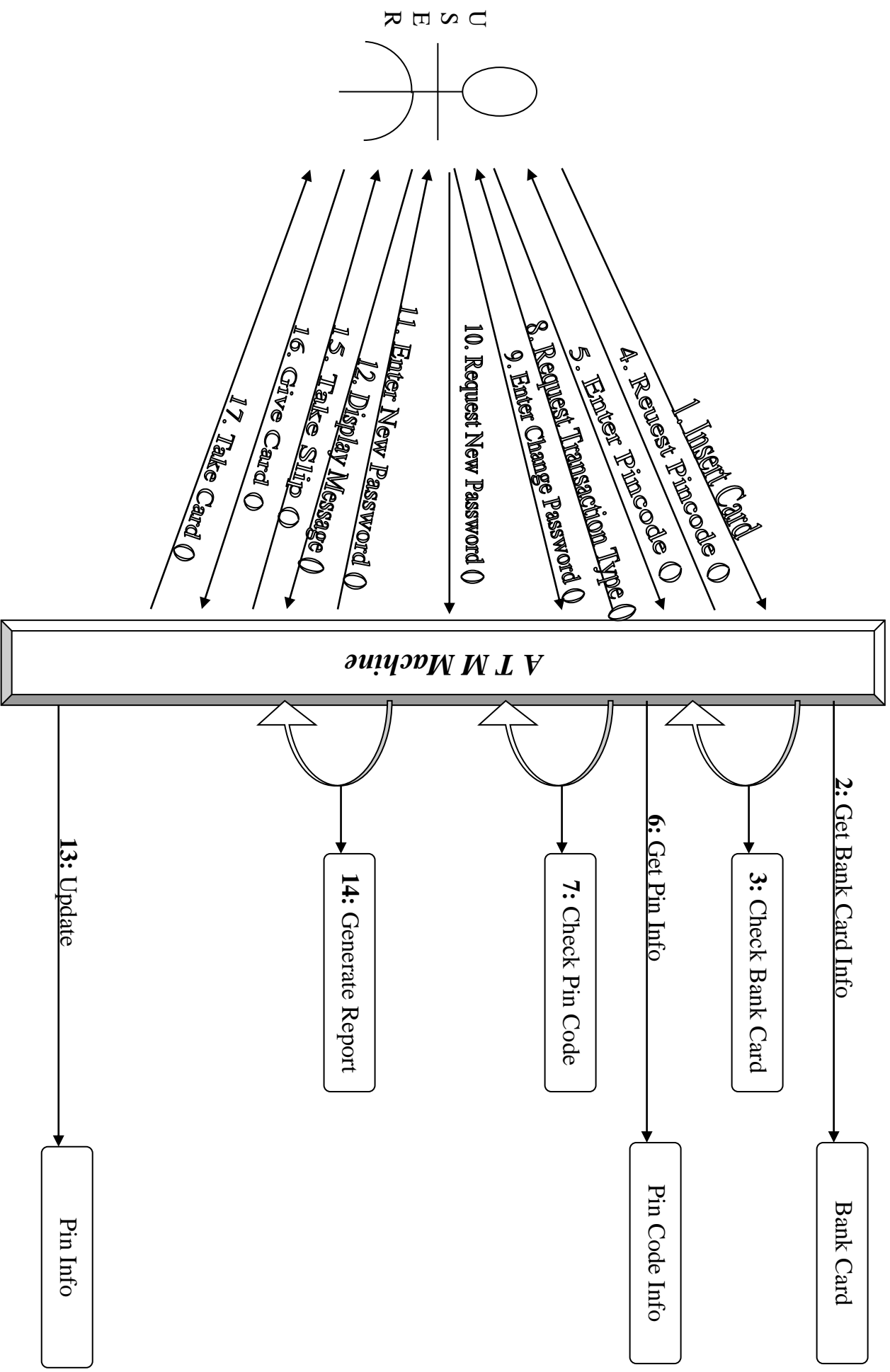
Collaboration Diagram for Balance Check



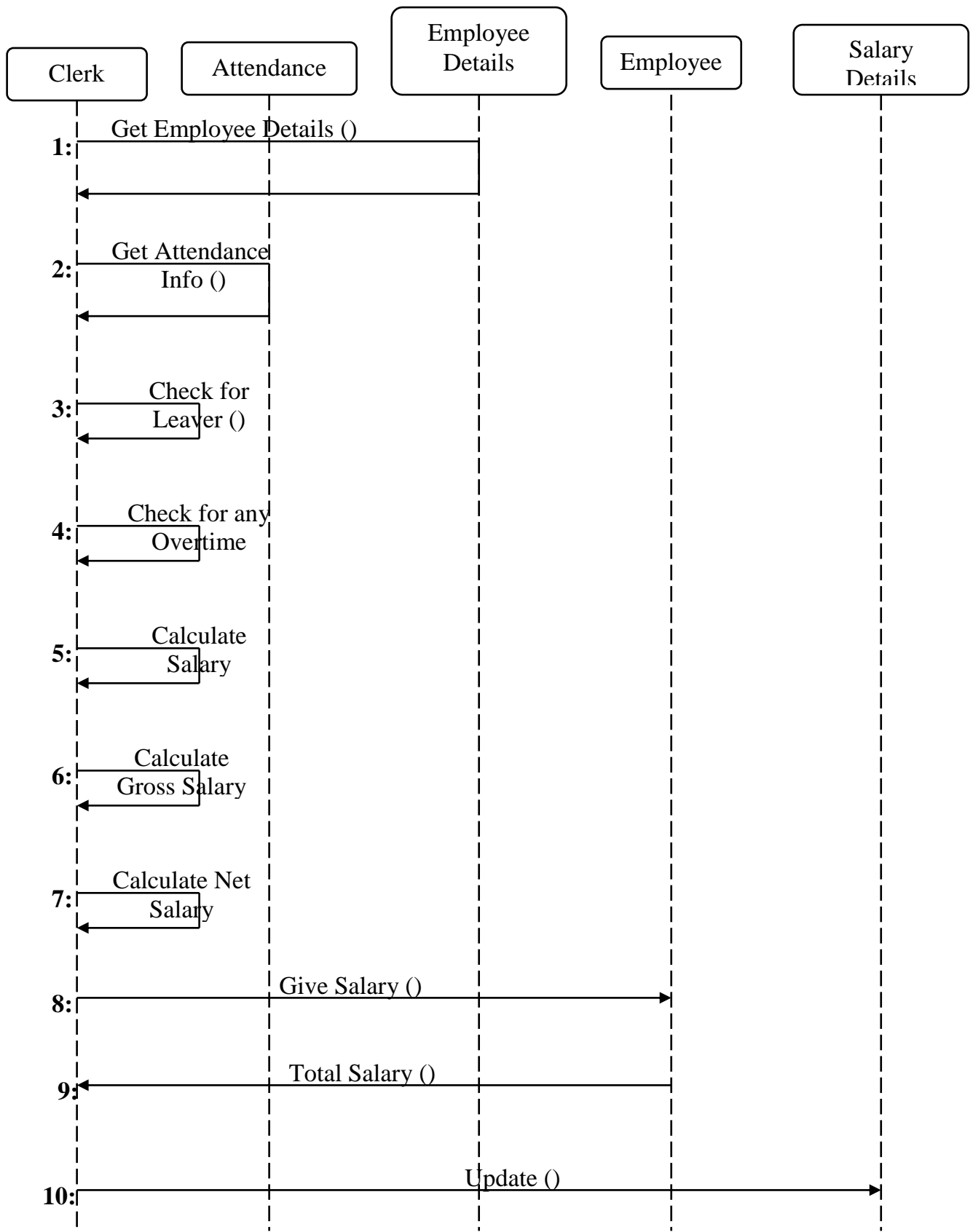
Collaboration Diagram for Invalid Bank Card



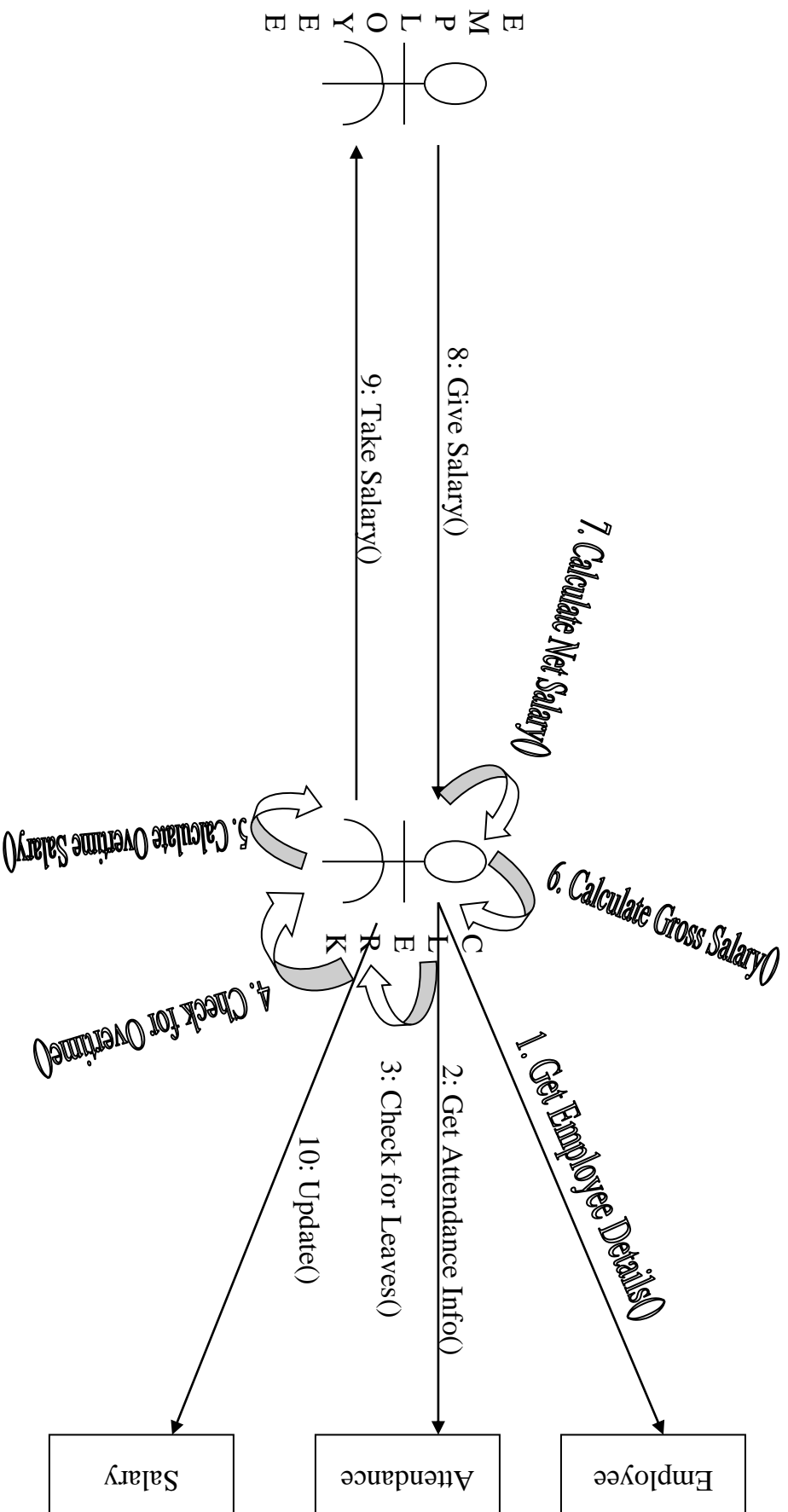
Collaboration Diagram for Changing Password



