Design Section – GCSE ICT Coursework Two – Database Project

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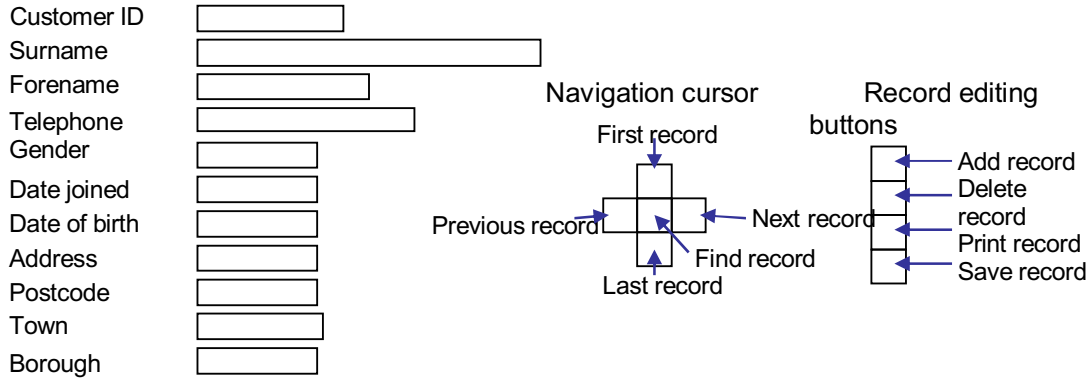
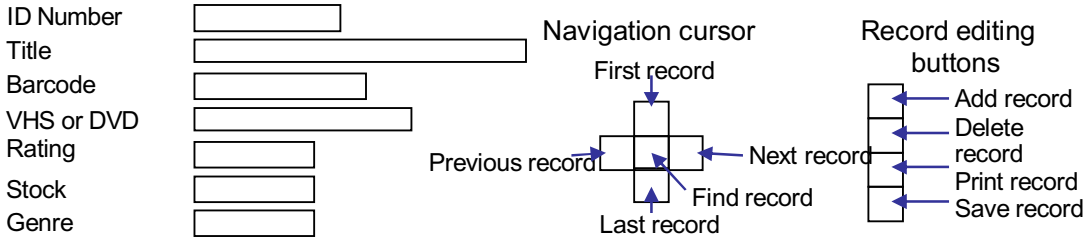
Form Designs

Members Information Design and Field Definitions Table



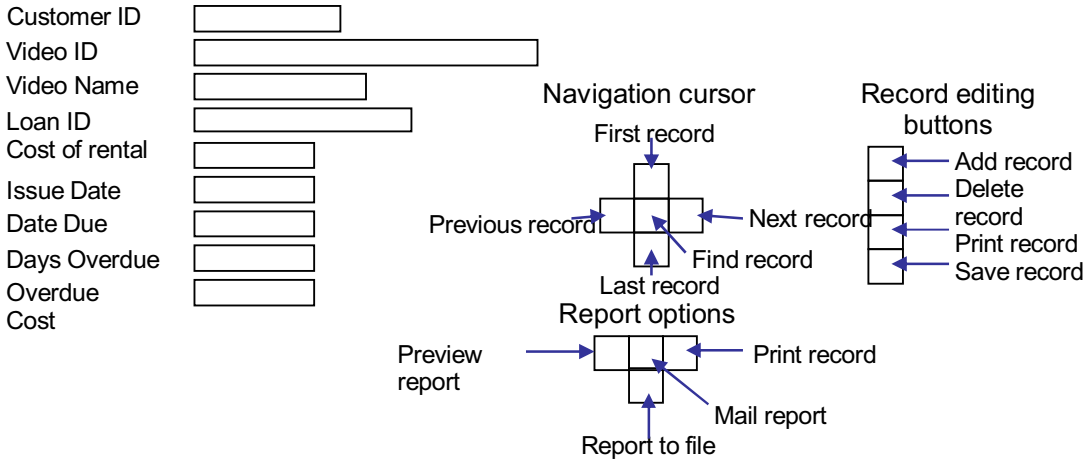
Field Name	Data Type	Field Size	Validation	Description
Customer ID	Text	7	Input mask: LL00\0900	Members chosen ID number
Surname		20	--	Members Surname (Alphabetic order)
Forename		50		Members Forename
Telephone		13	Input mask: 0\ 20\-0000\-0000	Member's telephone number
Gender		1	Input mask: L "M" or "F"	Member's gender (M or F)
Date Joined	Date/Time	--	Default value:=Date()	Date Member joined. For a new member has today's date (=Date())
Date of Birth			--	Member's Date of Birth
Address	Text	50		Member's address
Post Code		8	Input mask: La09\ 0LL	Member's post code
Town		20	--	Member's town
Borough				Member's borough

