Updated: 17/04/18
Total number of pages: 19

UML Design Book

Software Engineering

Version 0.1 (April 18)

Jishan Shaikh
161112013

This page intentionally left blank

Maulana Azad National Institute of Technology
(An Institute of National Importance)
Bhopal – 462003 (India)

Department of Computer Science & Engineering

Design diagrams in *Unified Modelling Language*

Software Engineering

Submitted by : Jishan Shaikh (Scholar no. 161112013)

Submission date : April 12, 2018

Supervisor : Prof. Akhtar Rasool
Department of Computer Science & Engg.
MANIT, Bhopal (India)

Subject : Software Engineering
CSE-229, IV Sem (B.Tech. in CSE)

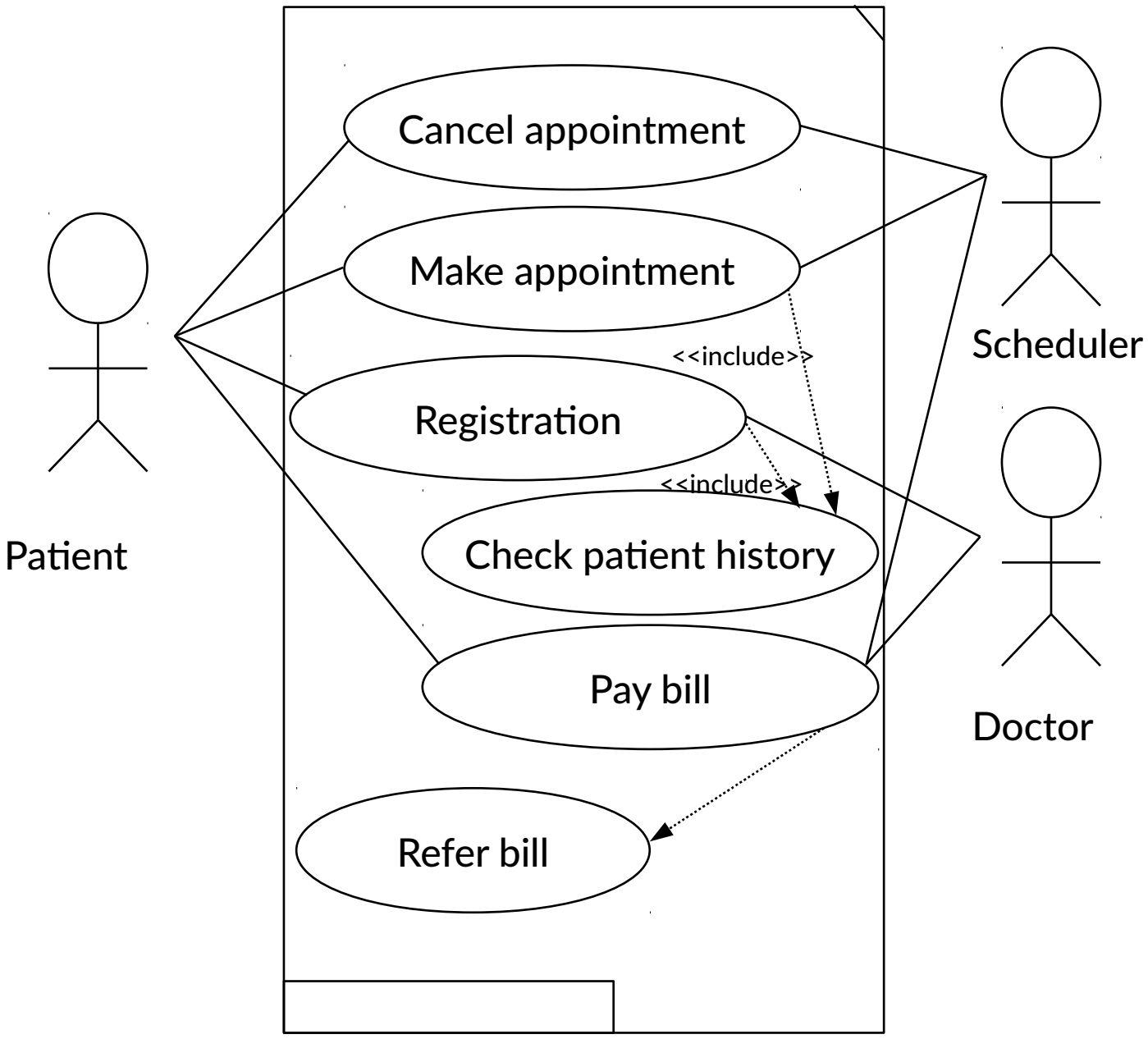
Session : Even Semester 2018

Disclaimer for *Github Users :

