

Video store project: Analysis

Fact finding: Interview with the video store manager

Do you have a membership system?

Yes.

How do you protect against abuse of the membership system?

I.D. is required for membership to sign up.

How do you deal with rentals?

I write down the name of the film, the tape number, the membership number in my book. When a customer returns a tape I cross it out of my book. I scan through a look for overdue videos every day.

What do you do with videos after they have finished their rental life?

Ex-rental videos are sent back to our supplier, or some are sold in the shop. I do not require this area of the shop to be computerised.

How many videos can a member take out at a time?

Members can only have 1 video out at a time, and we limit one card to one person.

How do you fill out the membership cards?

The membership cards are filled in by hand, I am not interested in computerising this area of the computer system.

What do you do if a customer returns a video damaged?

We charge the customer for the price of the replacement. Typically for a rental video this is ~£40.

Describe what you want the system to do.

- Everyday tell me the tapes that are overdue and who I need to telephone.
- The system must store all details of members and videos.
- I want to computerise my rental books and card indexes, both membership and tapes.
- Member details need to include Name, Address, Telephone number, Date of birth and Membership number. The membership number is a numerical value.
- Video details include the title of the film, the price band and the certificate of the film.
- I want to be able to enter a tape number and for the system to tell me where that tape is.

How many members do you have?

Approximately 2000, although some of these members are inactive.

How is the shop staffed?

Never more than 2 people in the store at once, at least 1 person serving at any time. All staff are part time.

How do you charge for videos?

There are 4 video categories. Videos are labelled with a coloured band, and the system has been using 3 bands for a long time, we recently introduced the 4th band for DVD rentals. Each band represents a price region.

DVD - £4.00

Premium - £2.50
Standard - £1.50
Cheap - £1.00

Do you currently have a computer in the shop?

There is a computer in the back of the shop that I have used for word processing. It is approximately 3 years old, I don't know much about computers. Neither do many of the staff so we will need training on a new system, and will need to get a new computer system. Our current system is a PIII 800, 64MB R.A.M., 10Gb H.D.D..

How many videos do you have in stock at any one time?

1000. 300 are out on rental on busier nights, mainly Saturday. Quieter nights about 50, the number can vary. We have about 1000 rentals per week.

How long do you lend videos for?

Standard loan length is 24 hours, we also offer a 48 hour rental on some videos. There is no discount for this service and the price for two nights is double the price for a single night, as I mentioned earlier using the banding system.

How many new members do you get a week?

We have a large turn over of members, typically 10-20 new members per week. Many of our 2000 members are not active.

How do you deal with videos that are not rented often?

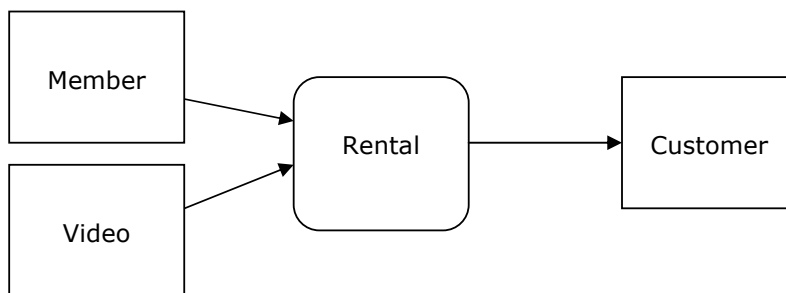
When a video is not popular we move the video to a lower price band.

How do you deal with stock replenishment and getting rid of old stock?

Stock from a single supplier. Every 2 weeks new stock arrives in exchange for old stock. We have no control over the stock that is given to us and what is taken from us or what arrives. The supplier gives us a list of what they want back and what is to arrive.