Video Information Design and Field Definitions



Field Name	Data Type	Field Size	Validation	Description
ID Number	Text	12	Input mask: L\-000\-0000\-L	Video's ID number given by the store for easy search and classification.
Title		50	--	Video title to recognise the video by the staff and customers.
Barcode		15	Input mask: "5 "000000\ 000000	The number recognised when the video is scanned in. Number created by manufacturers.
VHS or DVD		3	Input mask: LLL	To tell what format the video is to categorise by.
Rating		2	--	The video's rating to restrict the purchase of video to people under-age.
Stock	Number			The number of stock of a video.
Genre	Text	20		The type of film the video is to categorise by.

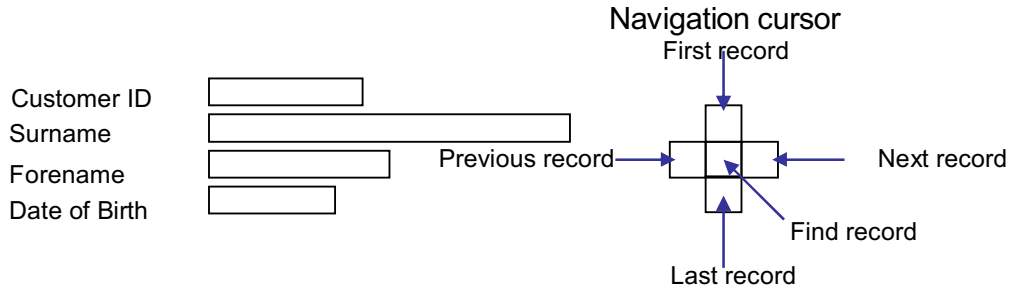
Overdue Rentals Form Design and Query Design Table



Description	Table Name	Field Name	Search Criteria	Visible	Calculations
Automatically searches for all the videos not returned.	Member Information	Customer ID	--	Yes	--
	Video Rental Information	Video ID	--		
		Video Name	--		
		Loan ID	--		
		Cost of Rental	--		
		Issue Date	--		
		Returned	"No"	No	

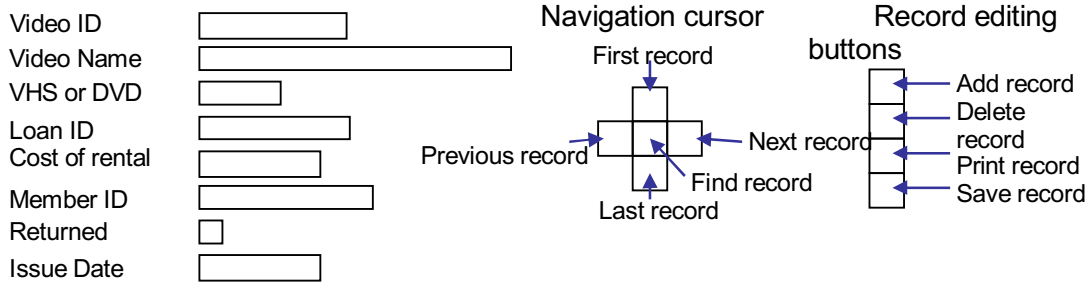
	--	Date Due	--	Yes	Date Due: [Issue Date]+2
		Days Overdue	--		Days Overdue: DateDiff("d",[Date Due],Date())
		Overdue Cost	--		Overdue cost: [Days Overdue]*[Cost of rental]

Date of Birth Form Design and Query Design Table



Description	Table Name	Field Name	Search Criteria
Automatically searches for members born after 1st January 1980	Member Information	Customer ID	--
		Surname	
		Forename	
		Date of Birth	>#01/01/1980#

Video Rental Information Form Design and Field Definitions Table



Field name	Data type	Field size	Validation	Description
Video ID	Text	12	Input mask: L\-000\-0000\-L	The video's ID number given by the store
Video Name		50	--	The video's title
VHS or DVD		3	Input mask: LLL	The video's format
Loan ID		5	Input mask: LL000	The ID number of the loan according to the member and video and kept as reference of issues.
Cost of rental	Currency	--	--	The cost to rent this video.
Member ID	Text	7	Input mask: LL00\0900	The member's ID number who purchased the video.
Returned	Yes/No	--	--	If the video is returned then there is a tick if it is not then there is left blank.