7 a) Sequence Diagram for Employee Management System

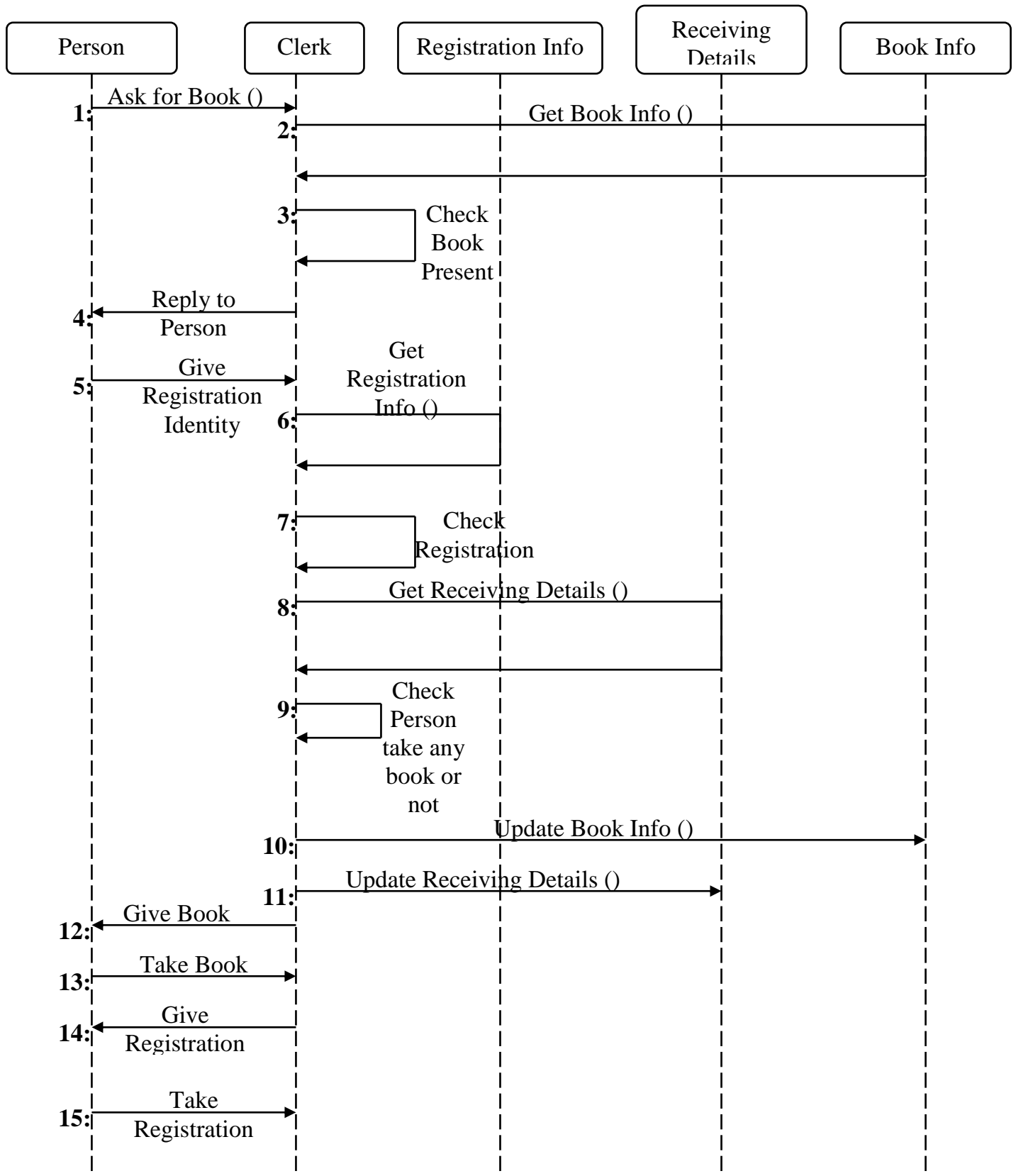


b) Collaboration Diagram for Employee Management System

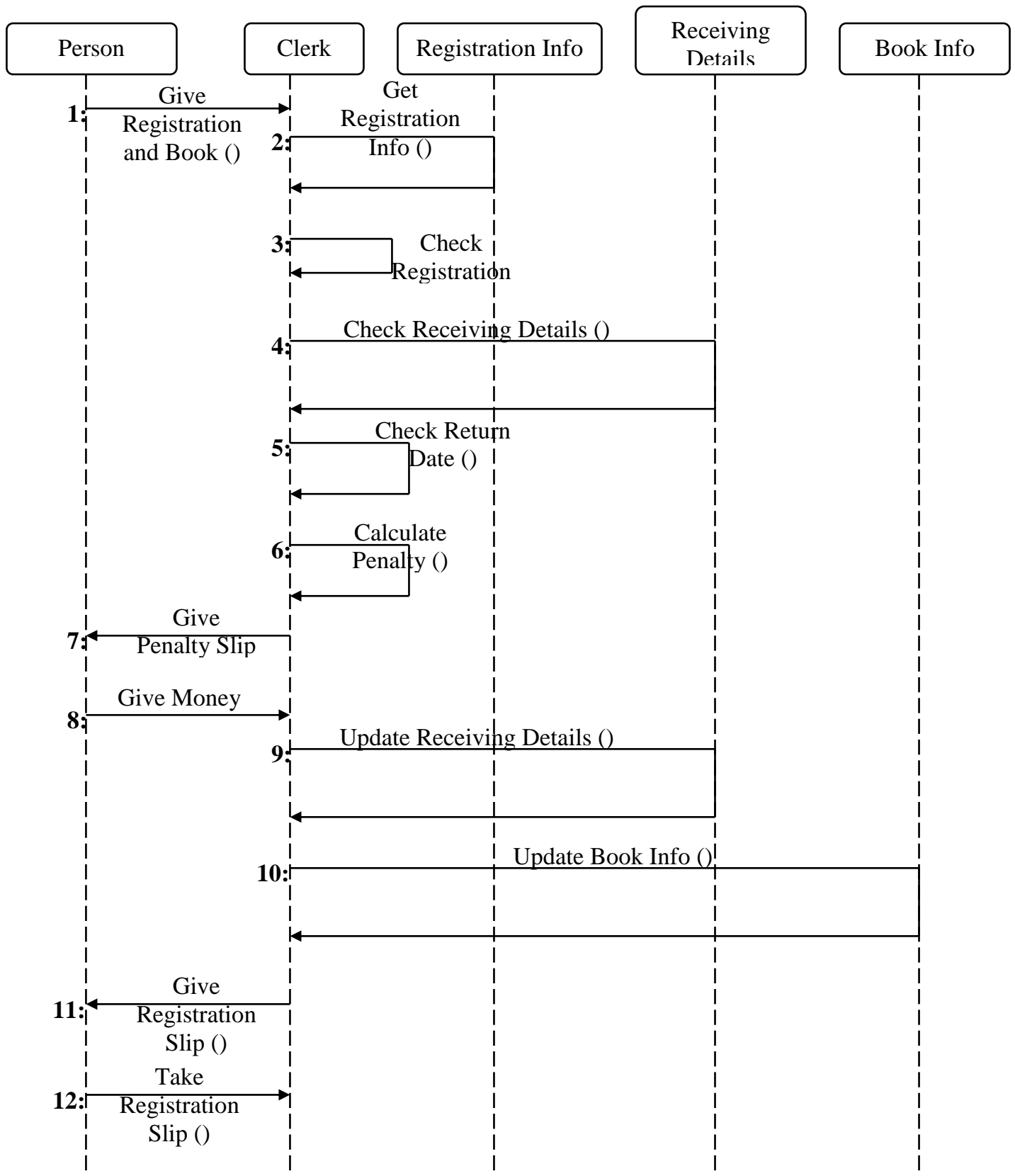


8 a) Sequence Diagrams for Library Management System

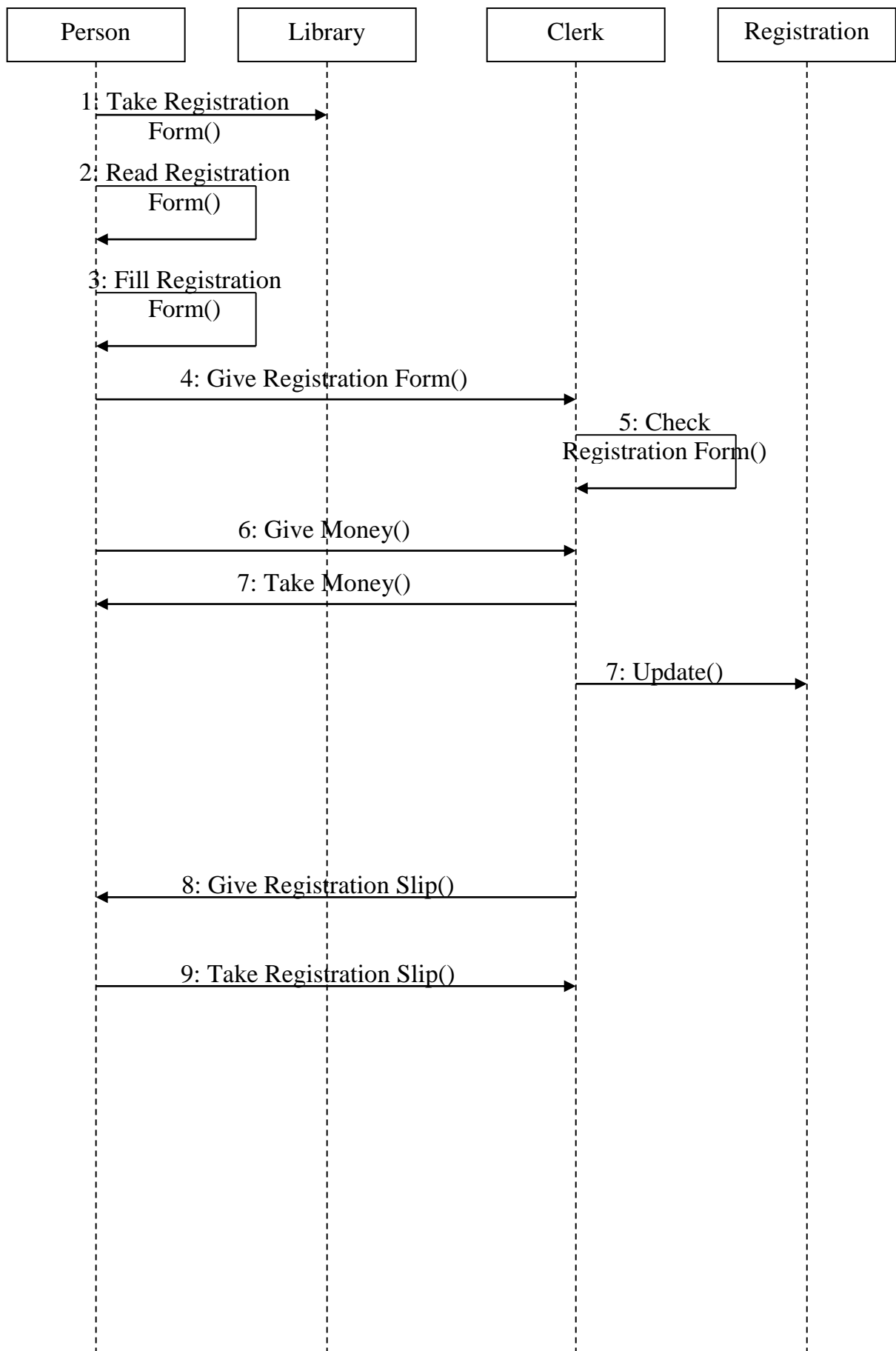
Sequence Diagram for Taking Book



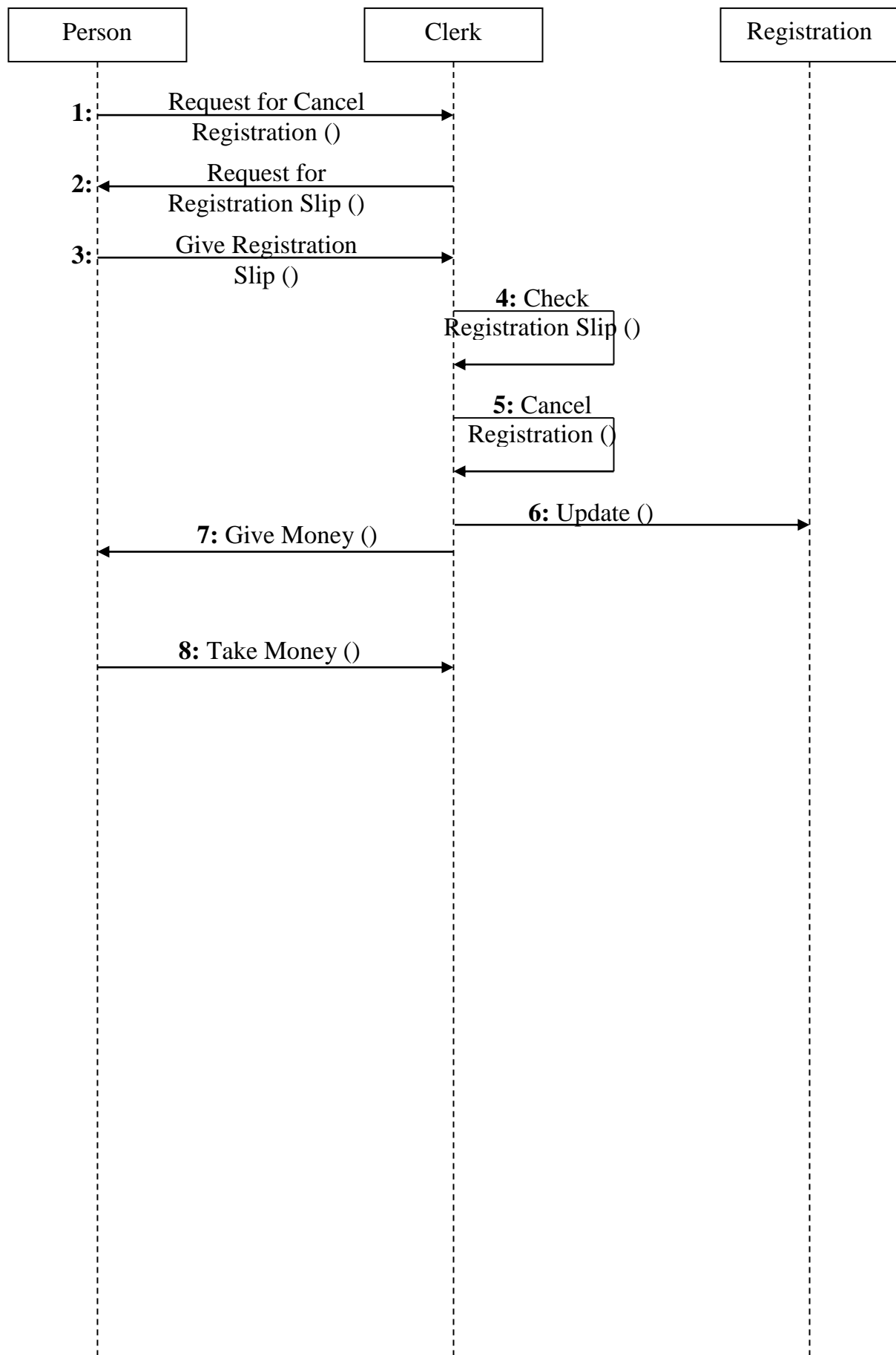
Sequence Diagram for Giving Book



Sequence Diagram for Create Library Registration

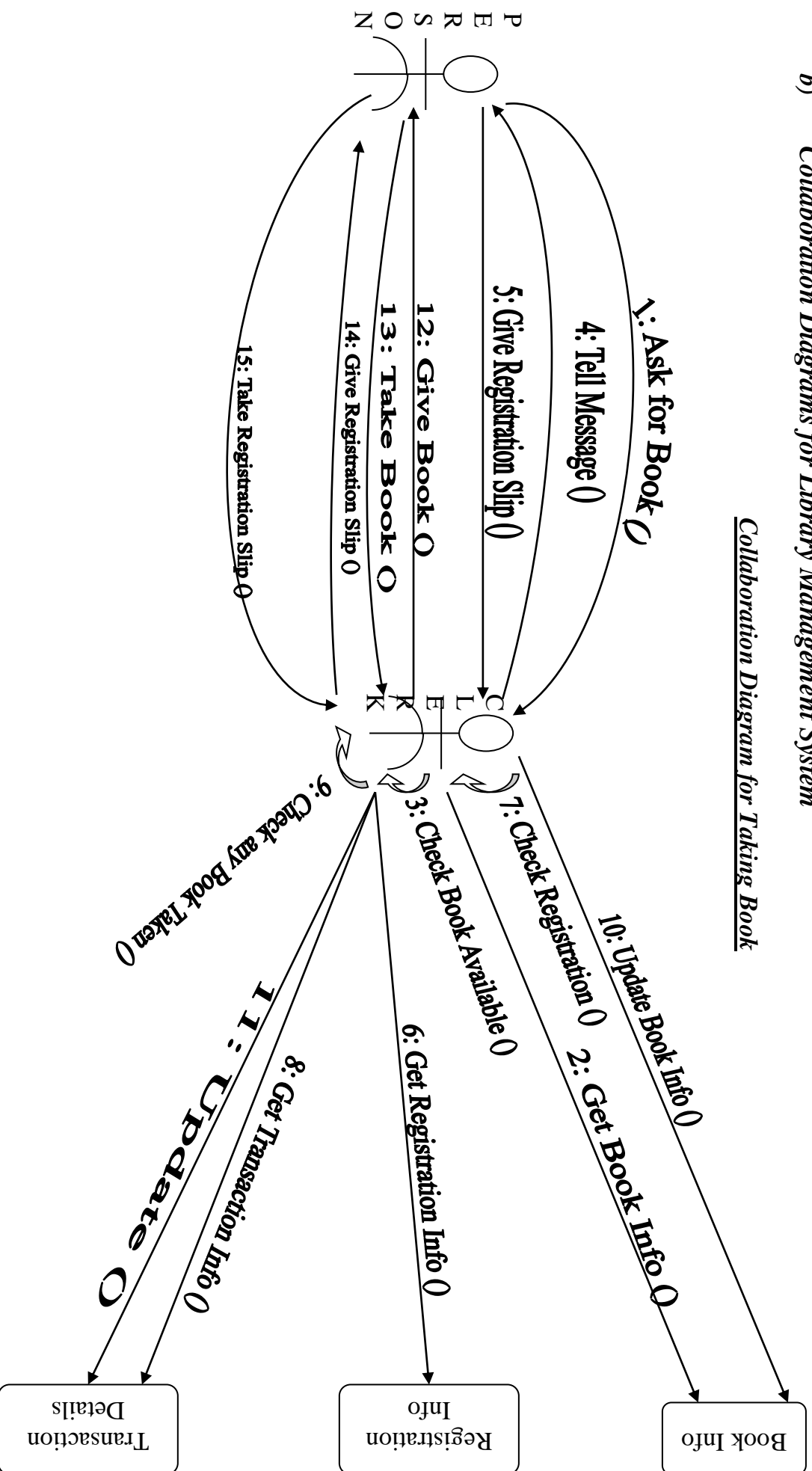


Sequence Diagram for Cancel Library Registration