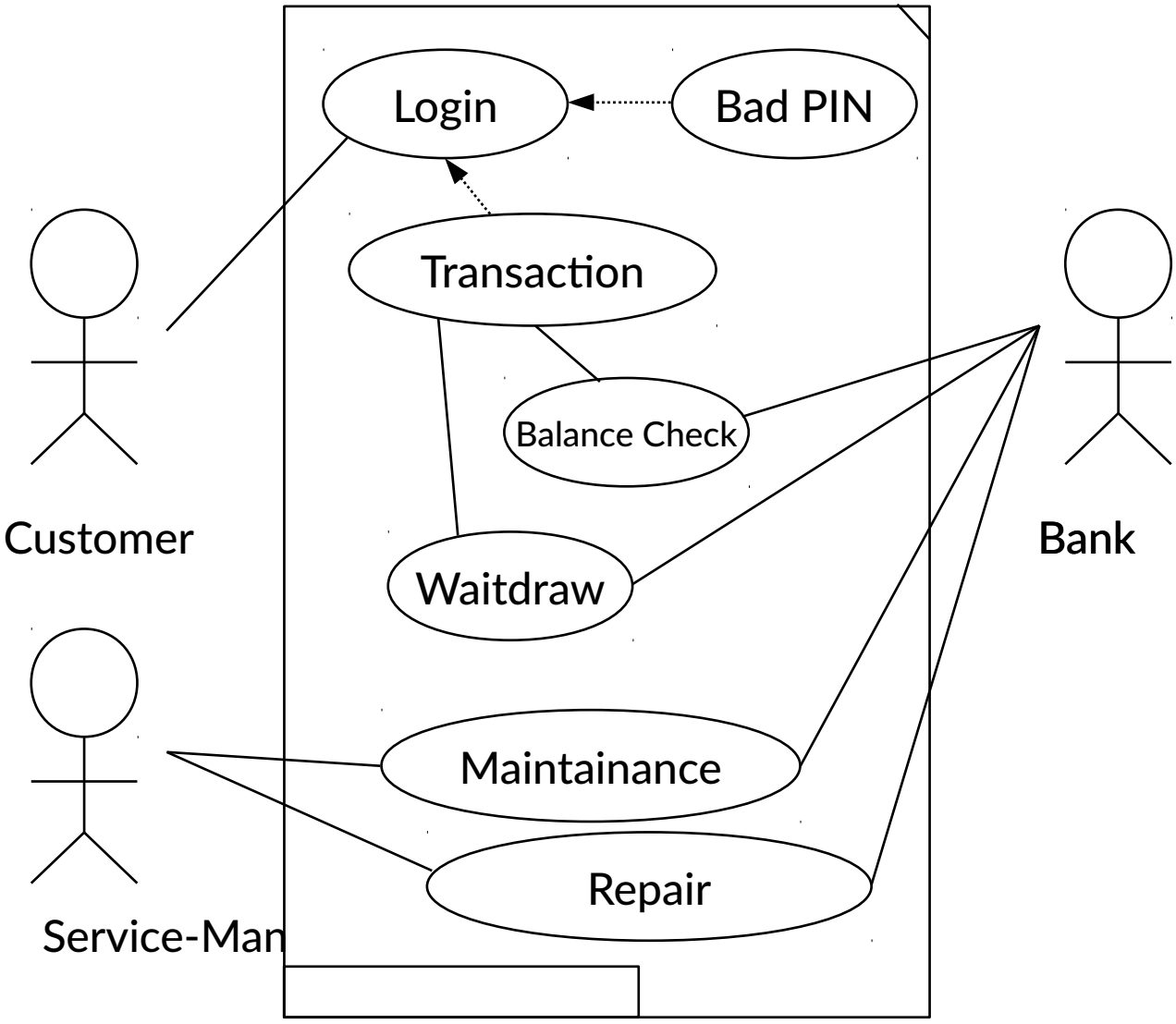
1. All the diagrams are for learning purpose and therfore the actual content/data is either dummy or taken an instance of dummy data.
2. You can make your own copy (either hard copy or PDF version) of this document for learning purpose without any commercial activities.
3. You are free to use this document as per your own discretion, the diagrams are submitted in preliminary basis, they might be modified, deleted, or manipulated without prior notification. Checkout https://www.github.com/JishanShaikh4 for latest version of this document.
4. The size of this document is made small for minimizing ambiguities regarding notations. There are NONE standard notations for UML diagrams; Diagrams from different sources might have different structures but they will have similar structure.
5. The diagrams are not robust in nature, i.e. the diagrams are not supposed to contain all the features of that diagram. A diagram may able to show more information via some means.
6. The notations are supposed to be correct in first sight, but there might be errors in notations. If you find some, please notify at https://www.github.com/JishanShaikh4. The document is meant to have minimum number of mistakes possible, thats why it's in Github.
7. The dashes in class diagrams are for dummy data, there will be some attributes and methods in them. There are three sections in a block of class diagram- Class Name in uppermost section, attributes (data members) in middle section, and Methods (functions) in lowermost section.
8. Feedback and suggestions are also welcome.
9. Following diagrams are used in designing-
    1. Use-Case diagram
    2. Class diagram
    3. Object diagram
    4. Activity diagram
    5. State Chart (diagram)
    6. Deployment diagram
    7. Sequence diagram
    8. Component diagram
    9. Collaboration diagram

