

# CPE 684

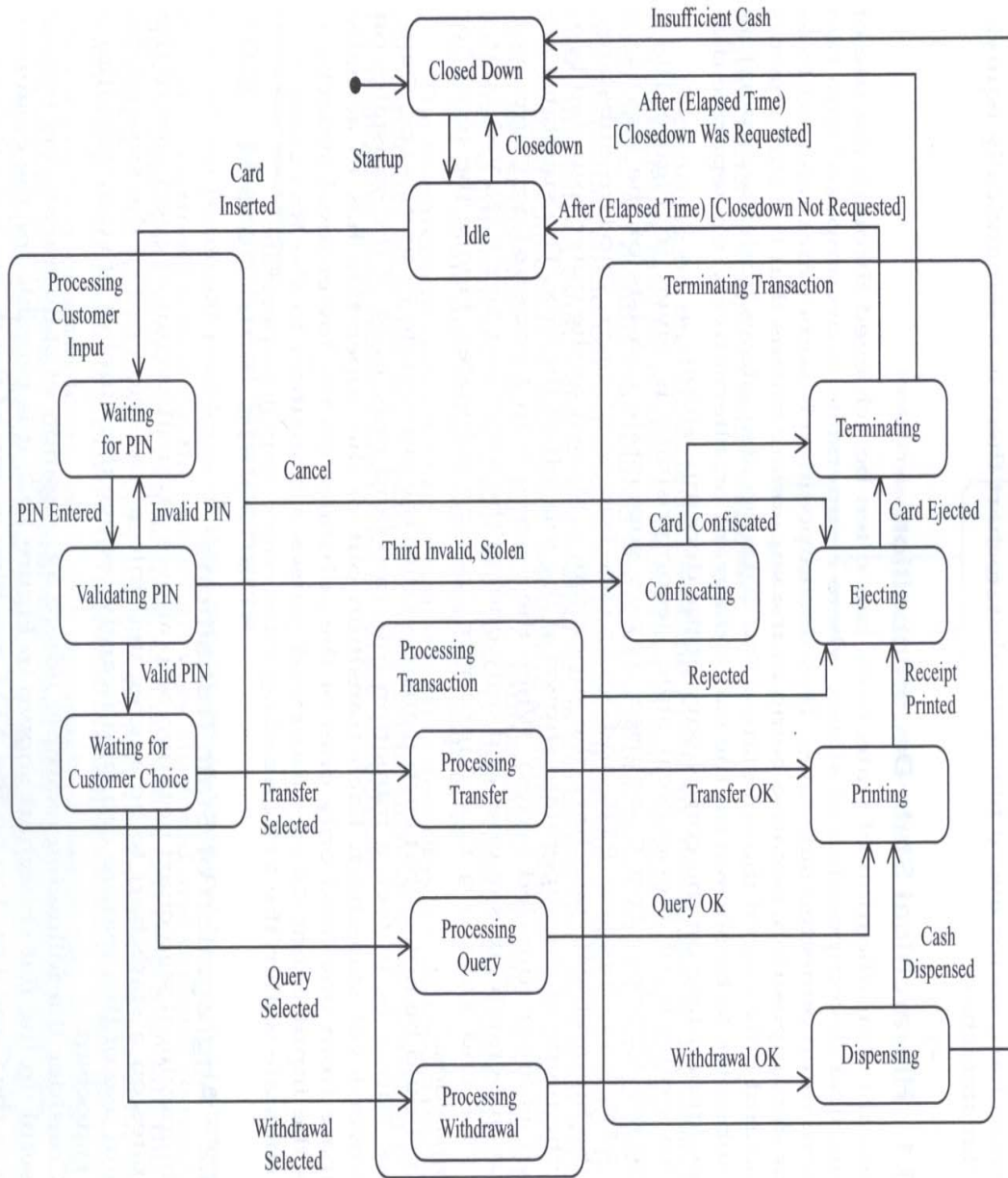
## Assignment 2

### PART I

Using as an initial design, the class diagram produced in Assignment 1 for the AGV control system, develop a refined design using design patterns. Show refinement steps based on applying patterns one by one. Each pattern should be targeted to a specific design problem that you specify in your design. Use specifically the *Observer*, and the *State* patterns discussed in class. Document your design refinements and show clearly the design model as it evolves from one refinement to the next.

### Part II

Use the statechart pattern language discussed in class to develop a refined design for the ATM controller class of objects discussed in class whose statechart is shown below:



**Figure 10.14** Example of hierarchical statechart