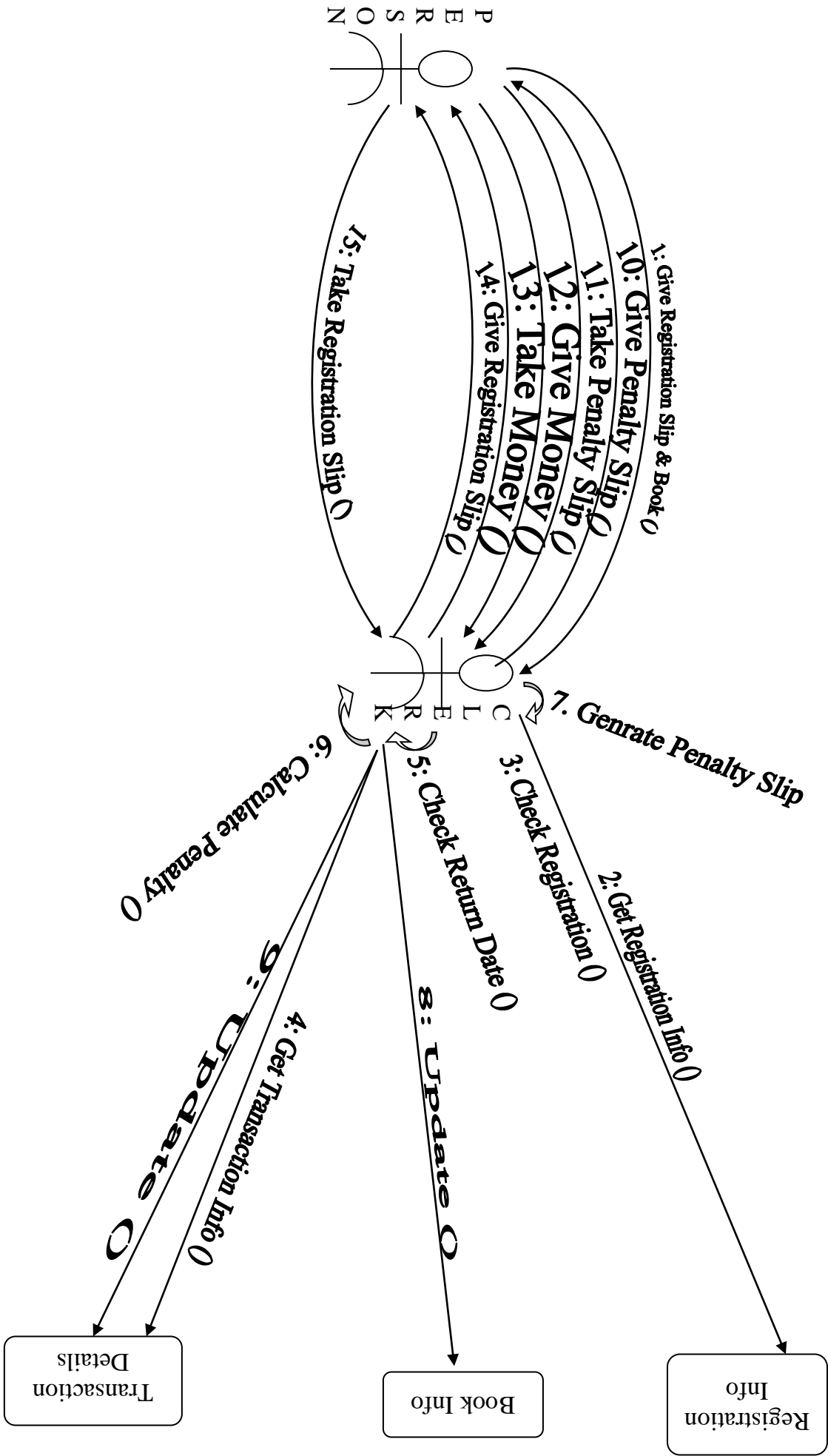


b) Collaboration Diagrams for Library Management System

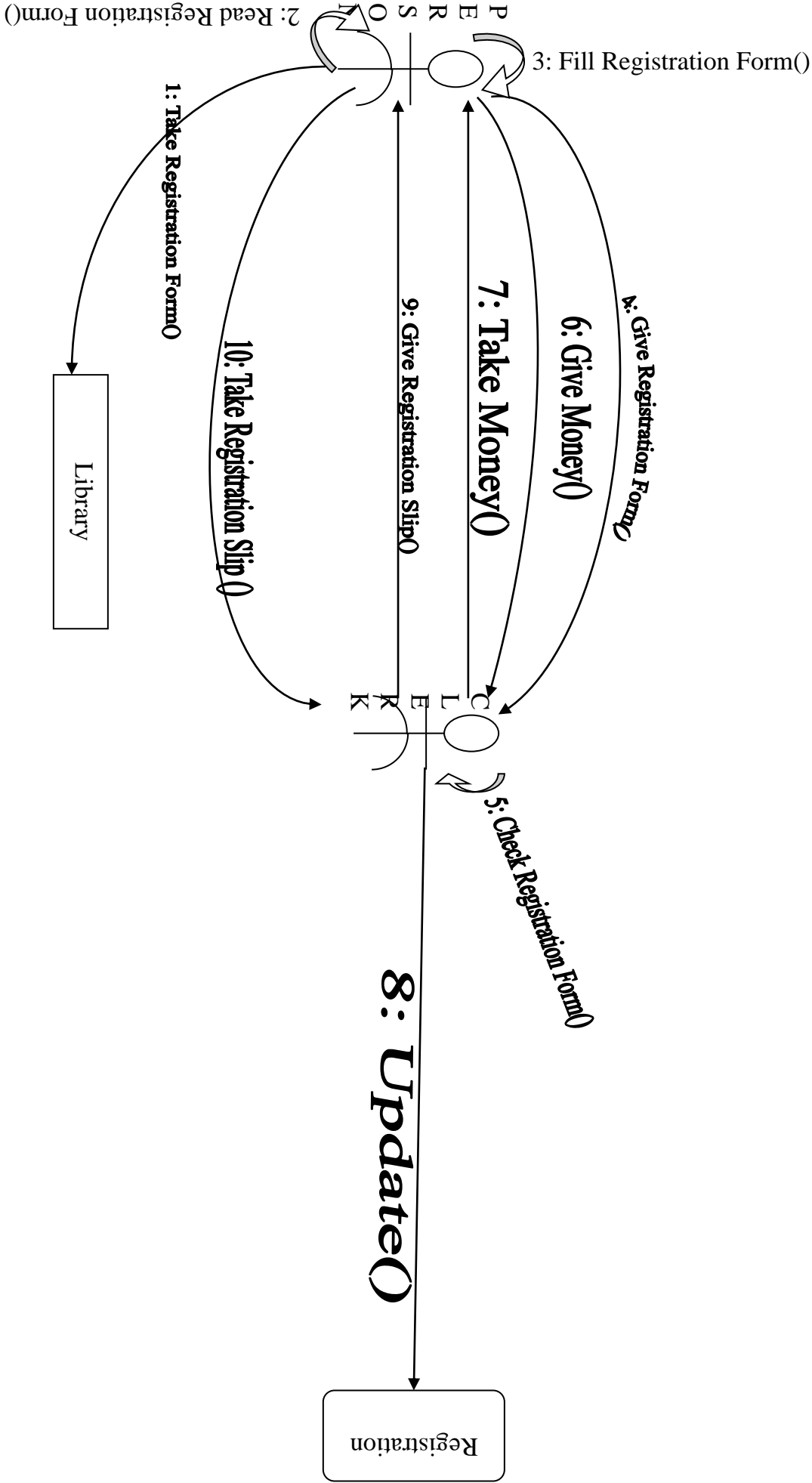
Collaboration Diagram for Taking Book



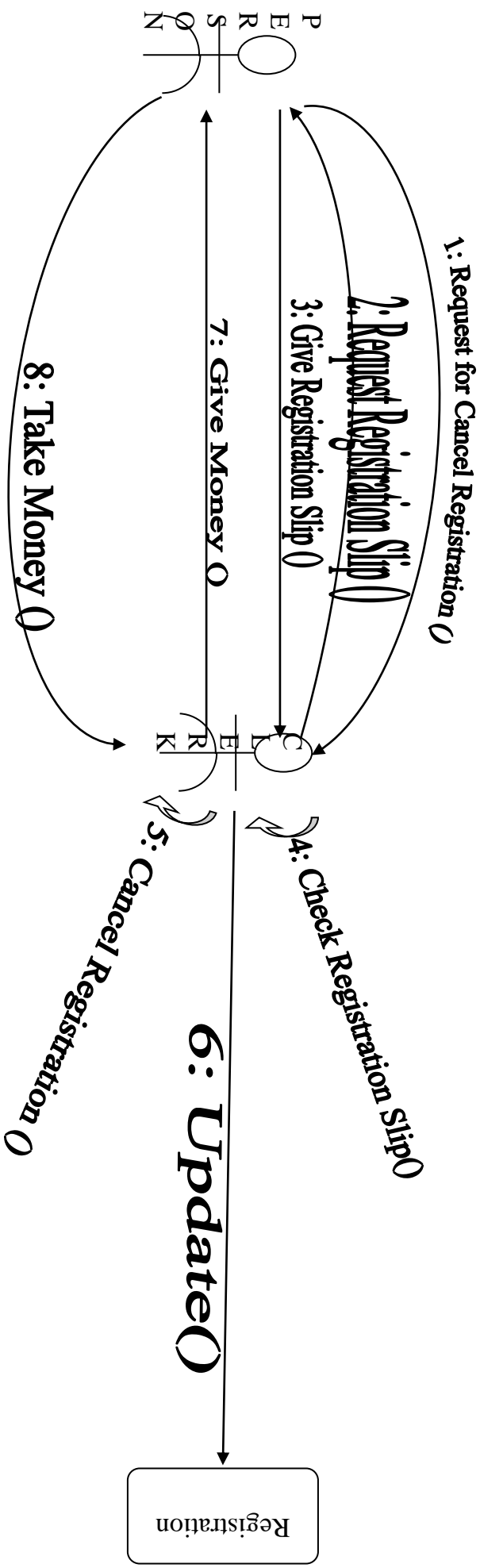
Collaboration Diagram for Giving Book



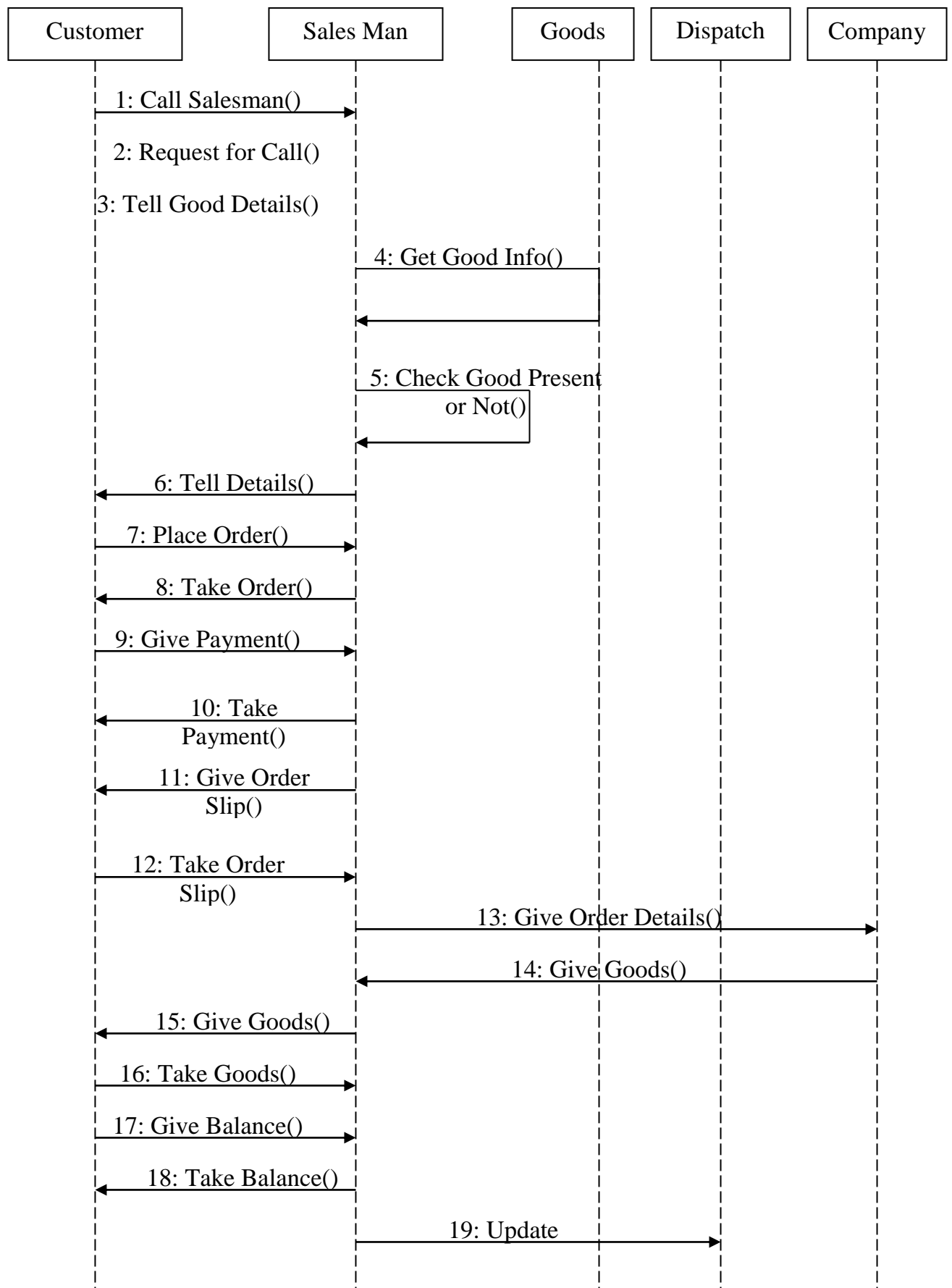
Collaboration Diagram for Create Library Registration



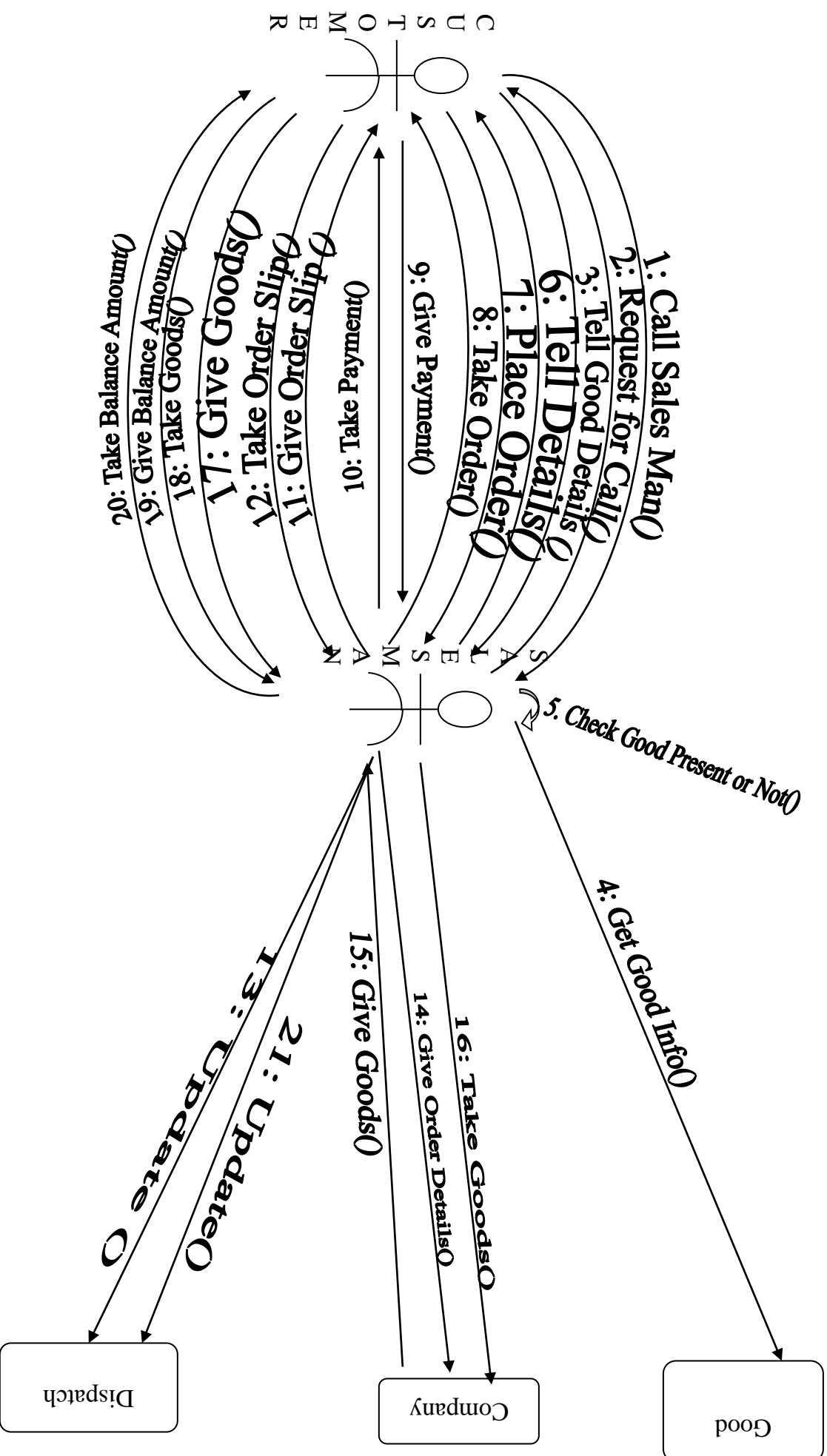
Collaboration Diagram for Cancel Library Registration



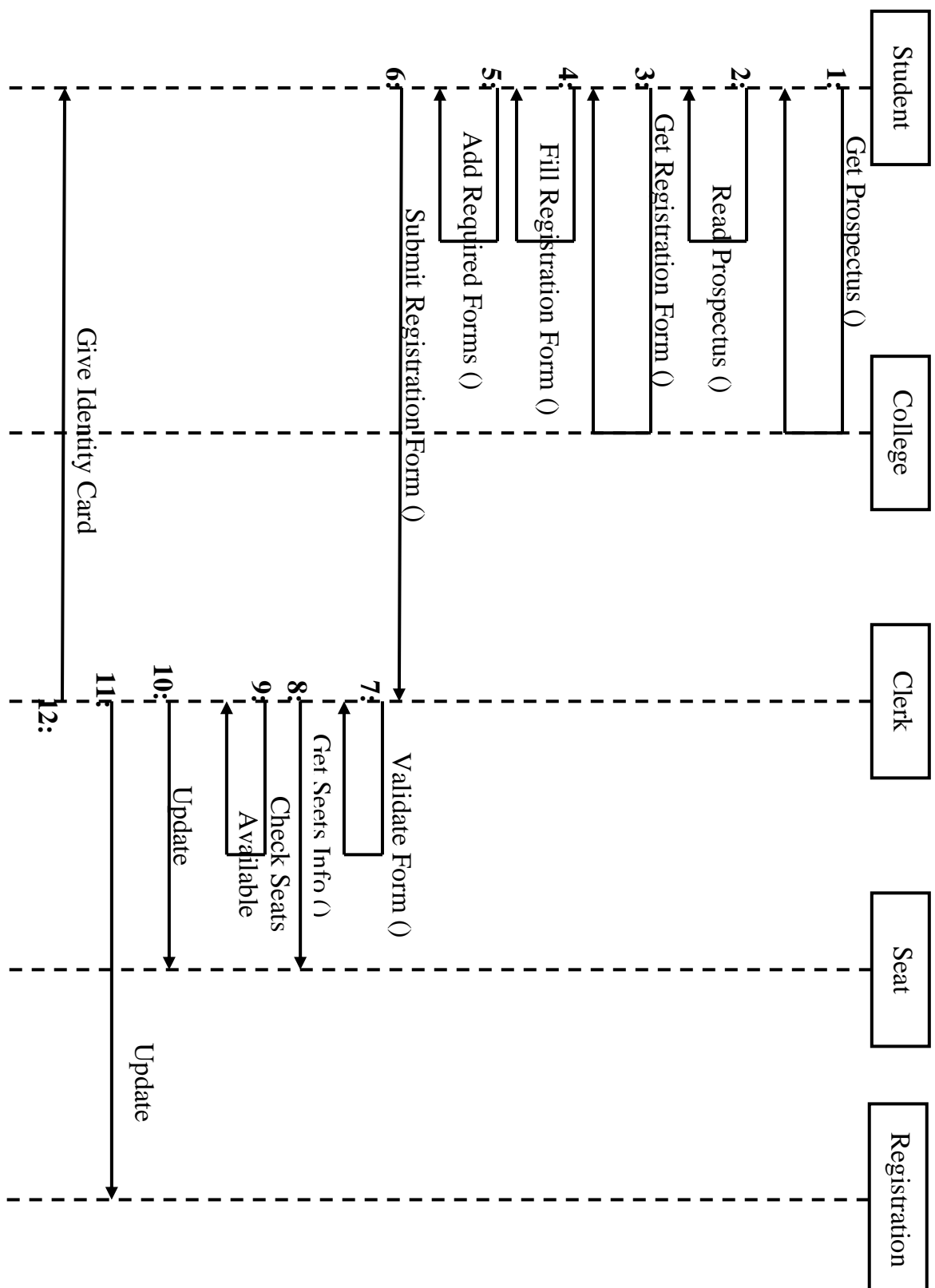
9 a) Sequence Diagrams for Order Processing Application