Index

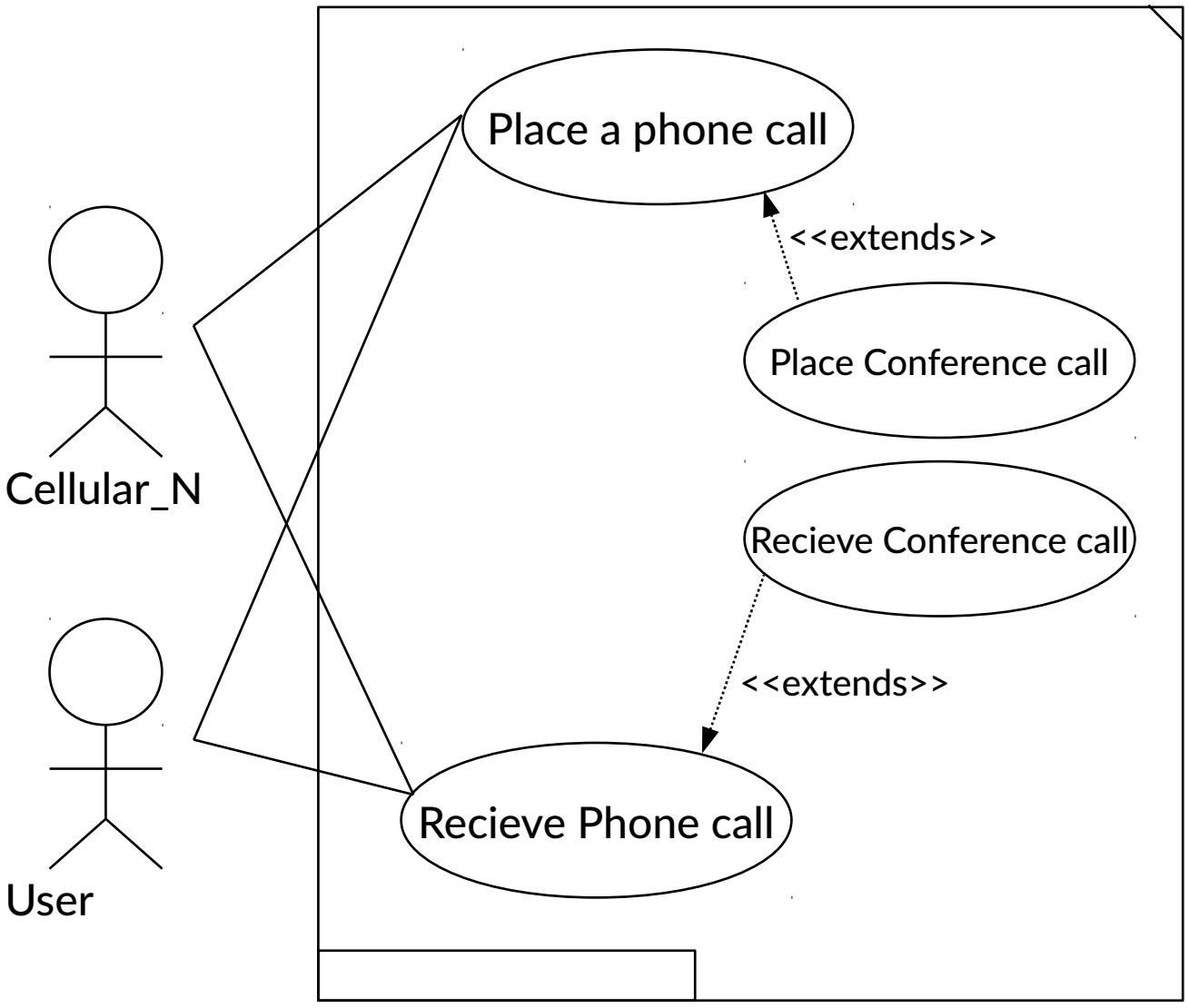
UML Diagram:: Doctor_Clinic



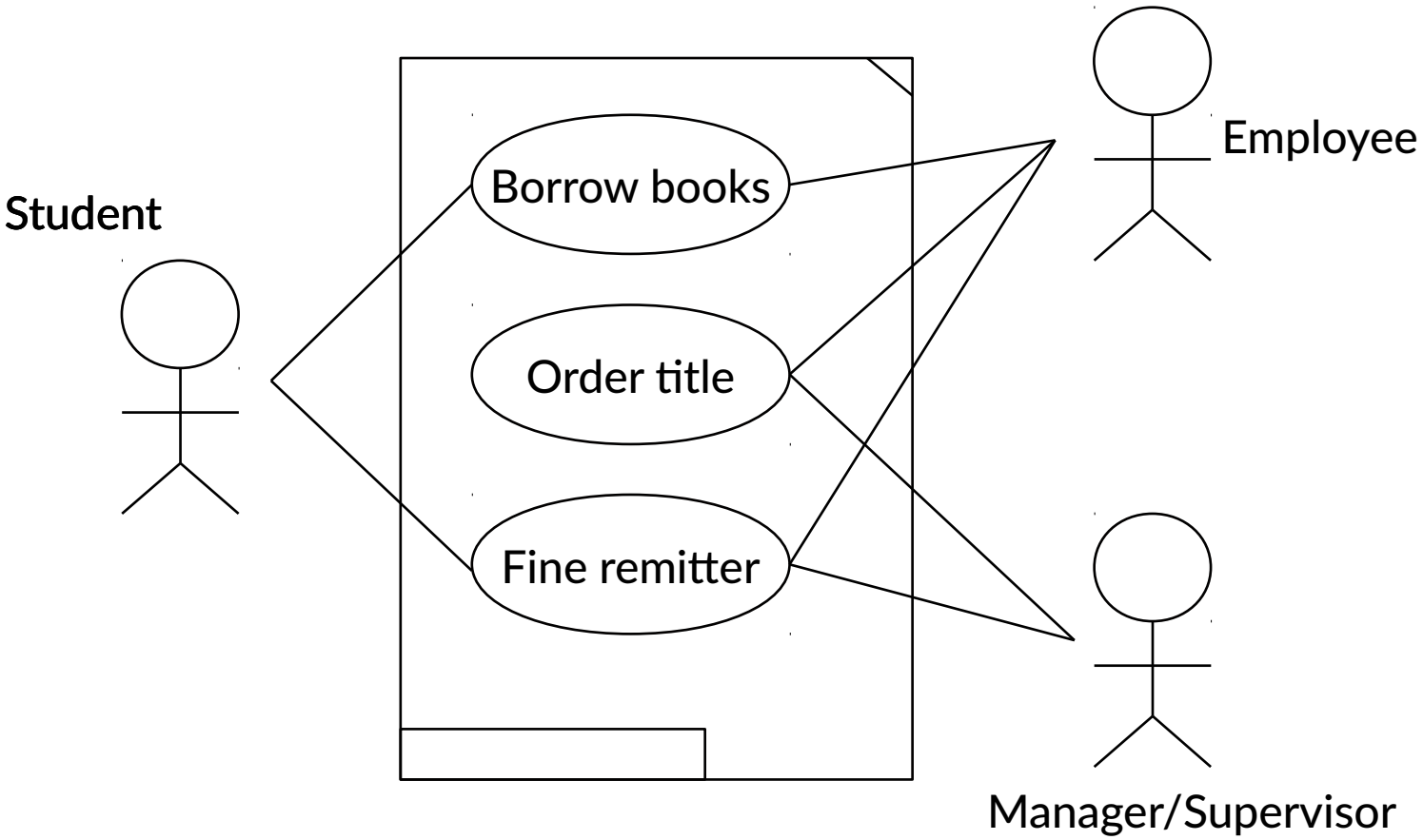
UML Diagram:: Bank_System



