**Activity Diagram**

**Case 2**

In an online airlines ticket booking system, a customer places a request to the system selecting the departure and arrival destinations and also the date of departure. The system then gets all the carrier names and their time schedule from the flight database. Once the carrier names and their time schedules are received the system displays the options of the carriers and the schedule to the customer. If the customer likes any one of the options, he selects the option. But, if the customer doesn’t like any option he can go back and select a new date of departure or he can close the application. After selecting an option, the system asks for customer details and credit card information. The system verifies the credit card. If the credit card is valid, the system writes all the booking information in the booking database and sends customer information to the carrier simultaneously. If the verification of the credit card fails, the system sends an error message to the customer and requests for credit card information again. The verification process is done again. If the credit card verification fails for three times the system cancels the booking process and sends a warning message to the credit card agent at the same time. Once the booking is done the system passes the message to the interface and the interface generates a bill and sends it to the customer.

**Case 3**

In an ATM machine a customer starts a withdrawal transaction by inserting the card. Then he enters the pin, which is verified by the bank. If the pin is incorrect the machine requests for the pin again and the customer enters pin number. The verification repeated for 3 times for an incorrect pin number. If the pin is incorrect even in 4th attempt, the card is seized by the machine and the transaction is closed. If the pin is correct customer enters the amount he wishes to withdraw. The bank then checks the account balance of the customer. If the balance is greater than or equals to the withdrawal amount then money is dispatched through the machine and the information is written in the log concurrently. If the money is taken form the slot within 5 seconds, the account is debited and a transaction receipt is printed simultaneously. If money is not taken in 5 seconds, it is taken back by the machine. Then the balance is shown to the customer. The card and the receipt are then ejected at the same time, and the transaction is completed.