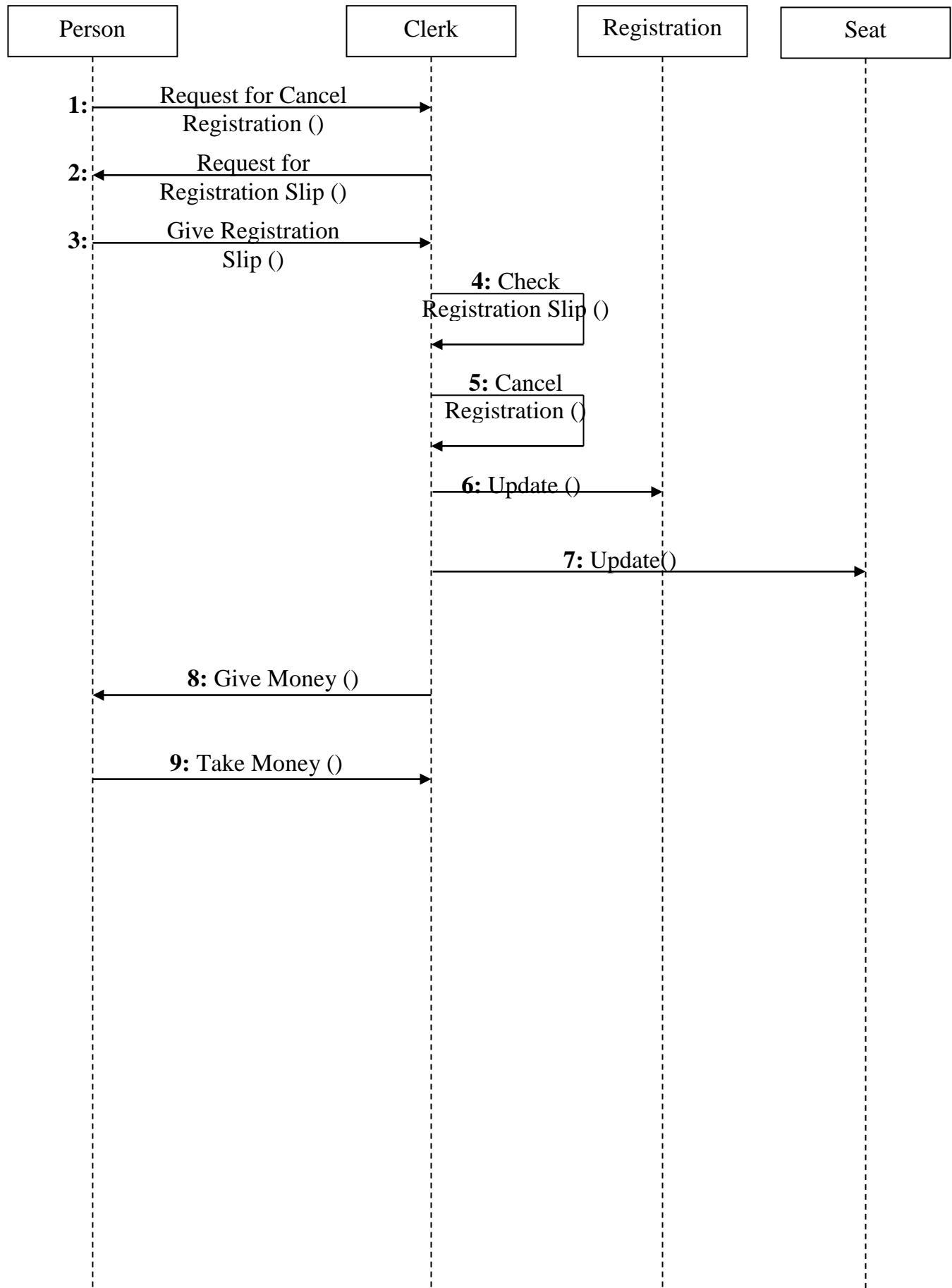
b) Collaboration Diagram for Order Processing Application



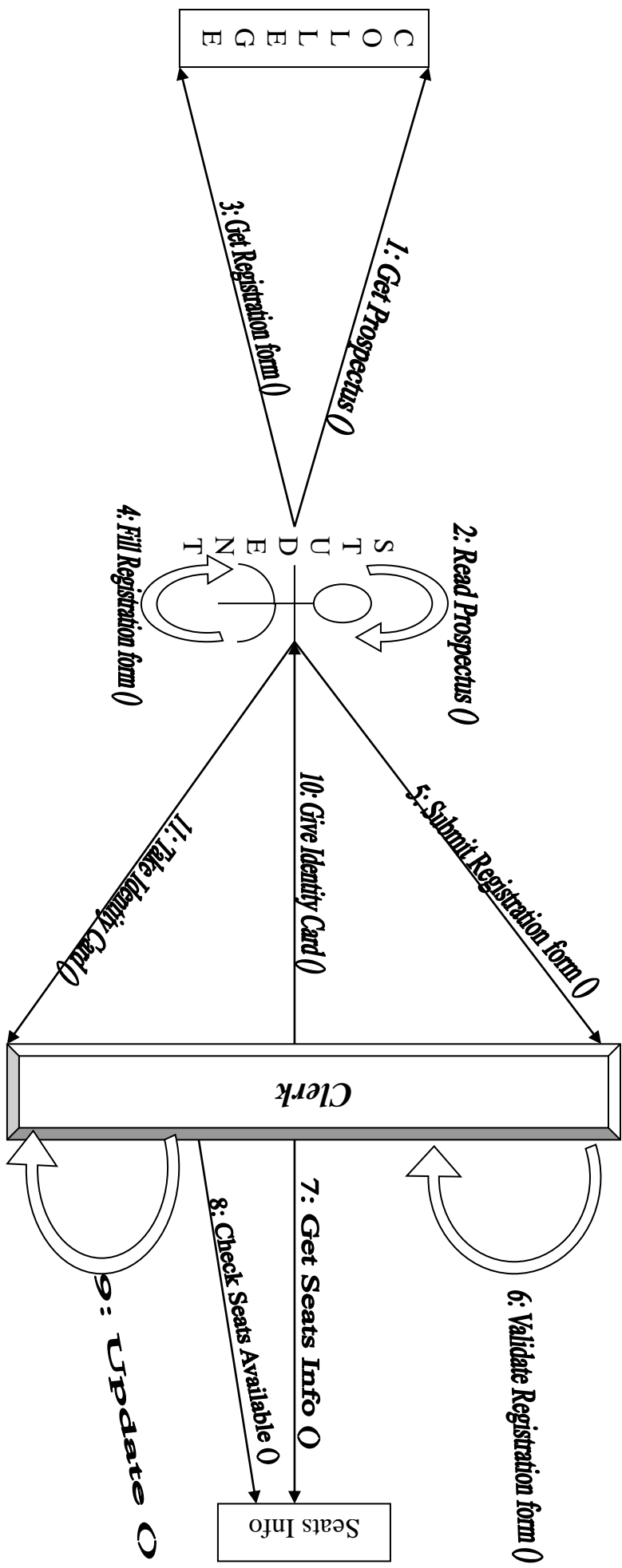
10.a) Sequence Diagram for Student Registration Process



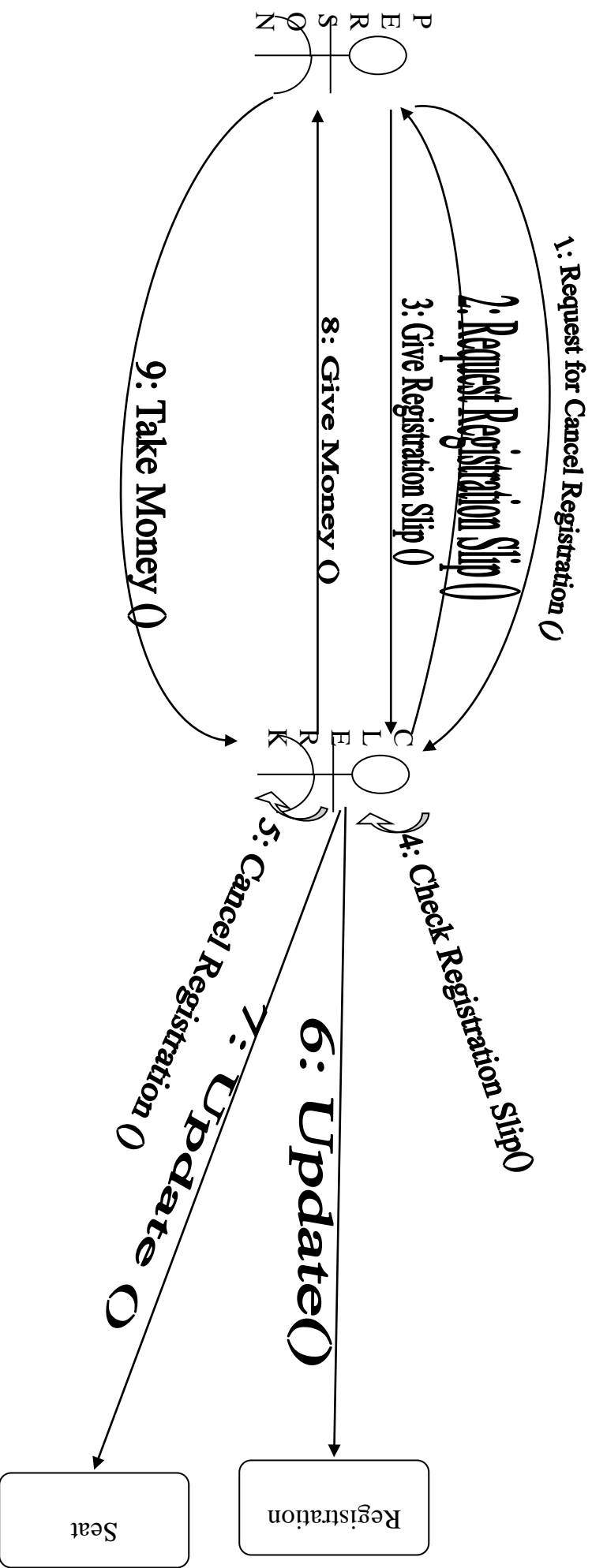
Sequence Diagram for Cancel Student Registration



b) Collaboration Diagram for Student Registration Process



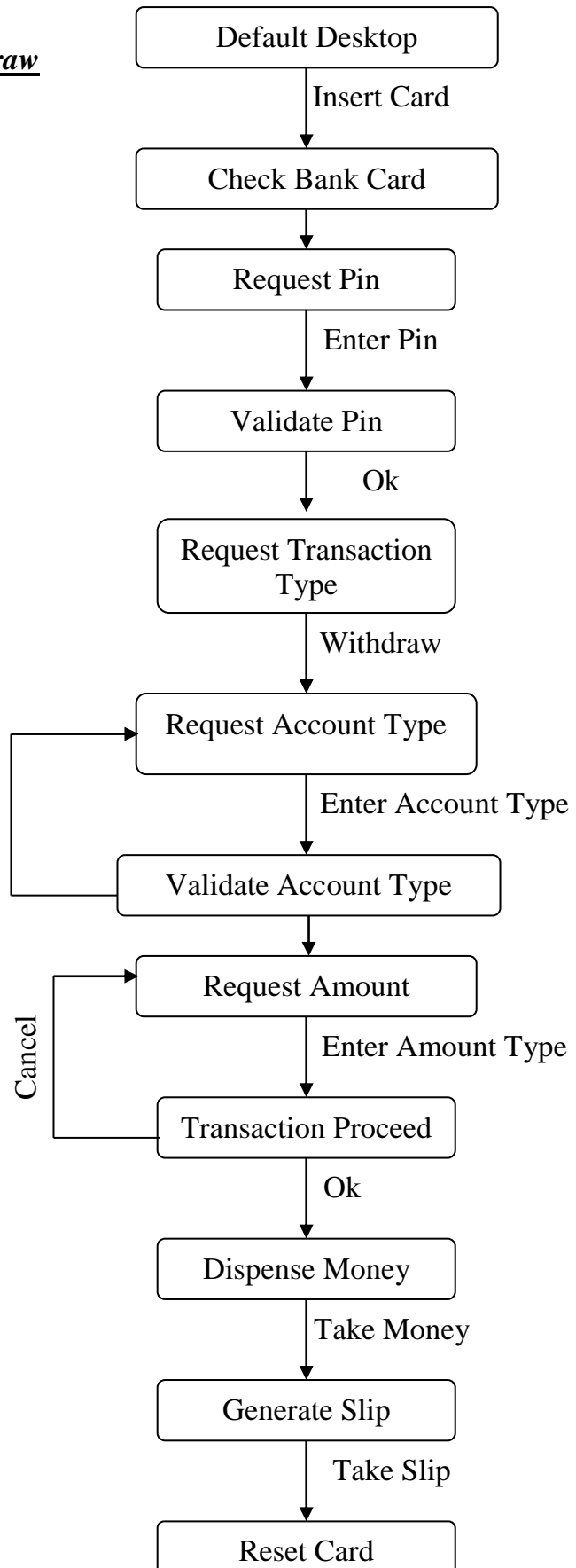
Collaboration Diagram for Cancel Student Registration



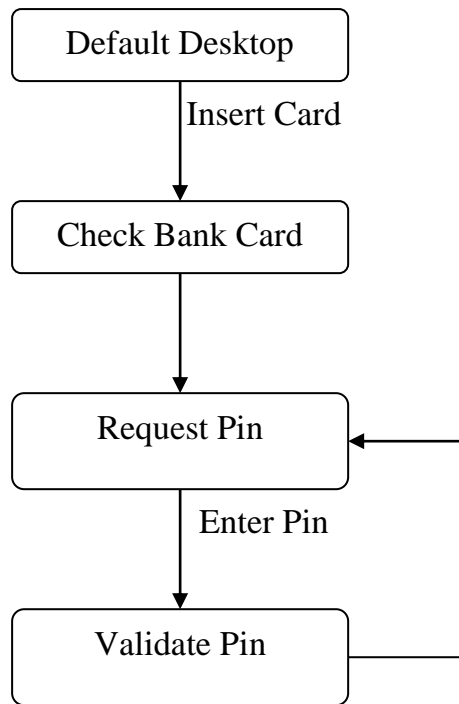
Section 6,7 & 8: Draw the State Transition and Class Diagrams