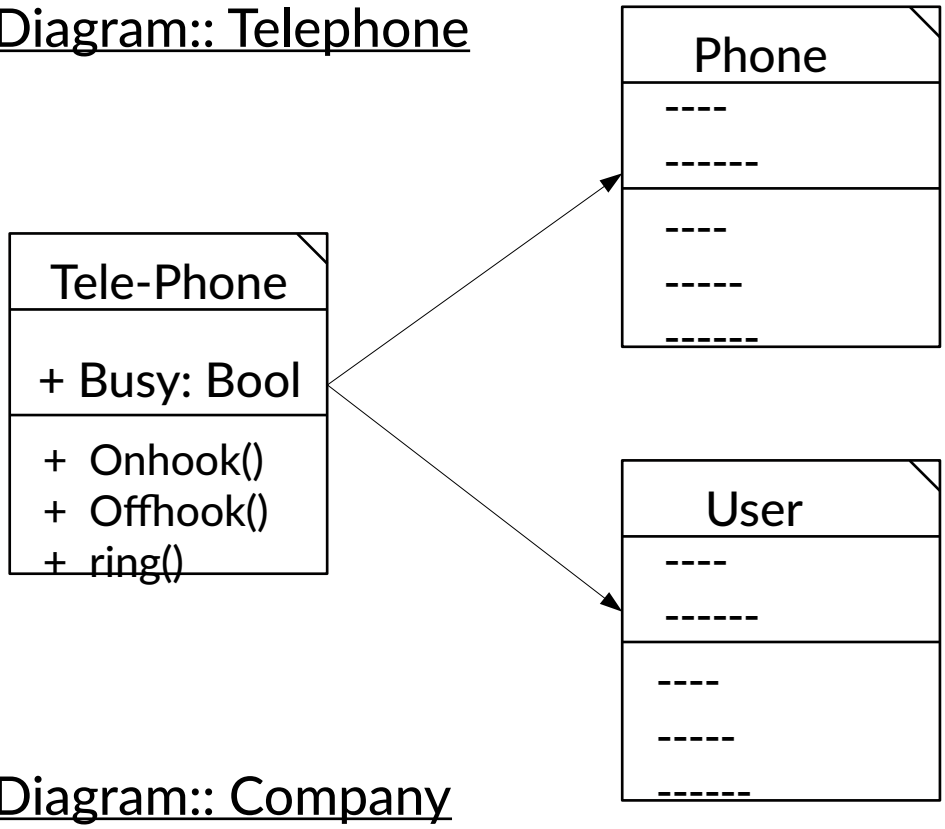
UML Diagram:: Cellular_Network



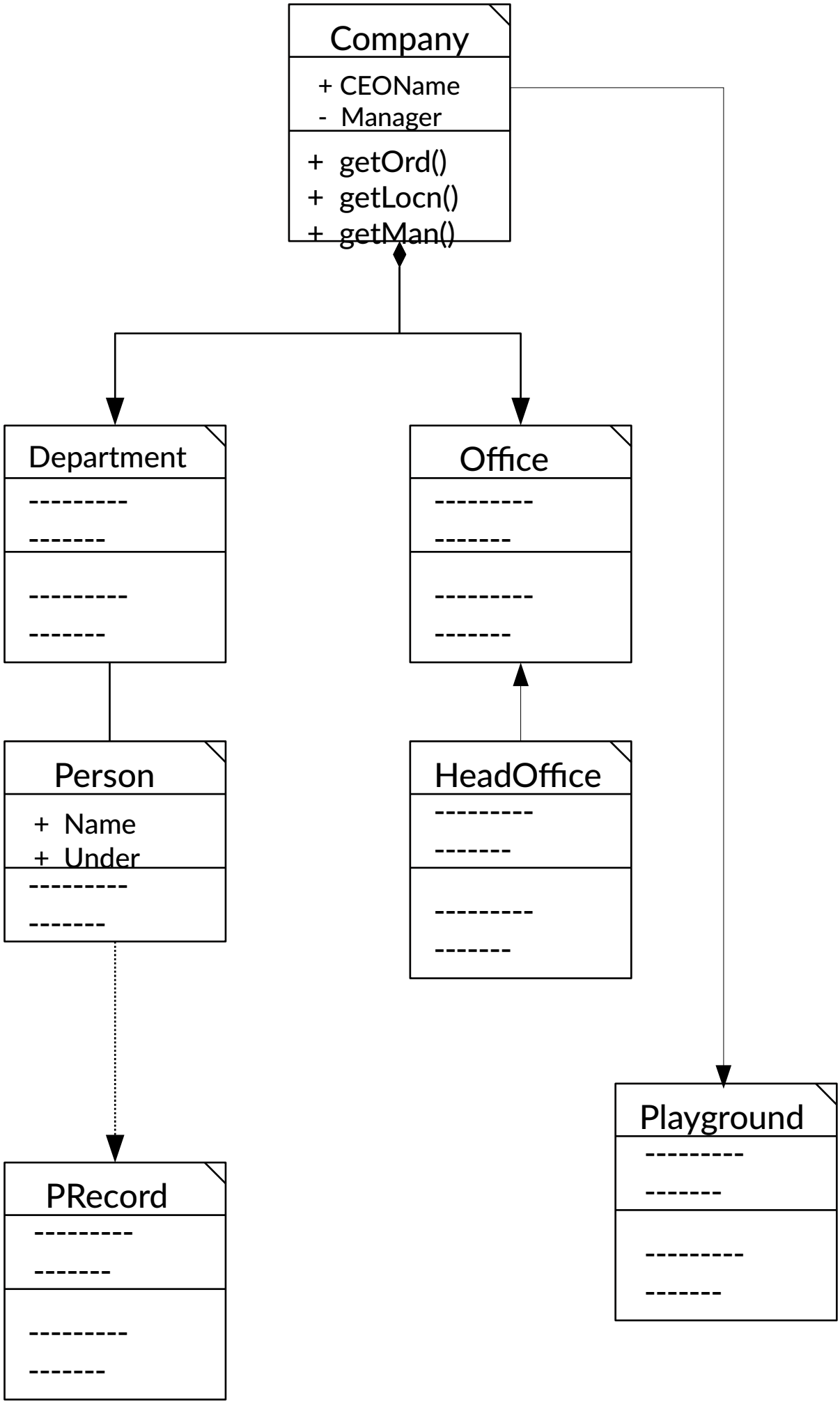
UML Diagram:: Library_book_management



Class Diagram:: Telephone