Issue Date	Date/Time			The date of when the video was issued.

Report Designs

---------- Report Header----------

Page Header---------- ----------

Company's Name in bold underline

Company's address, telephone and fax number and e-mail address

Forename
Surname
Member ID

Address
Town
Postcode
Borough

Date Joined

Message

Date: =Now()

The date will be automatically the date printed using the validation: =Now()

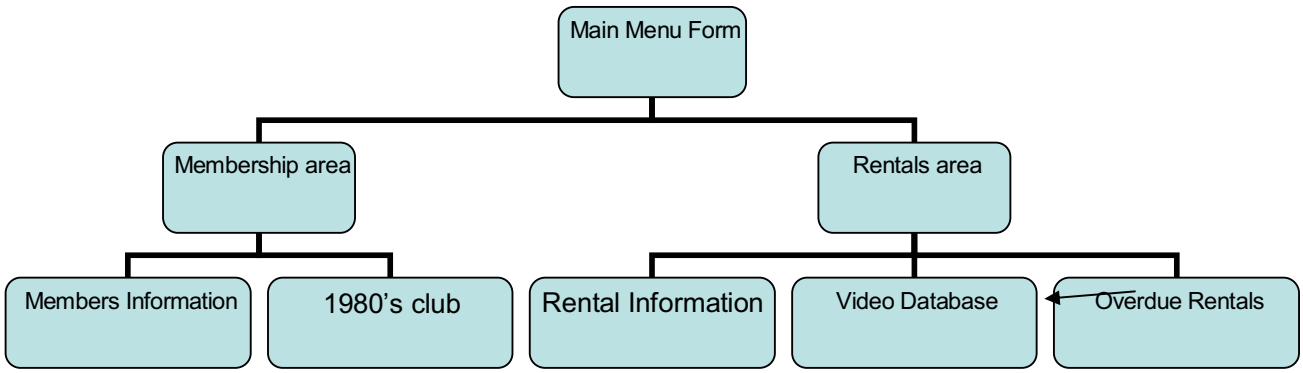
---------- Query header----------

Rentals Outstanding in bold underline

Video Name (title) Cost of issue (title) Issue Date (title) Date Due (title) Days Overdue (title) Overdue Cost (title)
---------- ----------Detail----------
--
Video Name (detail) Cost of issue (detail) Issue Date (detail) Date Due (detail) Days Overdue (detail) Overdue Cost (detail)
---------- Query Footer----------