11 a) State Transition Diagrams for ATM

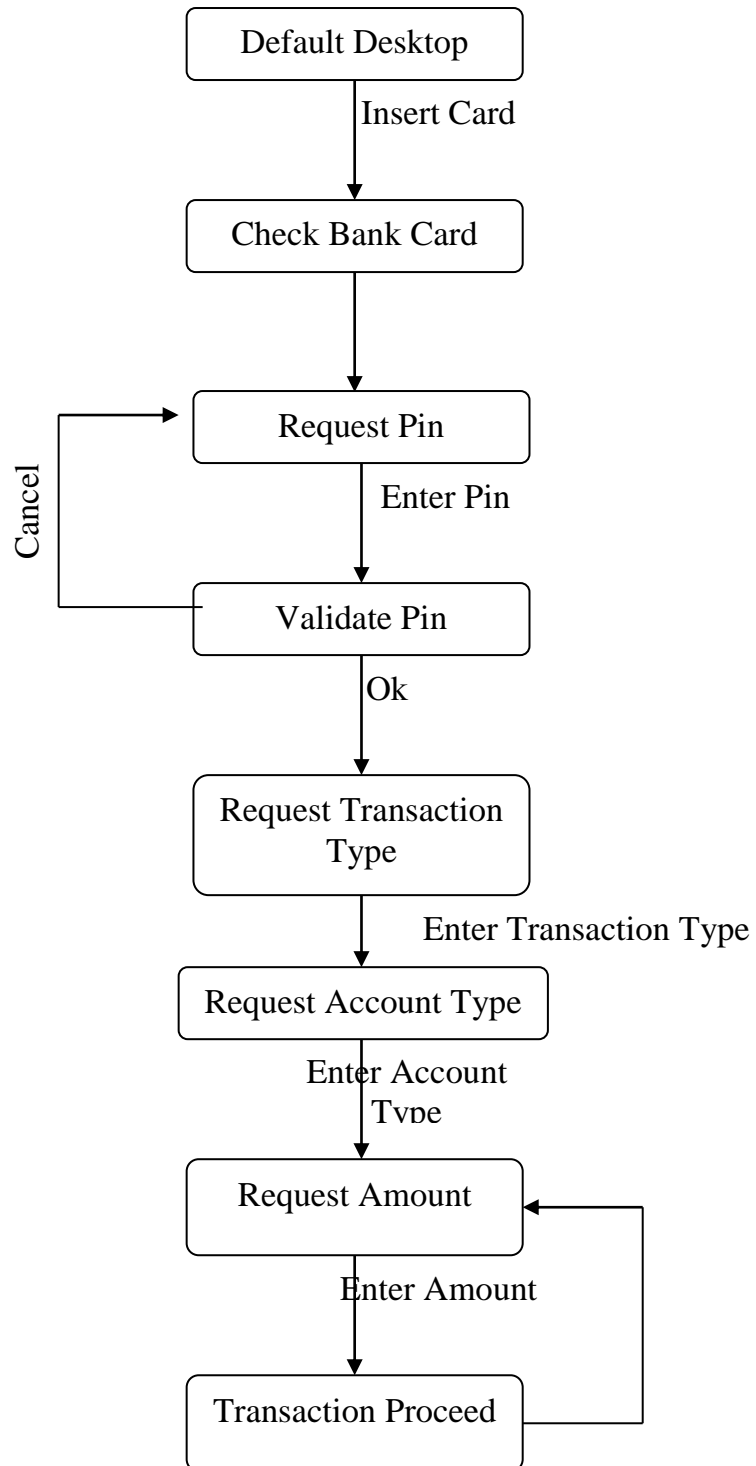
State Transition Diagram for Withdraw



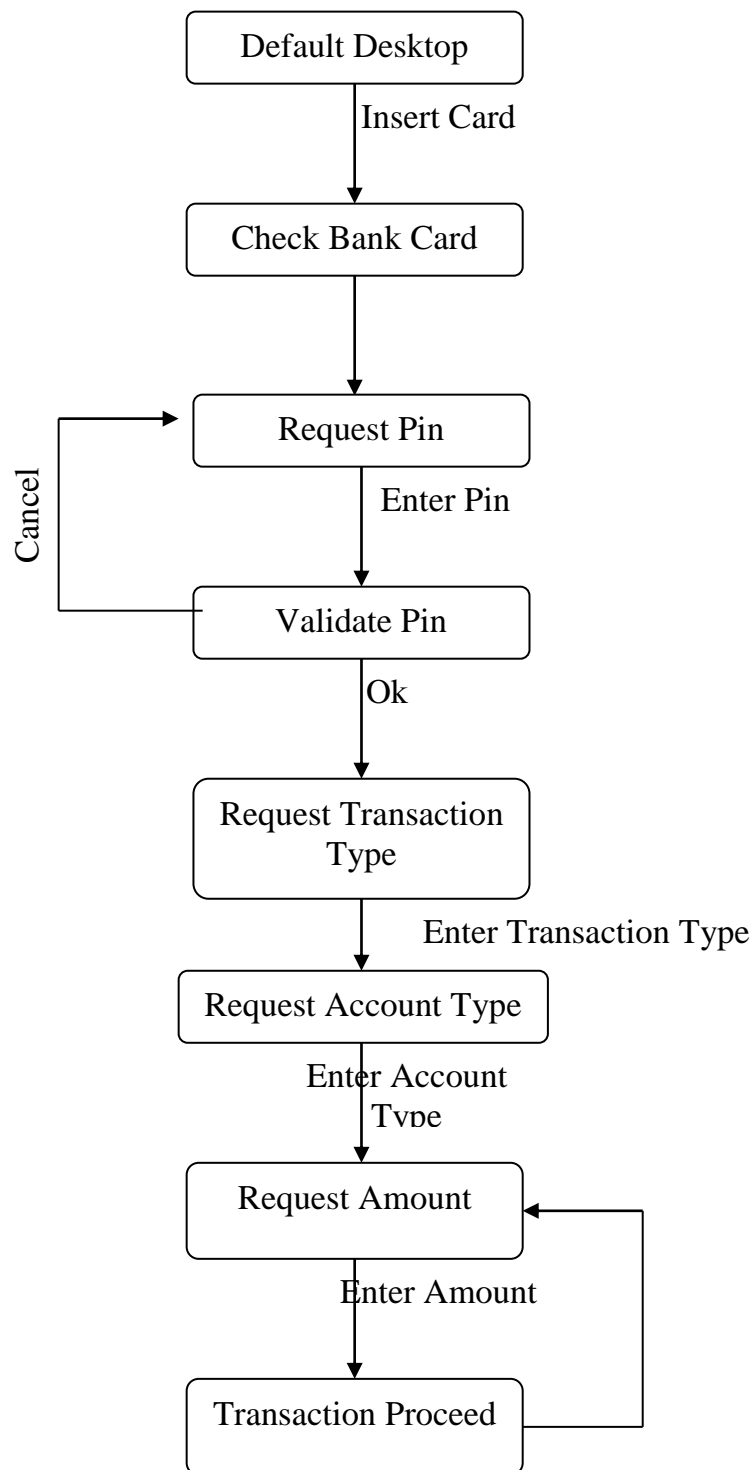
State Transition Diagram for Invalid Pin



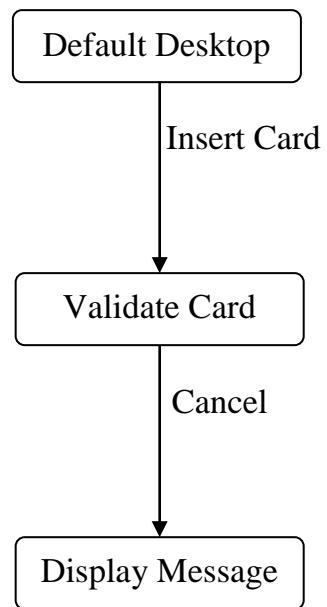
State Transition Diagram for Invalid Amount



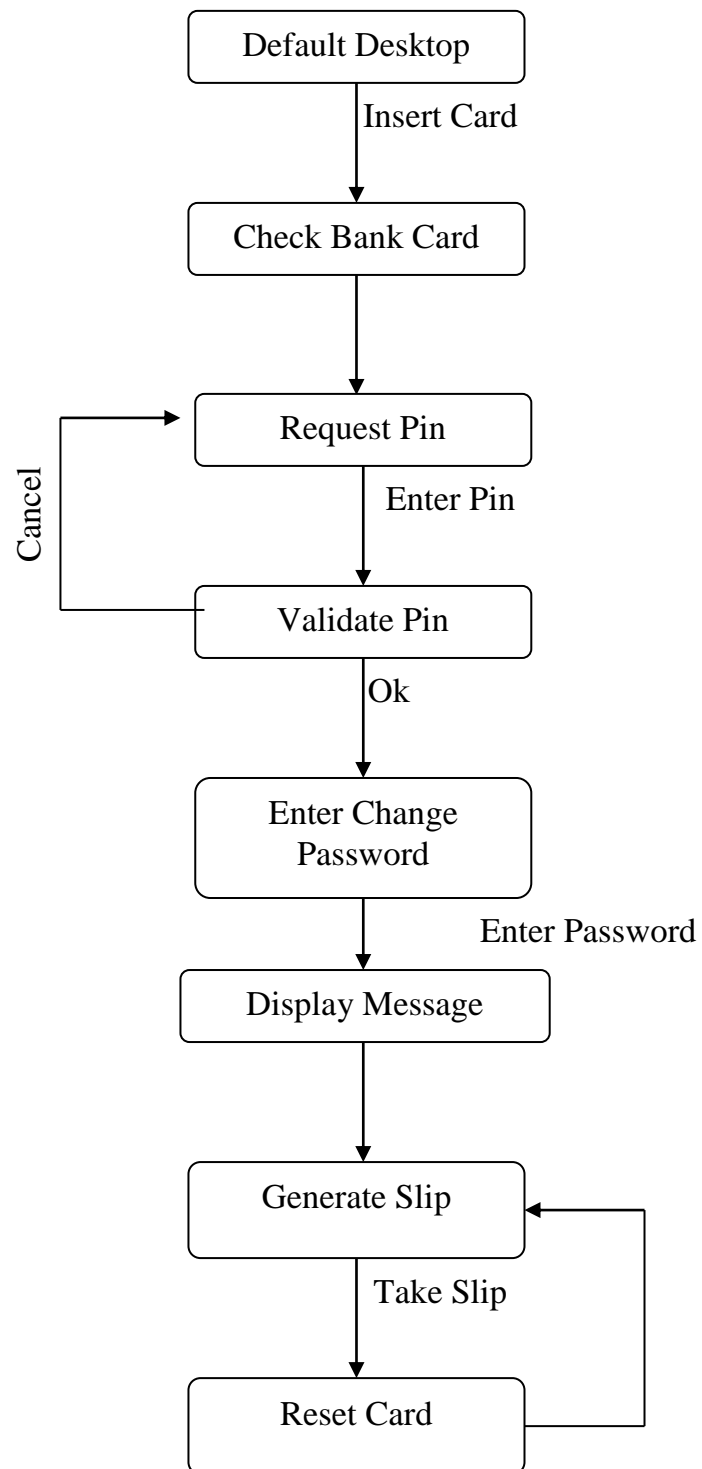
State Transition Diagram for Check Balance



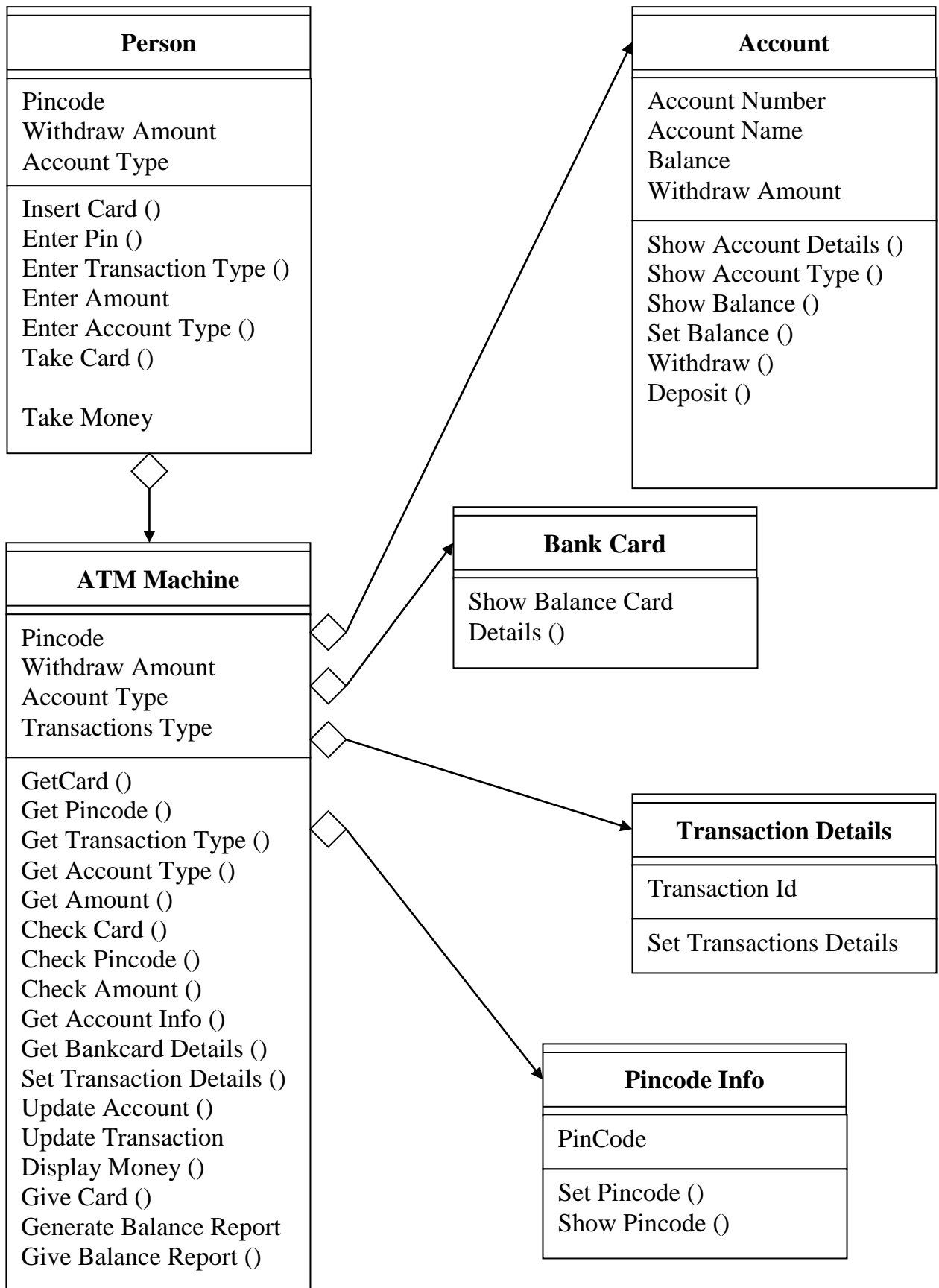
State Transition Diagram for Invalid Bank Card



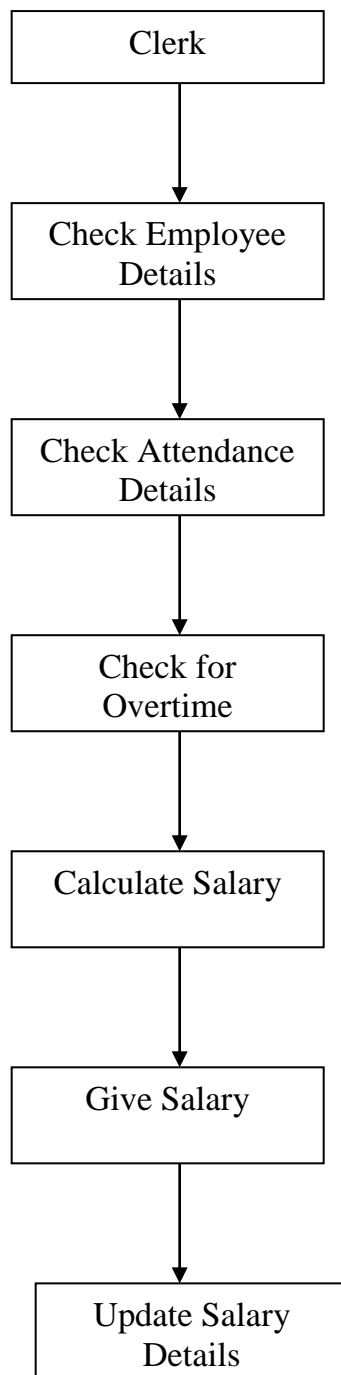
State Transition Diagram for Changing Password