Class Diagram:: Company


Company
+ CEOName
- Manager
+ getOrd()
+ getLocn()
+ getMan()
Department

Office

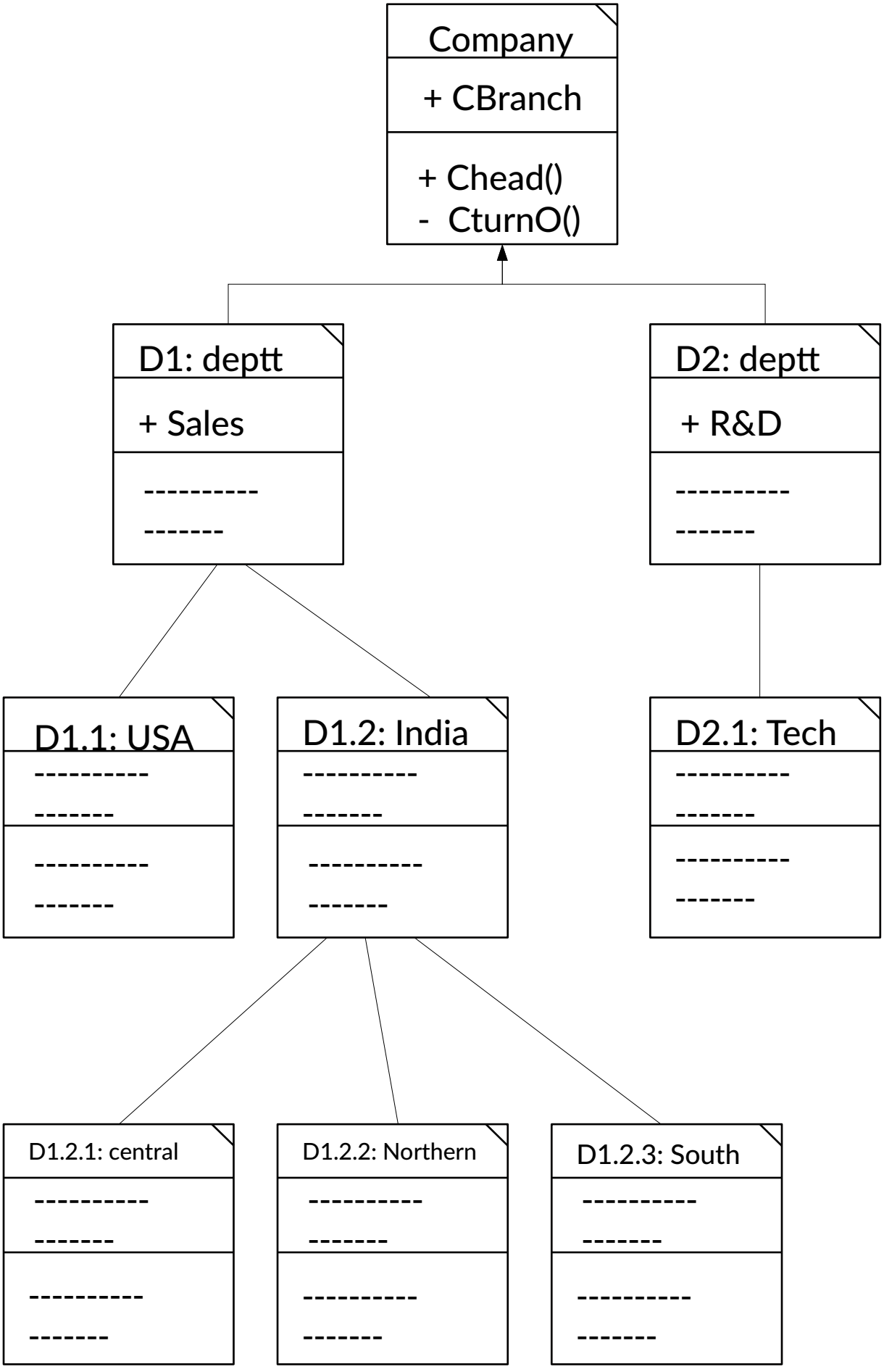
Person
+ Name
