Loan a video Use case: Actors: Assistant

Goal: To lend a video to a customer

Overview:

A customer chooses a video and gives their membership card and the video to the Assistant. The Assistant scans the customer's membership card and checks if they owe any money or have outstanding loans. The system searches for a specific video using the barcode scanned from the video they wish to borrow. The system locates the required video and displays the details on the screen. The Assistant checks that this is the video the customer wants to borrow and looks to see what the rental cost is for this video. The system then registers the loan transaction.

Typical course of events:

Actor action System response The customer chooses a video The Assistant scans in the 3 Displays customer details membership card barcode 4 The Assistant agrees the details The Assistant scans in the video 6 Displays video details including barcode hire cost 7 The Assistant agrees the cost and 8 Stores the loan transaction registers the loan 9 The customer pays for the loan 10 The Assistant records the 11 Prints a receipt

Figure 6.25 Use case description 'Loan a video'

payment

Figure 6.26 shows the use case description 'Return a video' 6.5 from the video rental system.

Following the guidelines given in the section on deriving operations from CRC responsibilities, identify two more operations that are needed on the Loan class and one on the Reservation class.

Describe the operation calcDaysOverdue() using specification 6.6 by contract as described in the section on specifying operations. The informal description of this operation is as follows.

calcDaysOverdue()

This operation uses today's date from the system clock and the attributes Loan.startDate and Loan.numberDays