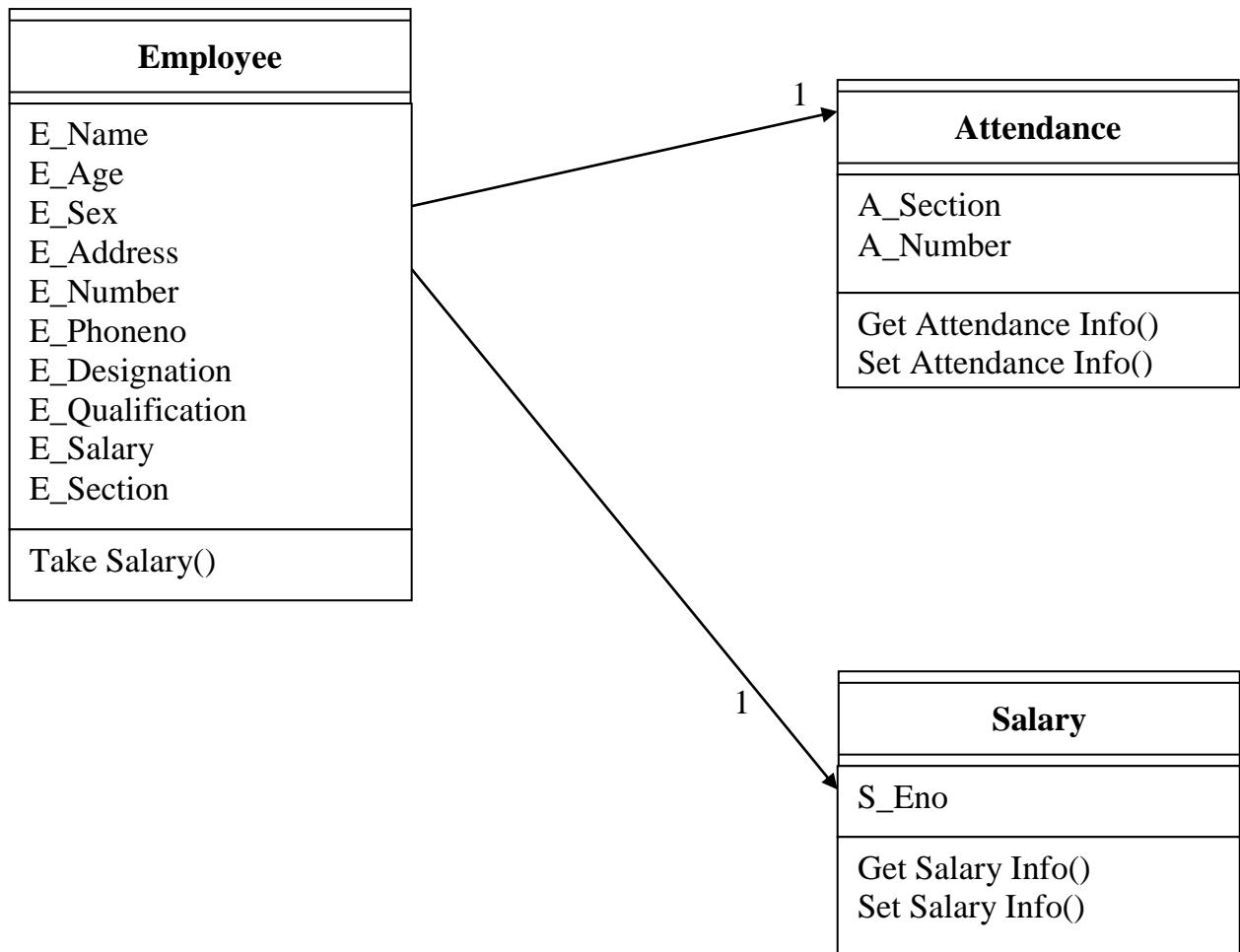
b) Class Diagram for ATM



12 a) State Transition Diagram for Employee Management System

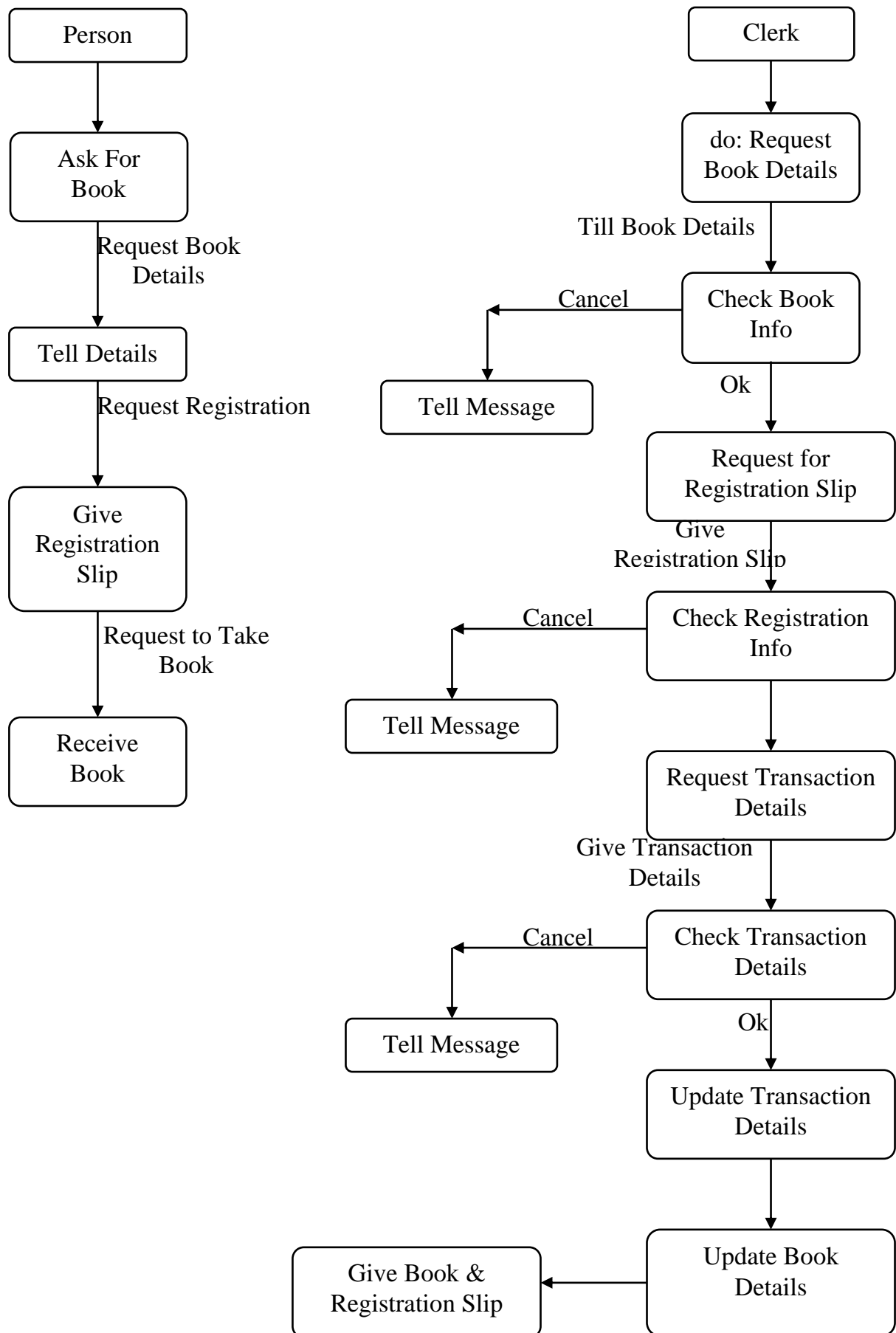


b) Class Diagram for Employee Management System

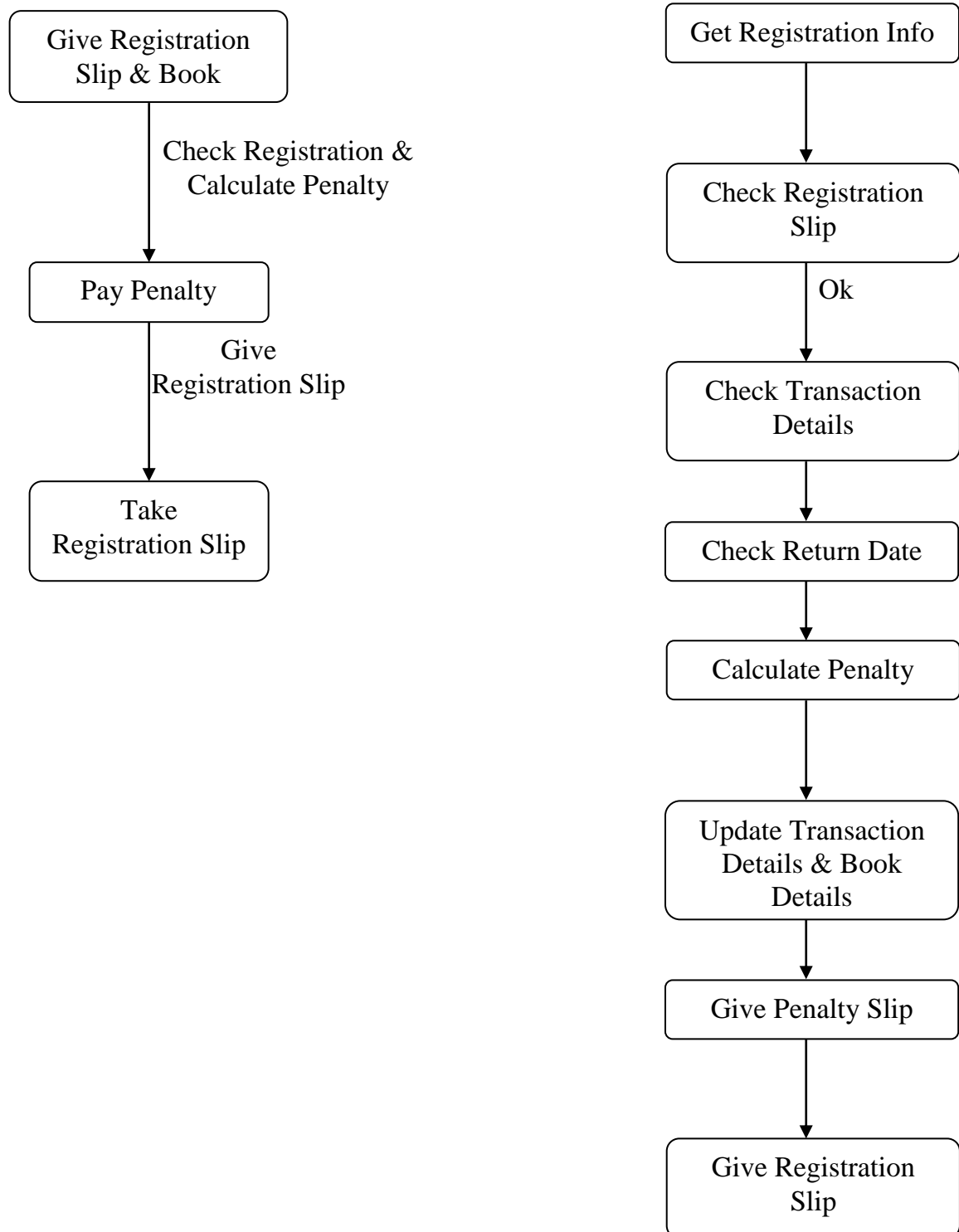


13. a) State Transition Diagram for Library Management System

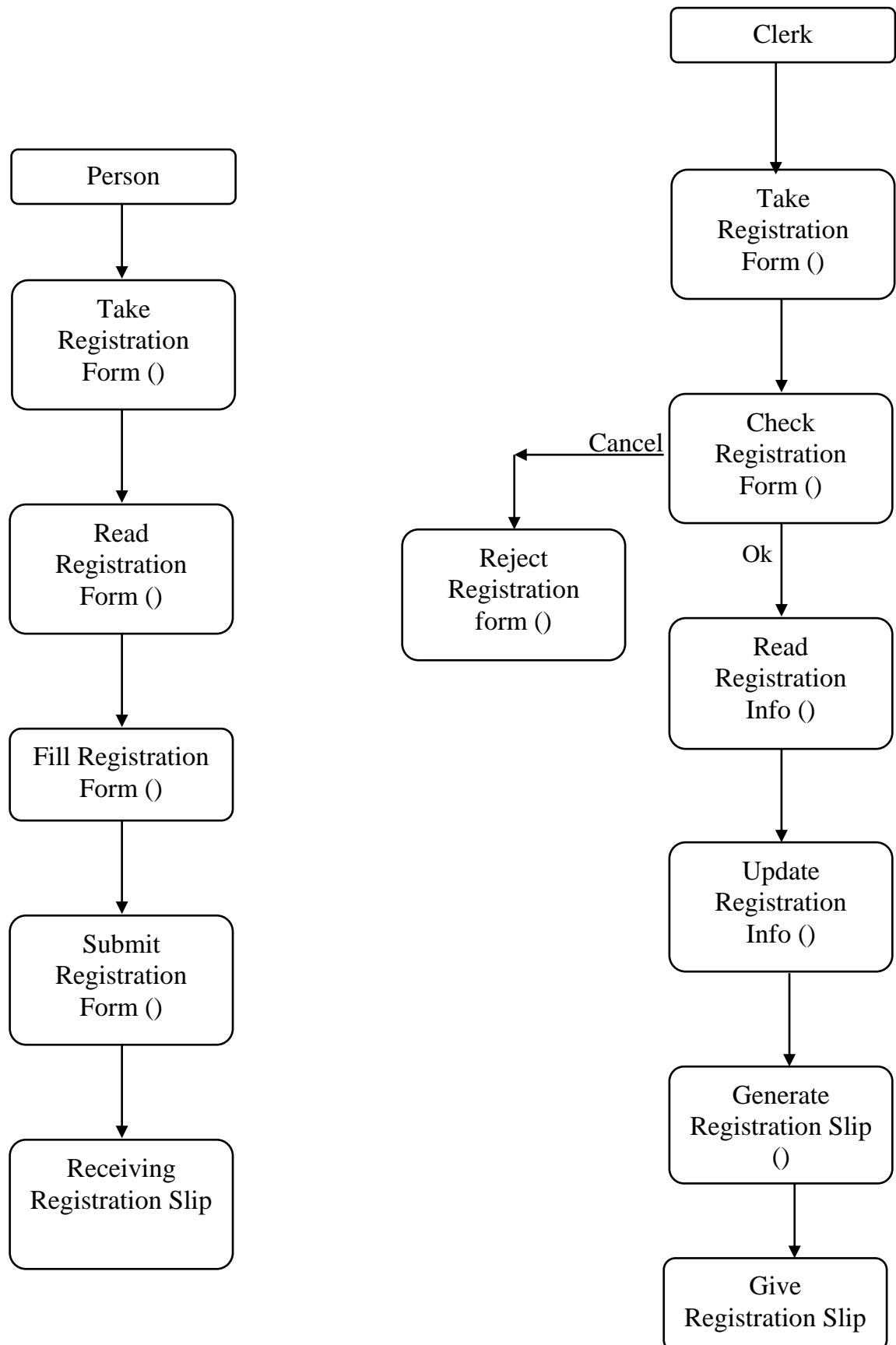
State Transition Diagram for Taking Book From Library



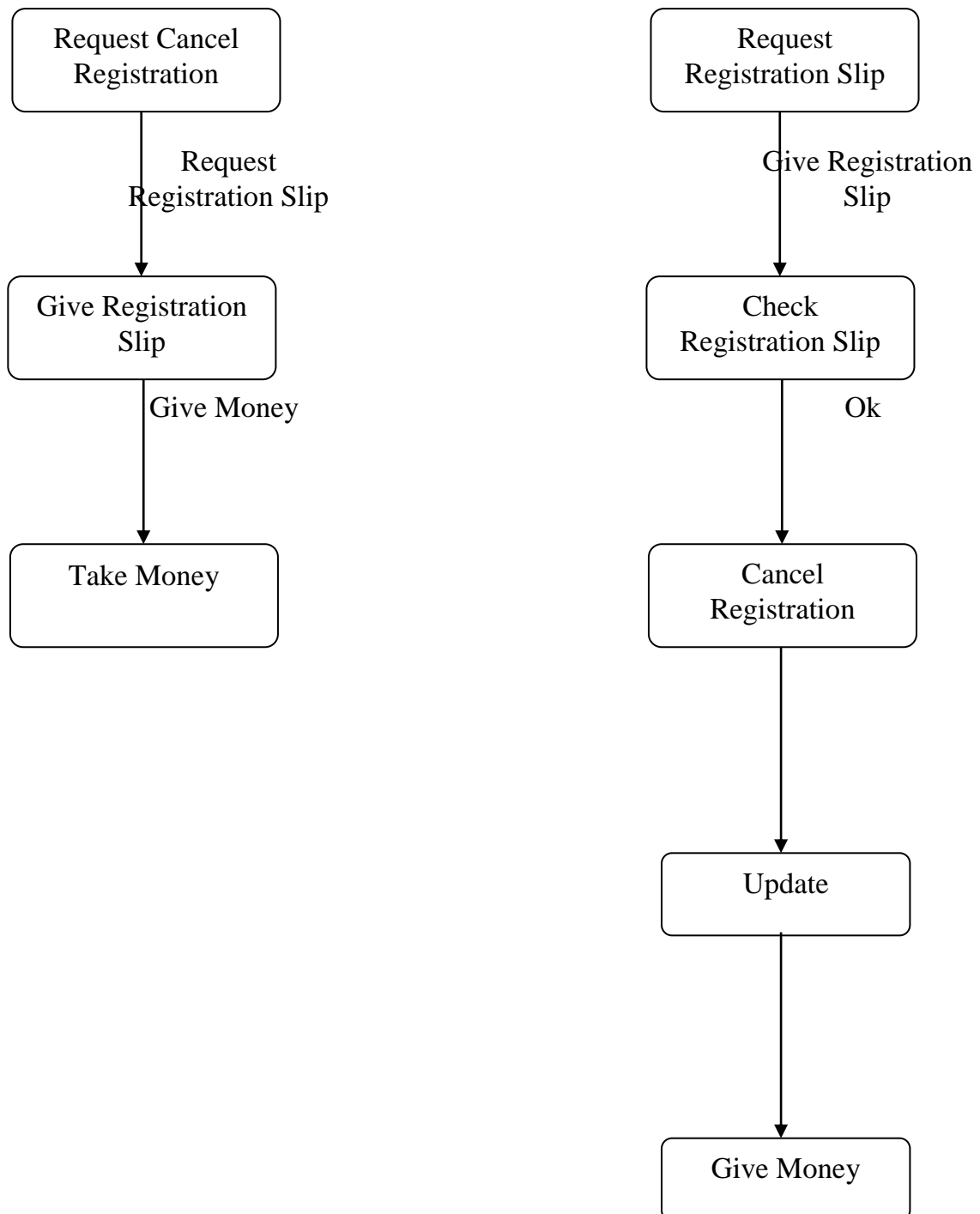
State Transition Diagram for Giving Book



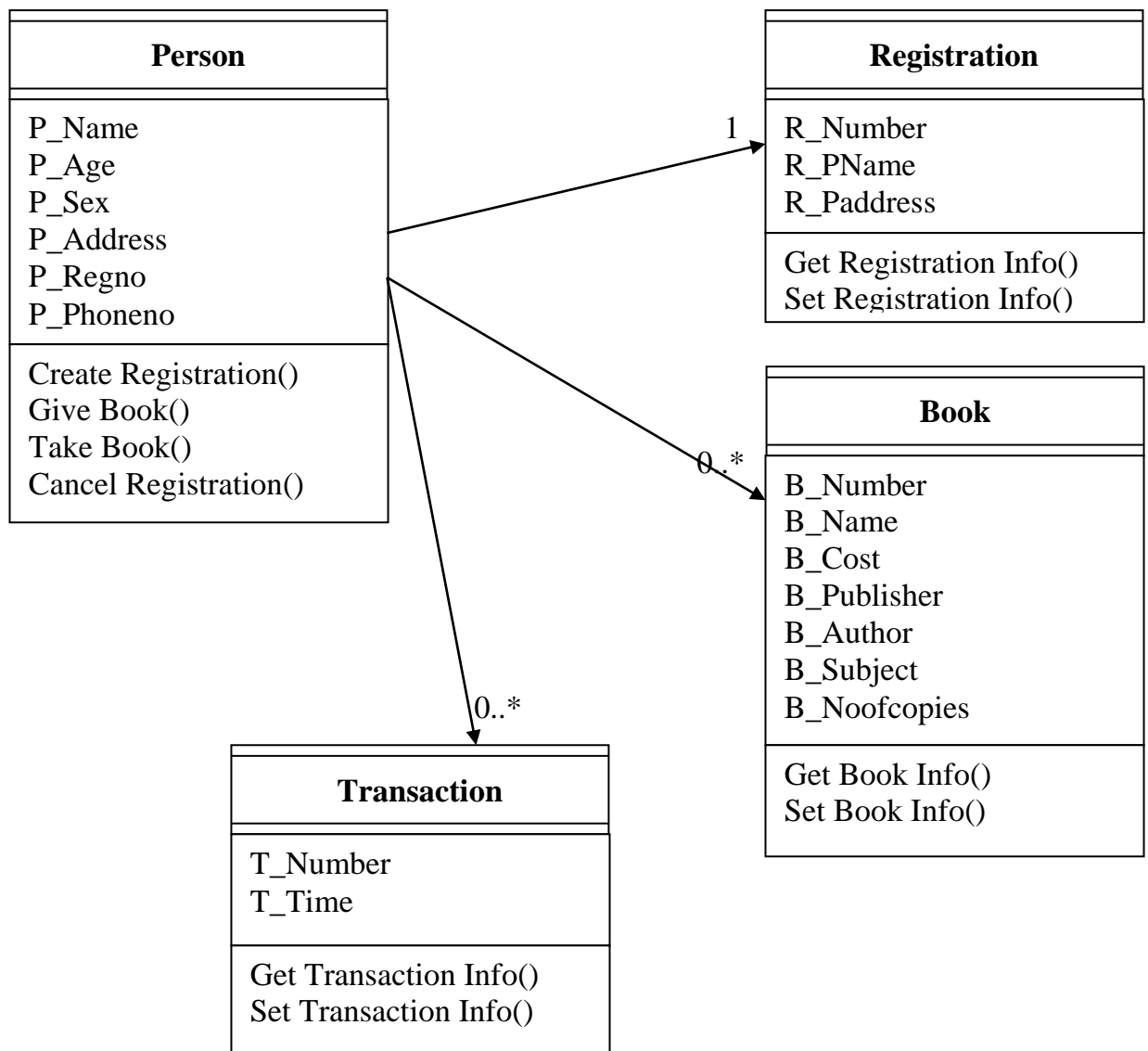
State Transition Diagram for Create Library Registration