+ Under

HeadOffice

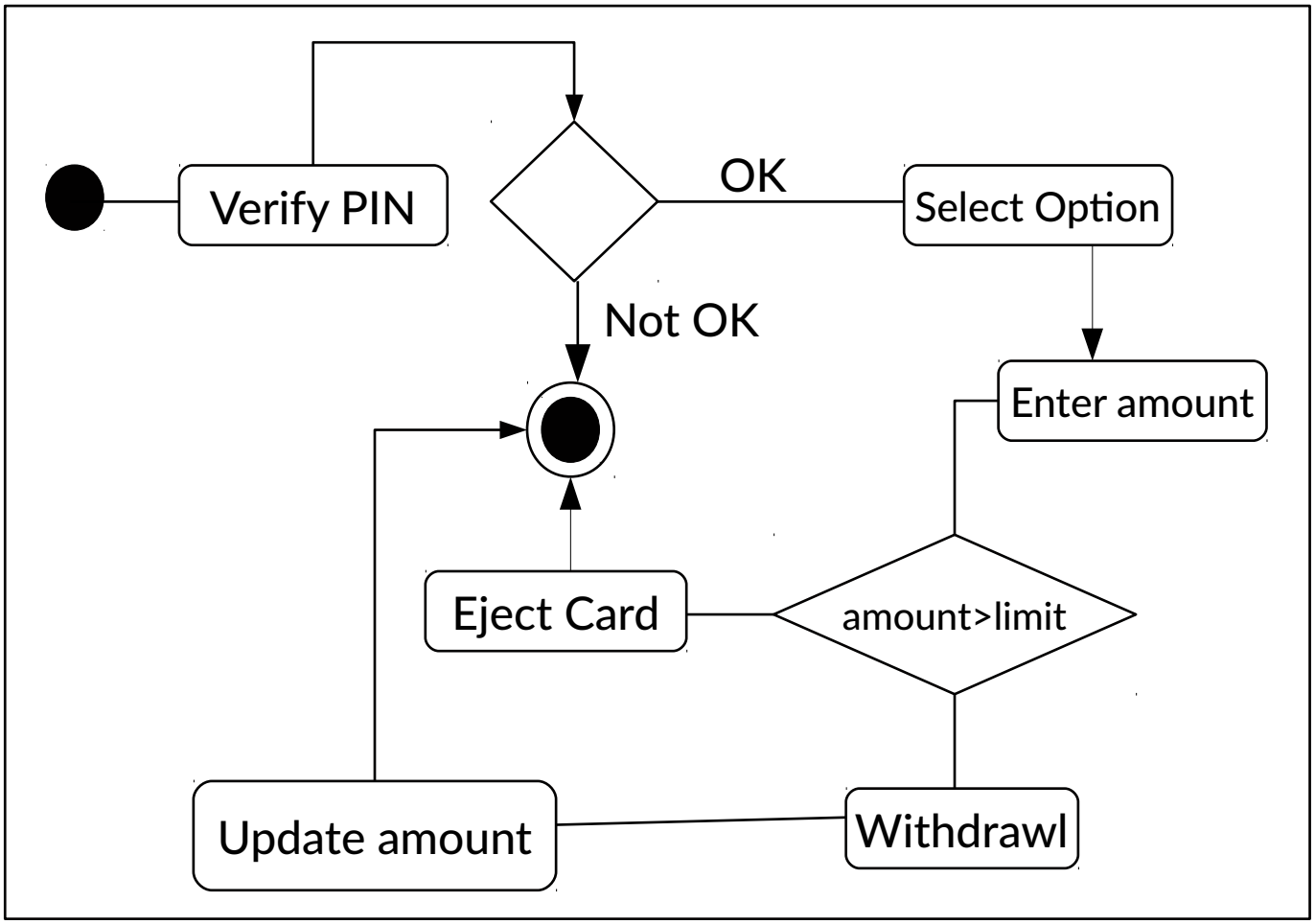
PRecord

Playground

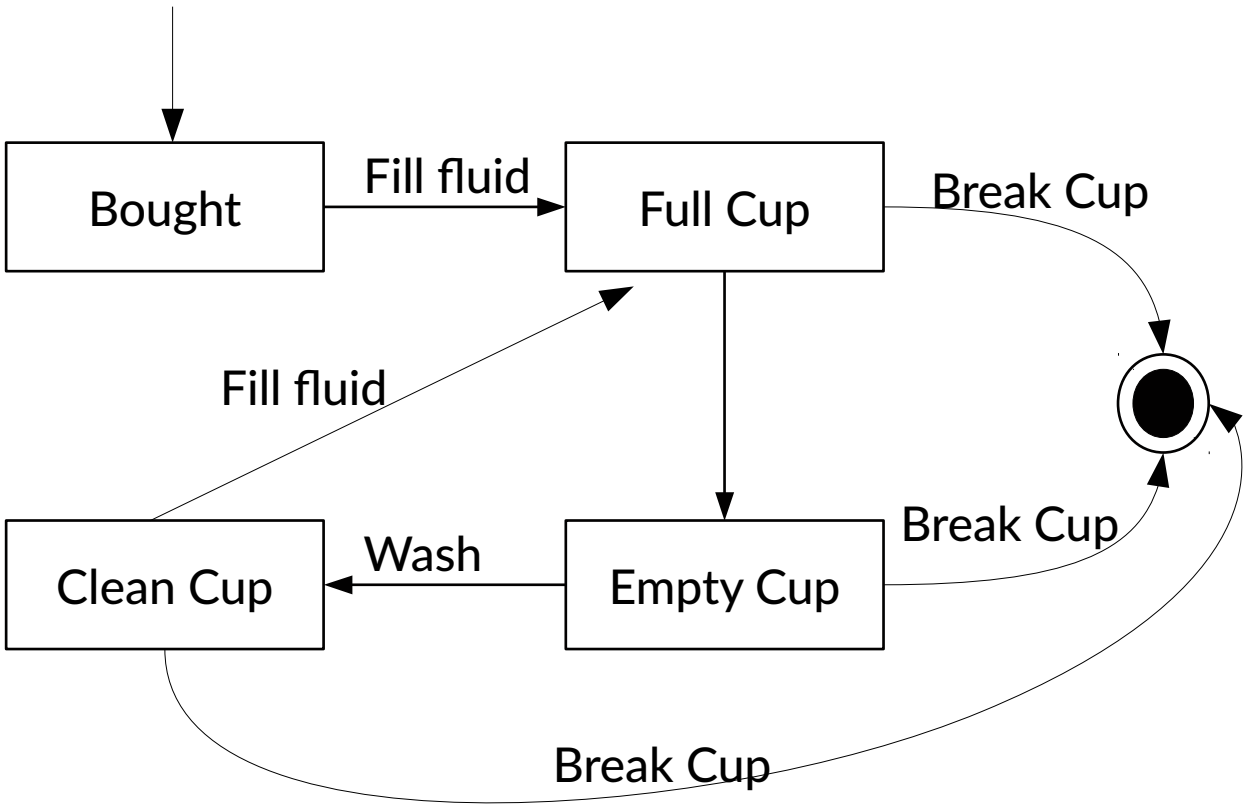
Object Diagram:: Company