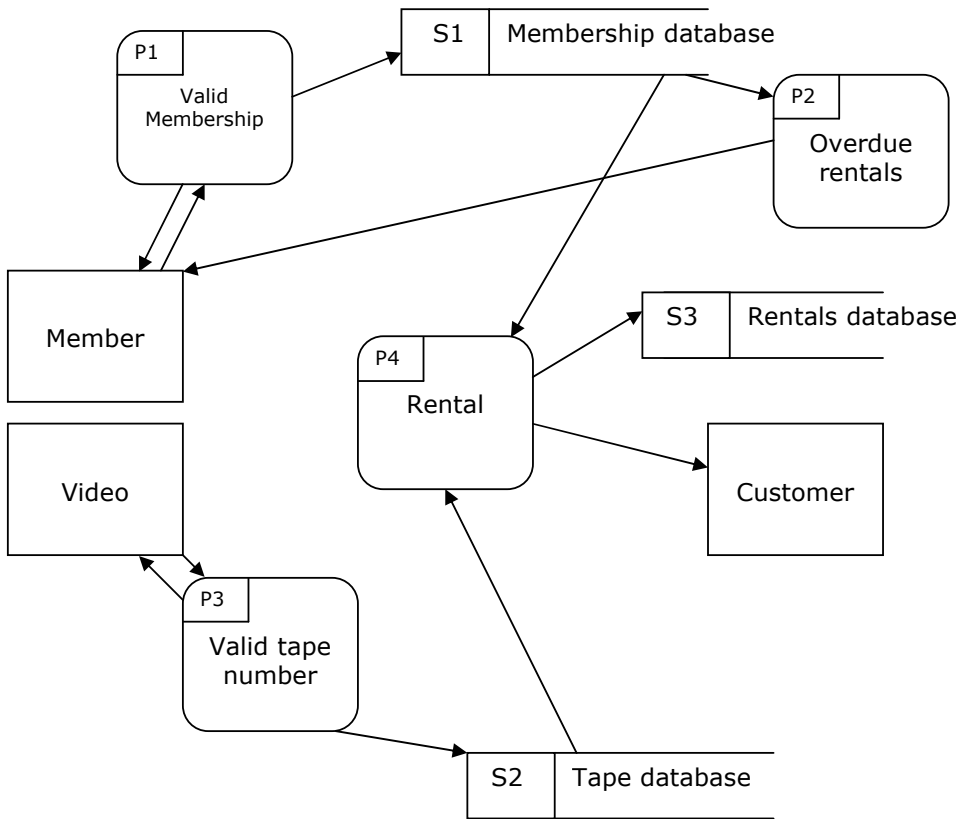
Data Flow Diagram

Top Level:

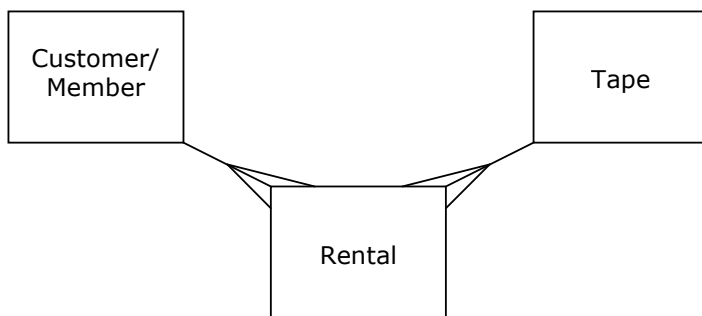


Second Level Diagram:

Comment: Good



E.R. Diagram



List of requirements

- The system must be accompanied by a user manual detailed and simple enough for staff with only very basic computer skills to be able to use it.
- Must record every rental by a customer and record them.
- Ability to find out how many tapes a user has borrowed in the last year.
- Produce a list of overdue videos within 5 clicks.
- Must comply with data protection act.
- Interface must be menu driven.

Gareth Jones (JLB) – Computing (IMC)

- System must be able to generate results from requests within 10 seconds.
- There must be a backup routine.
- Data must be secure.
- Video database must be able to store 10,000 videos and membership database able to store at least 30,000 members.
- Must be able to produce reports on...
 - Members history (total fines, how many videos a user has taken out)
 - Most popular videos/Least popular videos
 - List of overdue videos
 - Create mail-merge documents to send out to inactive members, or to give very active members a discount
- Perform the following calculations...
 - Fines for a member
 - Cost of rental
- Search for any member by...
 - Name (First and/or last)
 - Part of, or all of address
 - Membership number
 - Telephone number
- Search for any video by...
 - Alphabetical list (browse all videos)
 - Title of video
 - Video number
 - Certificate of video
 - Popularity

Comment: Good work:
12/12