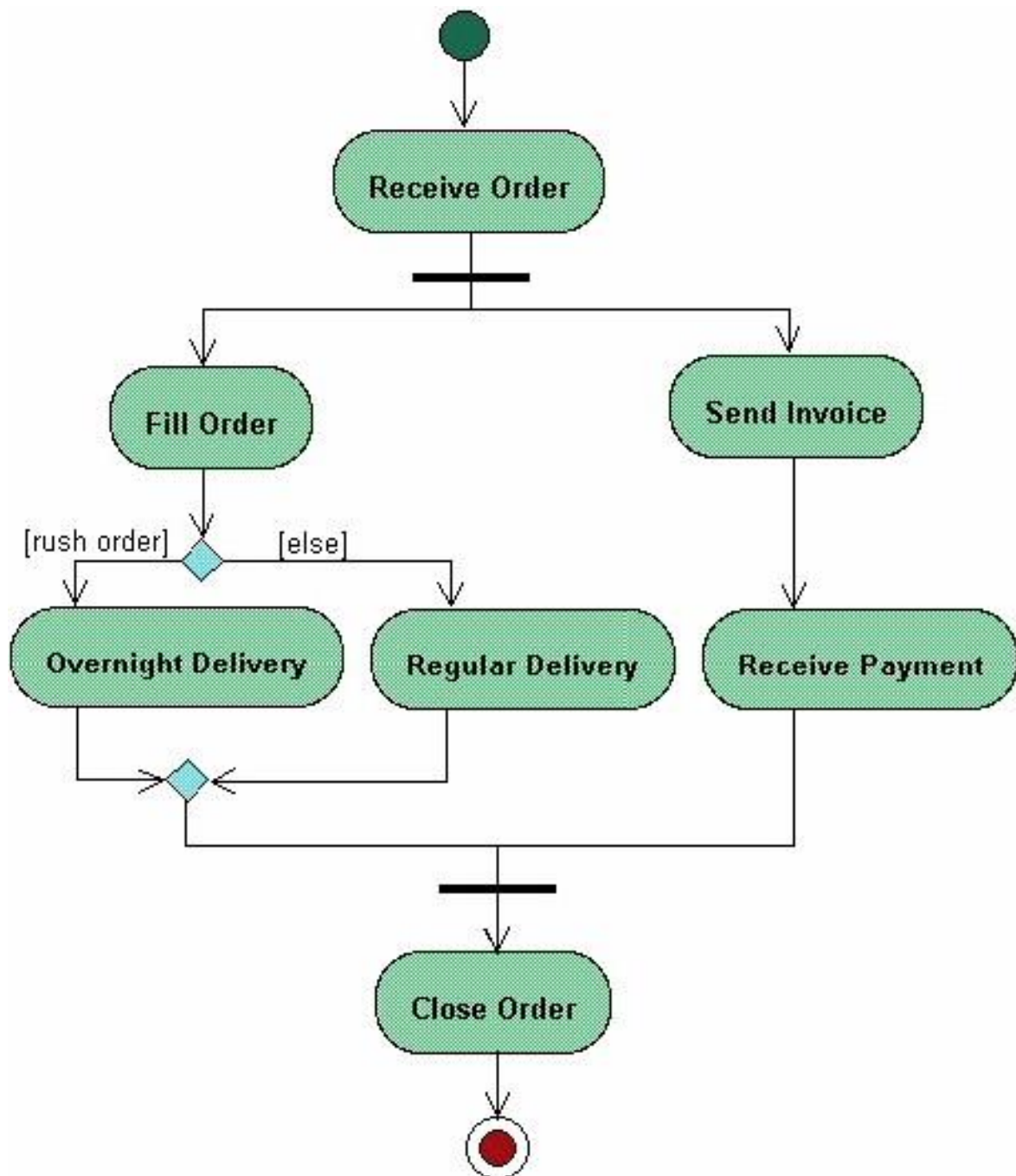
State Transition Diagram for Cancel Library Registration



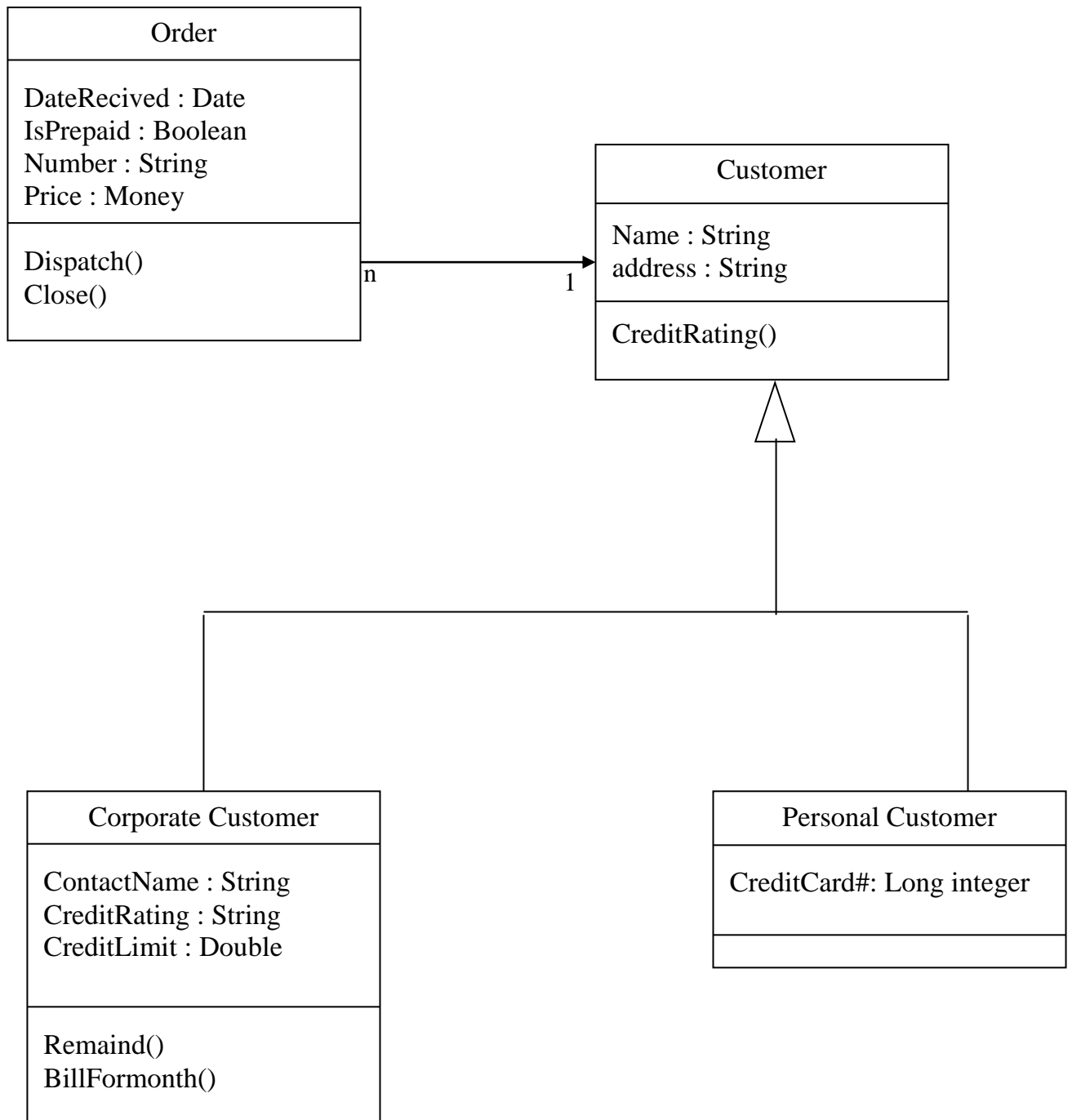
b) Class Diagrams for Library Management Application



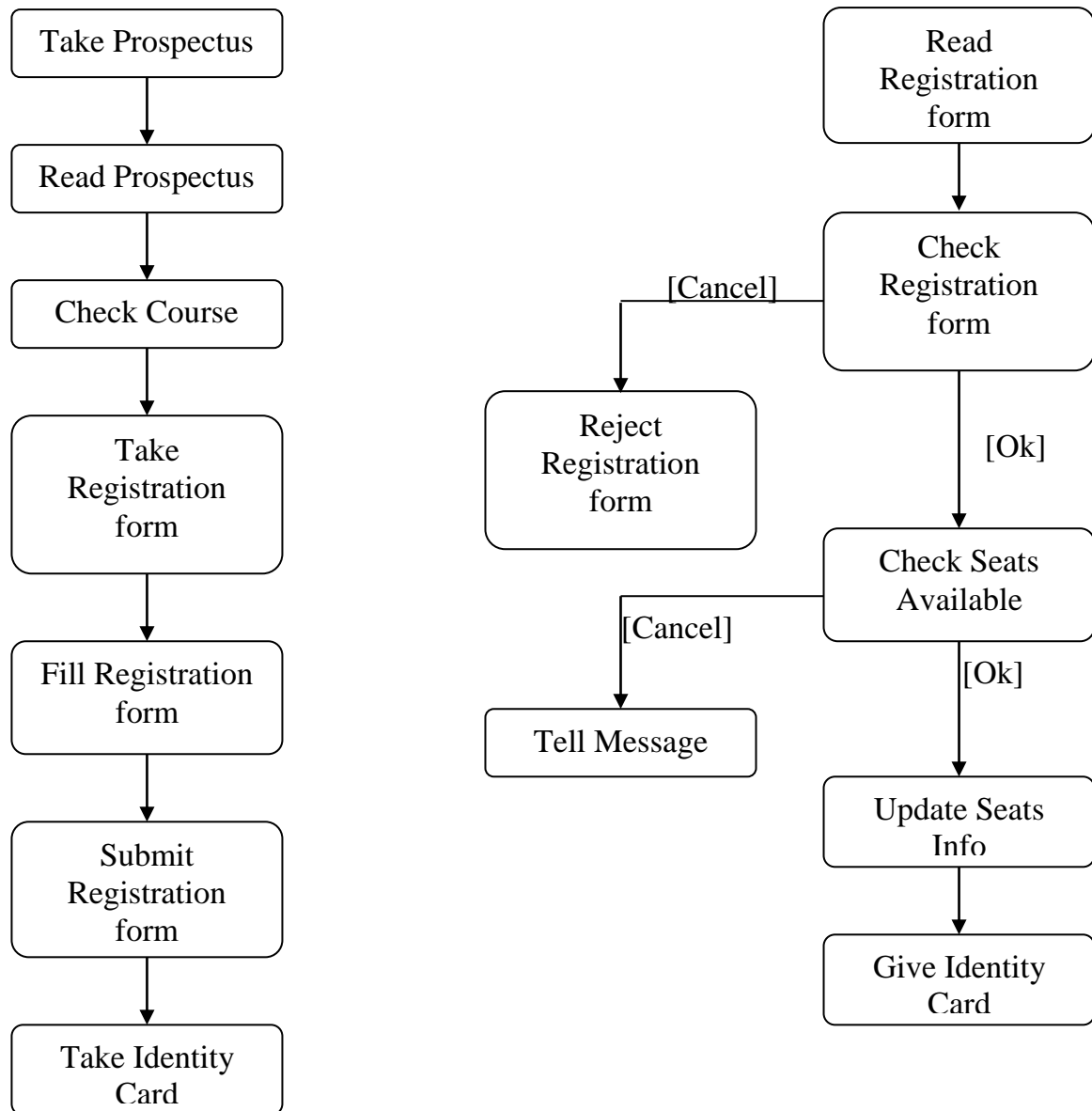
14 a) State Transition Diagram for Order Processing Application.



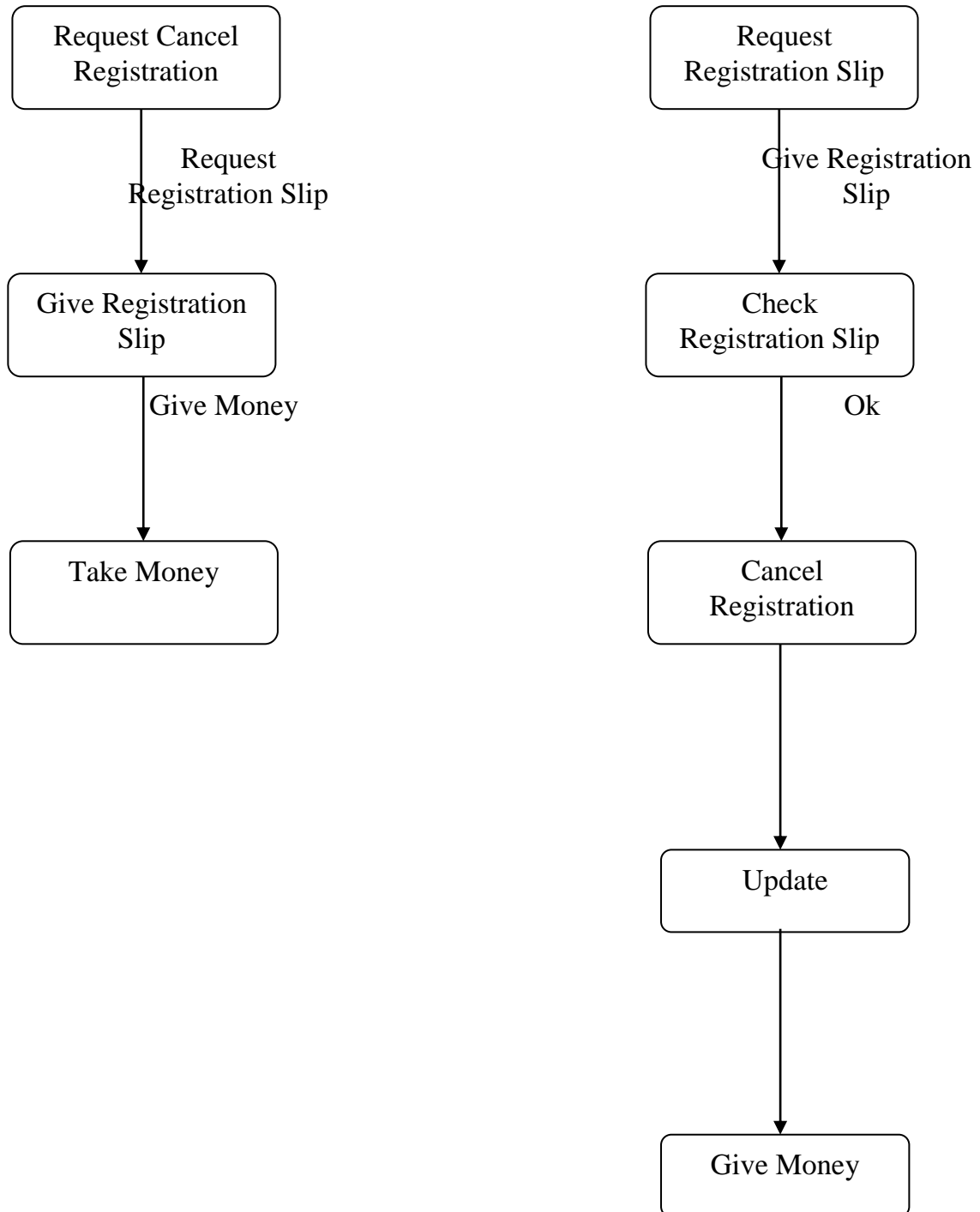
b) Class Diagram For Order Processing



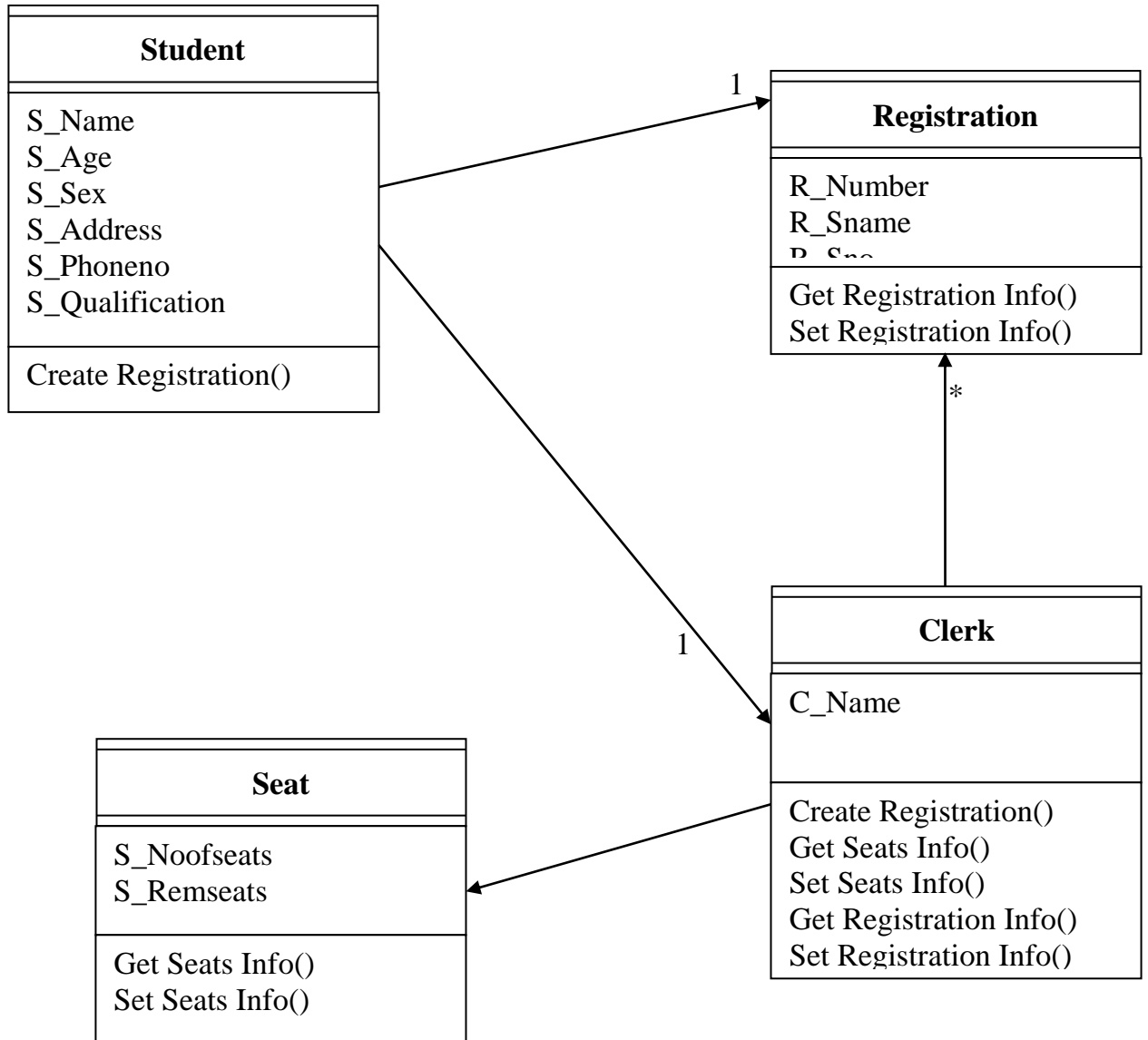
15. a) State Transition Diagram for Student Registration Process