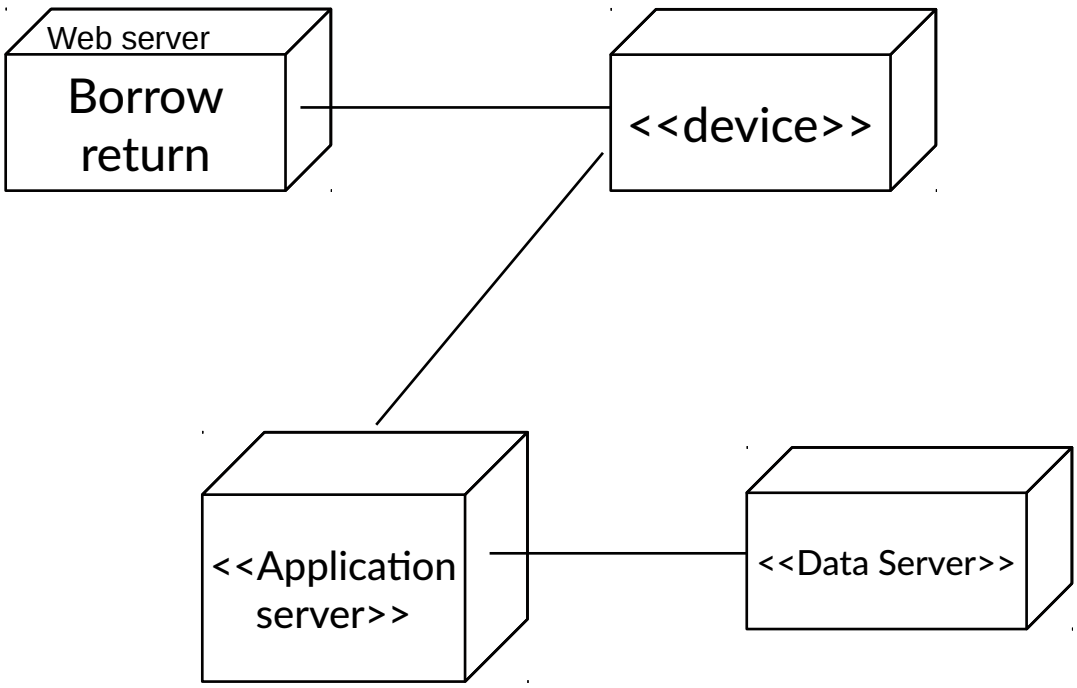
Activity Diagram:: ATM PIN generation



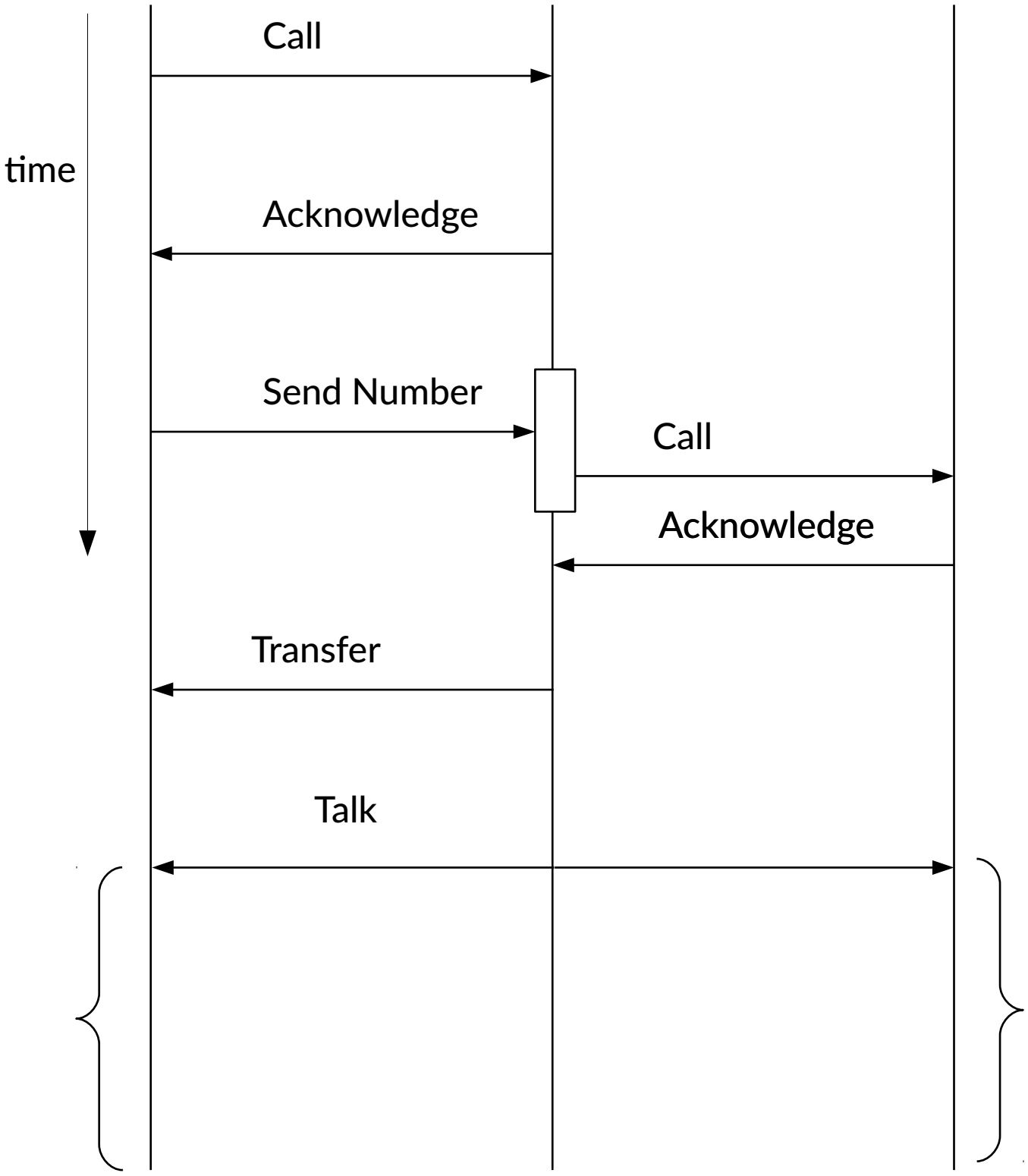
State Diagram (Control flow Diagram):: Life of a Cup :)



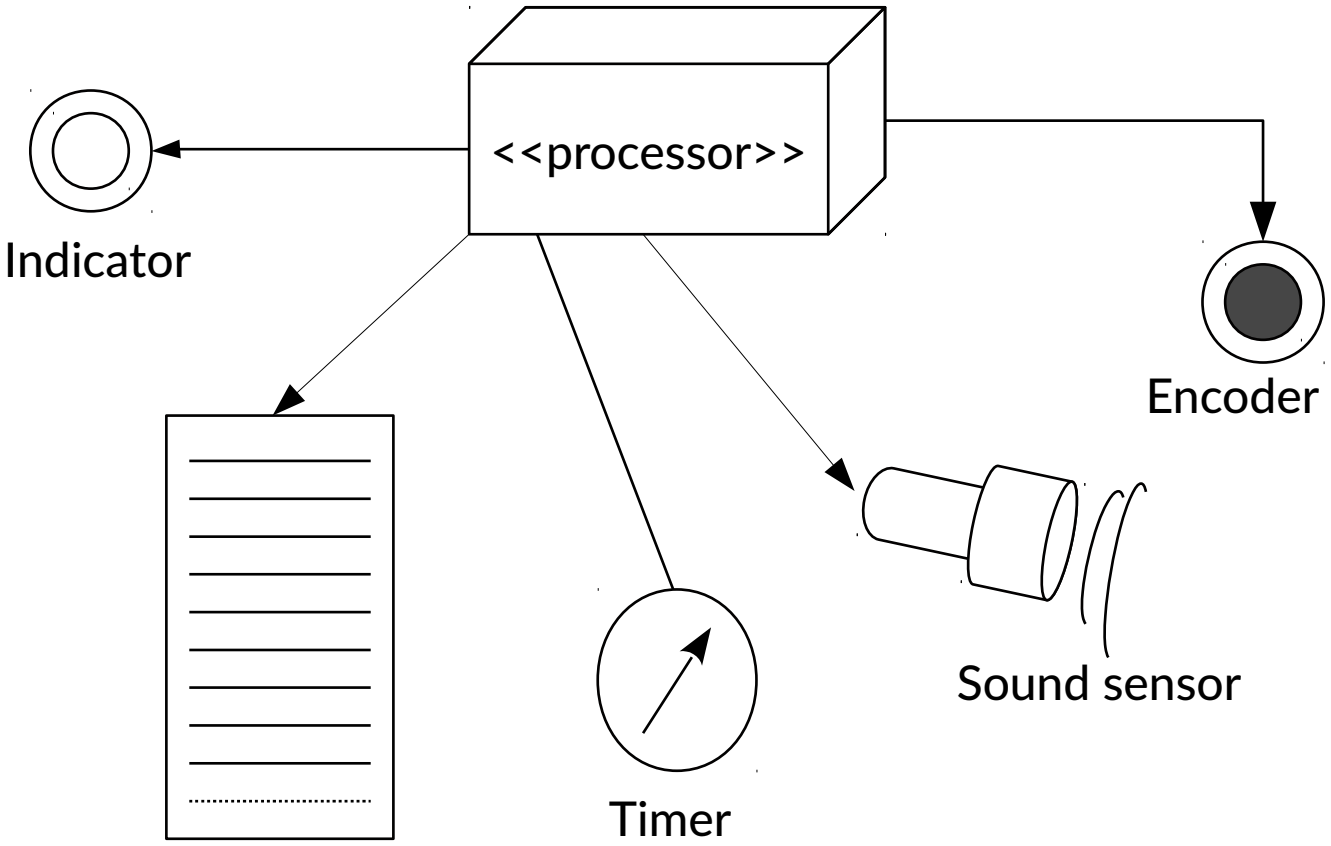
Deployment Diagram:: An Embedded System



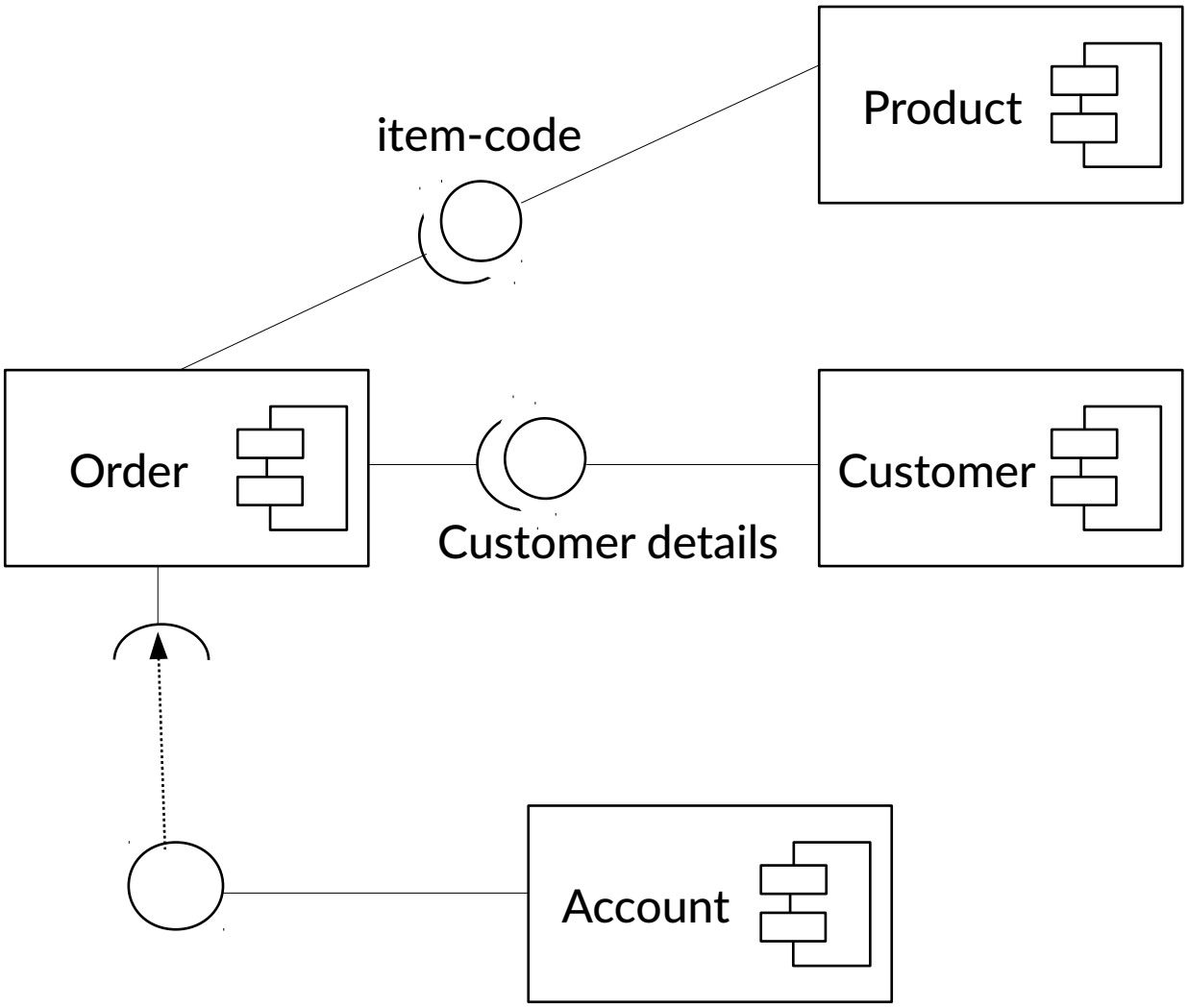
Sequence Diagram:: Cellular System



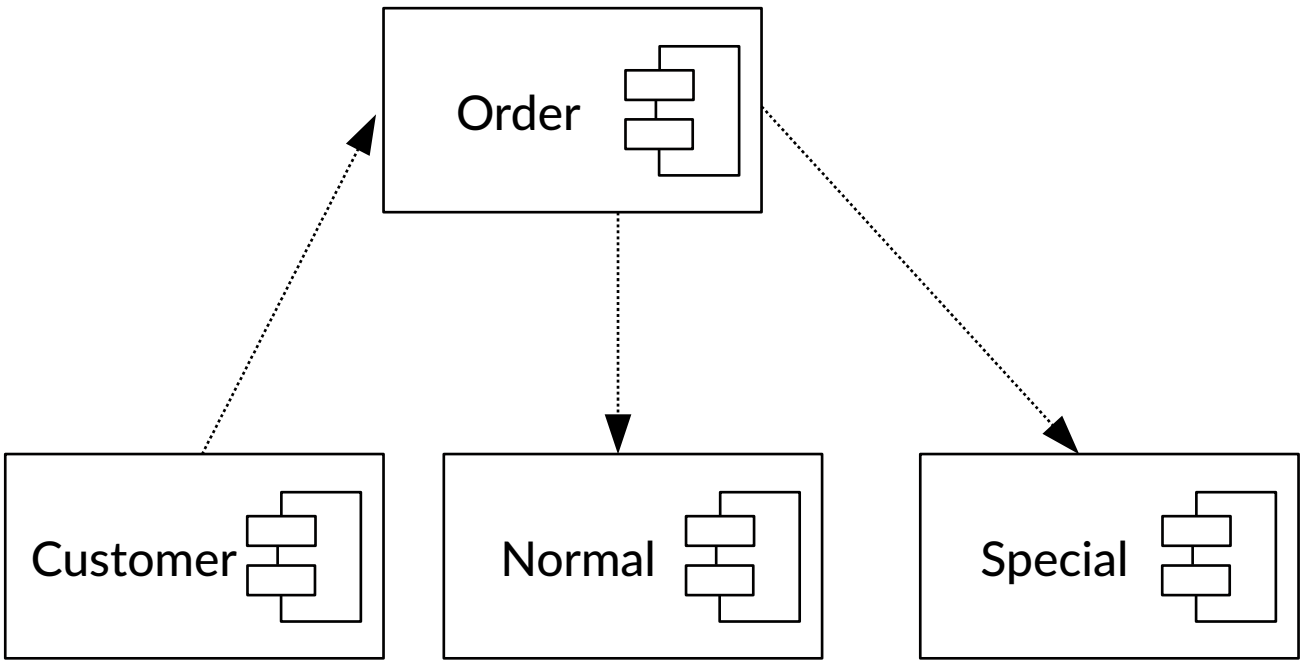
Deployment Diagram:: E.g. Motherboard



Component Diagram:: Product Order



Component Diagram:: Customer & Orders



Collaboration Diagram:: Product Selling