State Transition Diagram for Cancel Student Registration

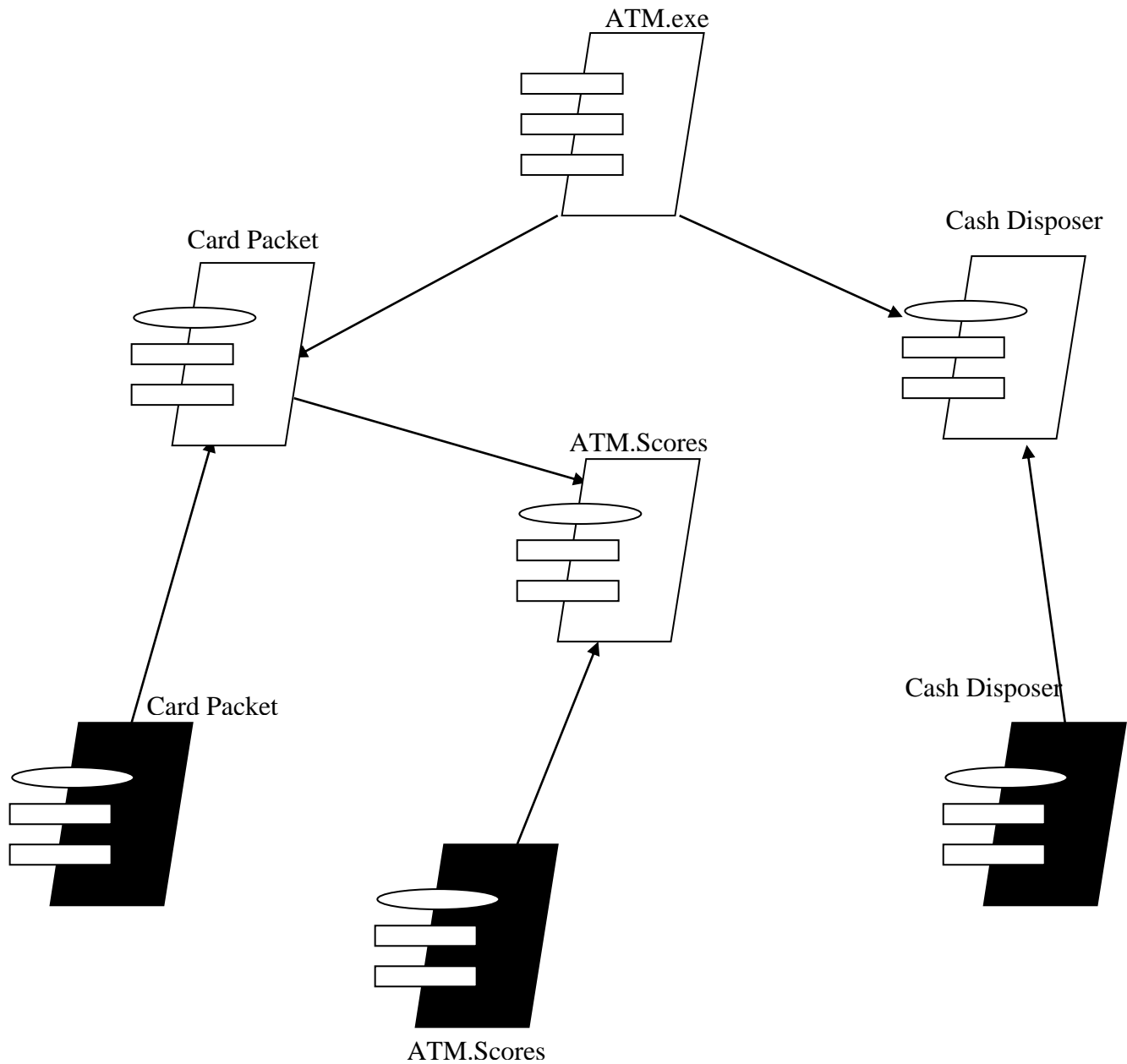


b) Class Diagram For Student Registration Process

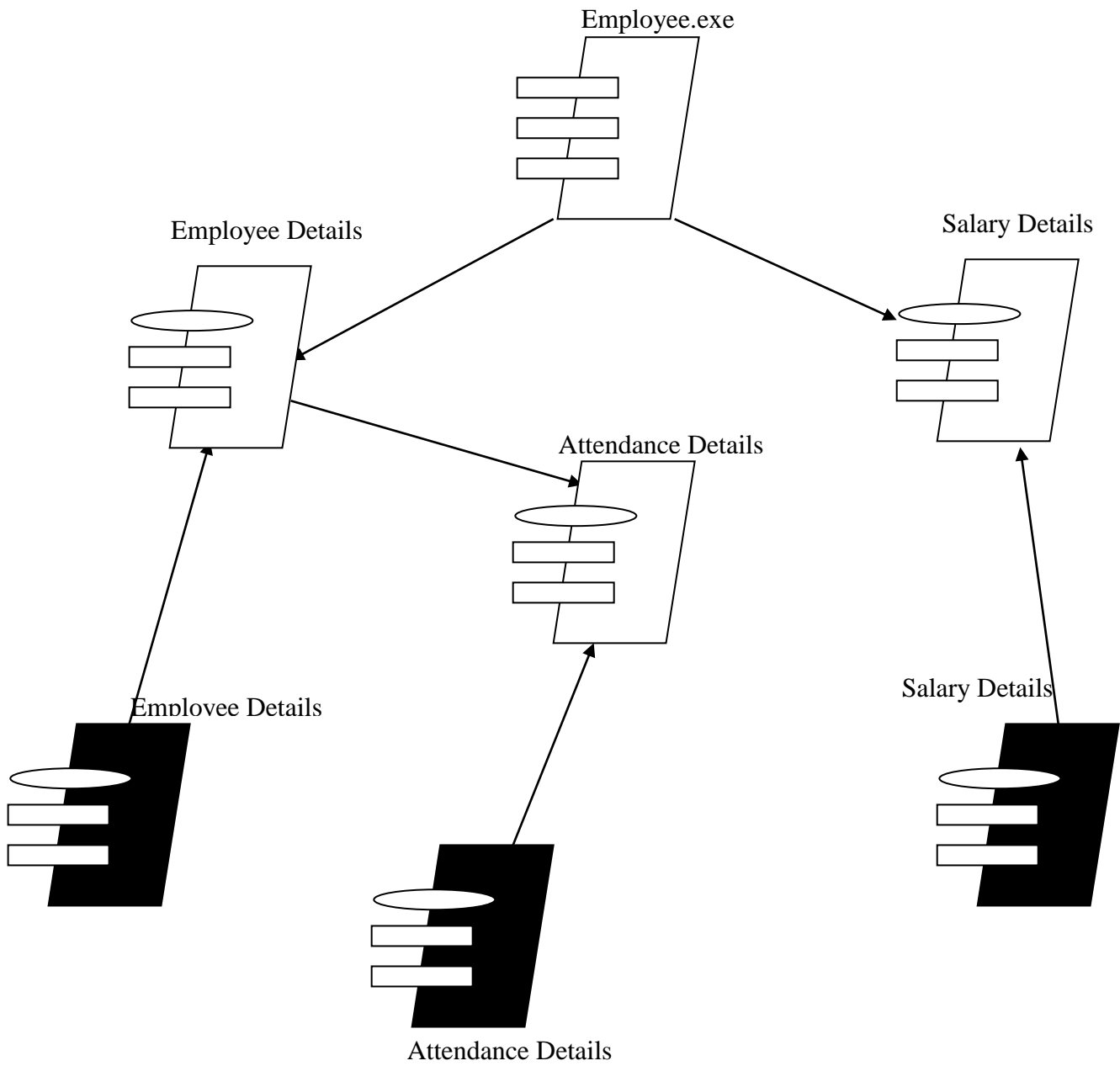


Section 9 & 10: Draw the Component Deployment Models

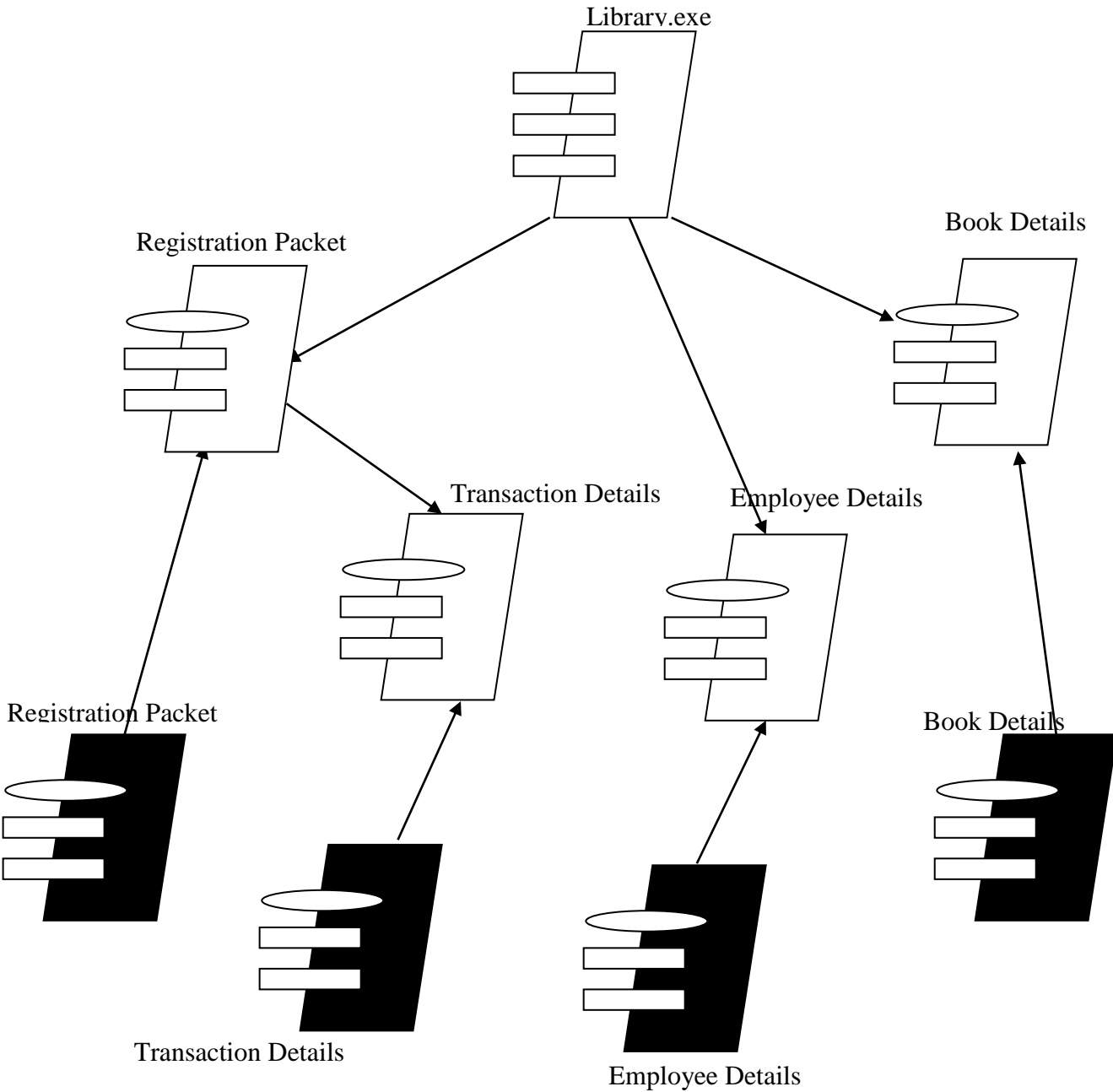
16. Component Diagram for ATM



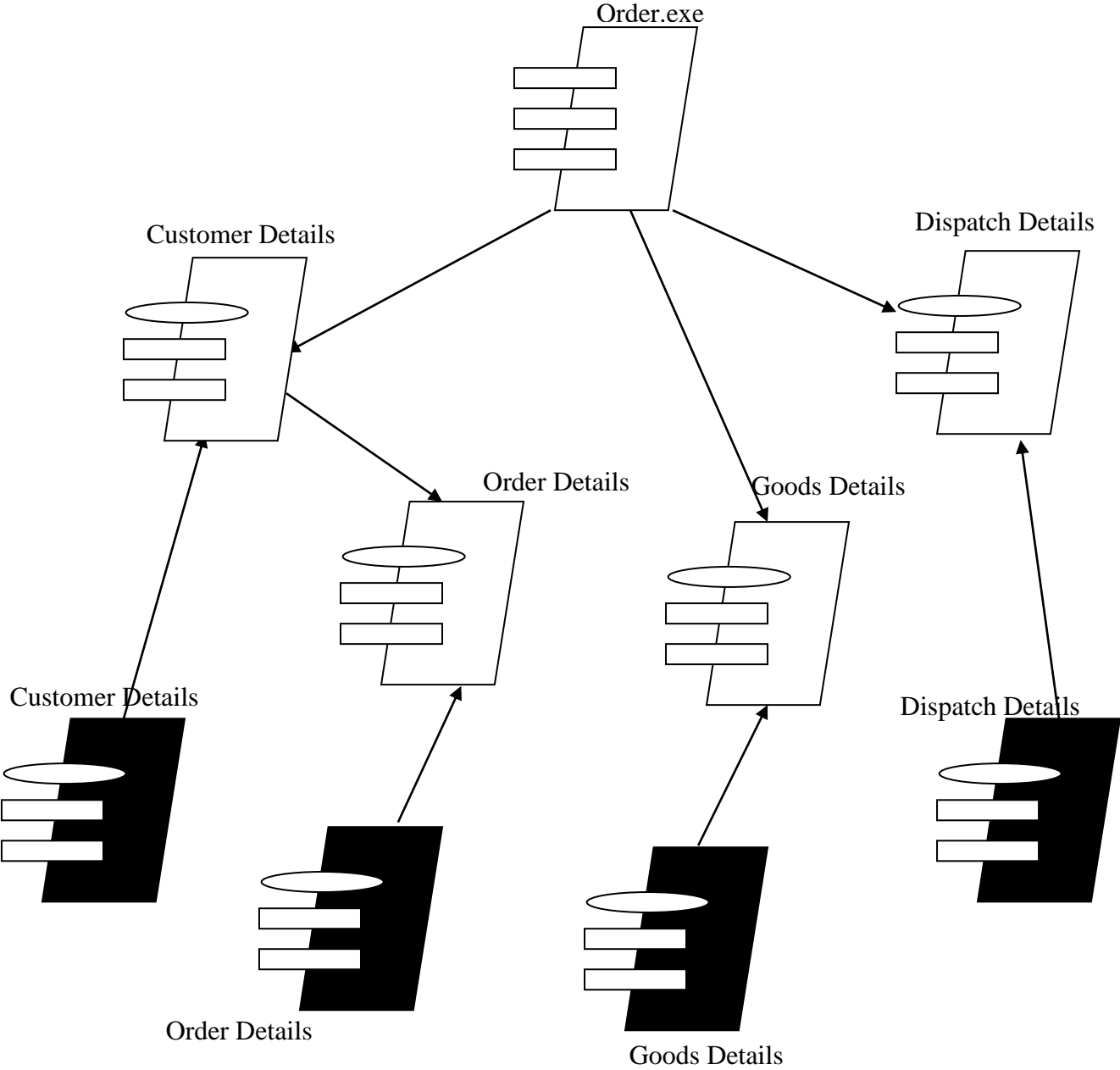
17. Component Diagram for Employee Management System



18. Component Diagram for Library Management System



19. Component Diagram for Order Processing Application



20. Component Diagram for Student Registration Process