Final Designs

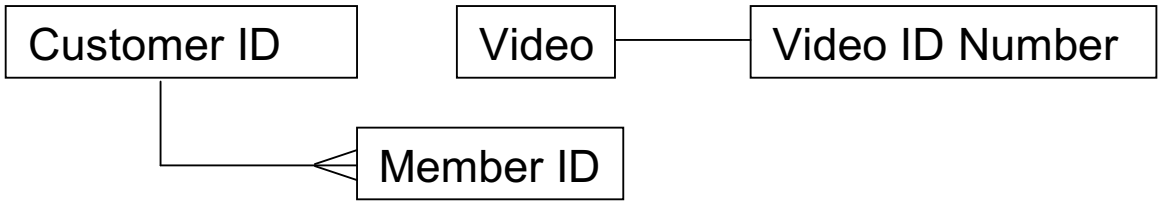
Structure Diagram



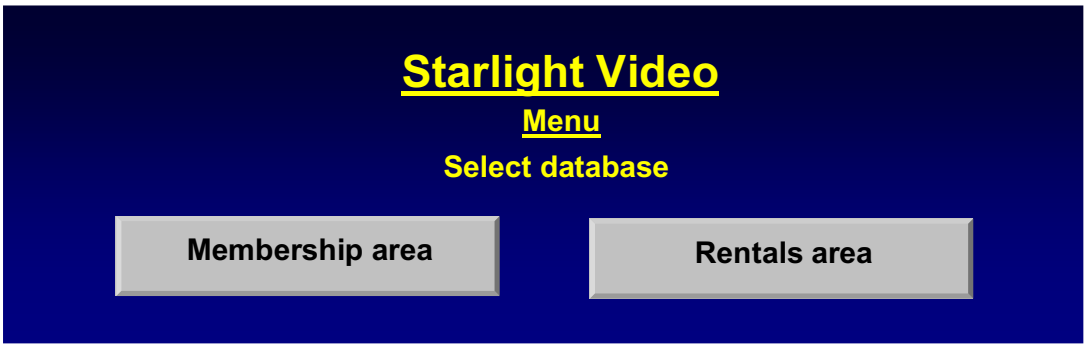
Macro Design

Action	Object Type & Name	Miscellaneous	Form Name
Message Box	N/A	Alerts user when they double click on the form	All
Open form	Membership Area	Opens a different form	Main Menu
	Overdue Rentals		Rentals Area
	Rentals Area		Main Menu
	Rental information		Rentals Area
	Member information		Membership Area
	1980's Club		
	Video Database		Rentals Area
Print report	Overdue Report	Prints out a report	Overdue Rentals
Open report	Overdue Report	Opens a Report	Overdue Rentals

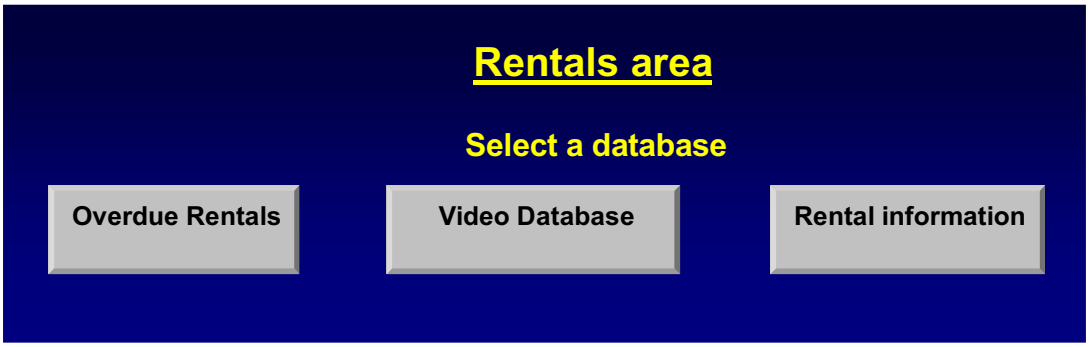
Entity Relationships



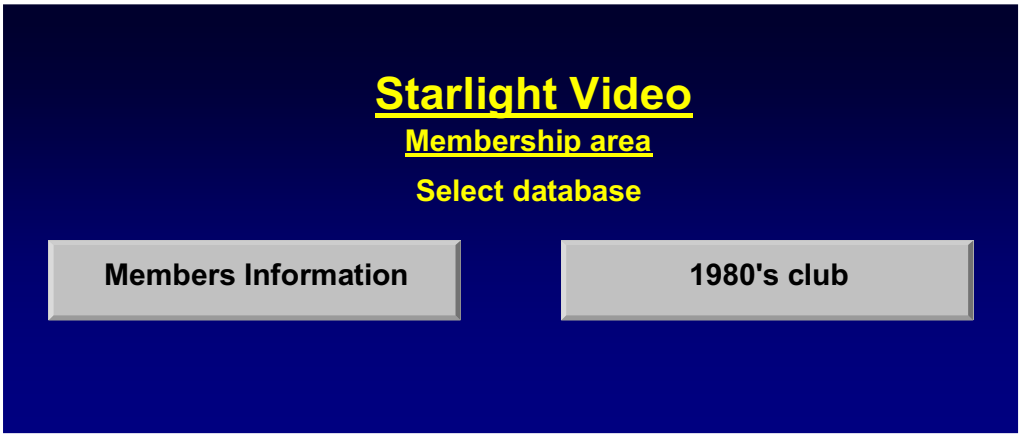
Final Form Designs
Main Menu



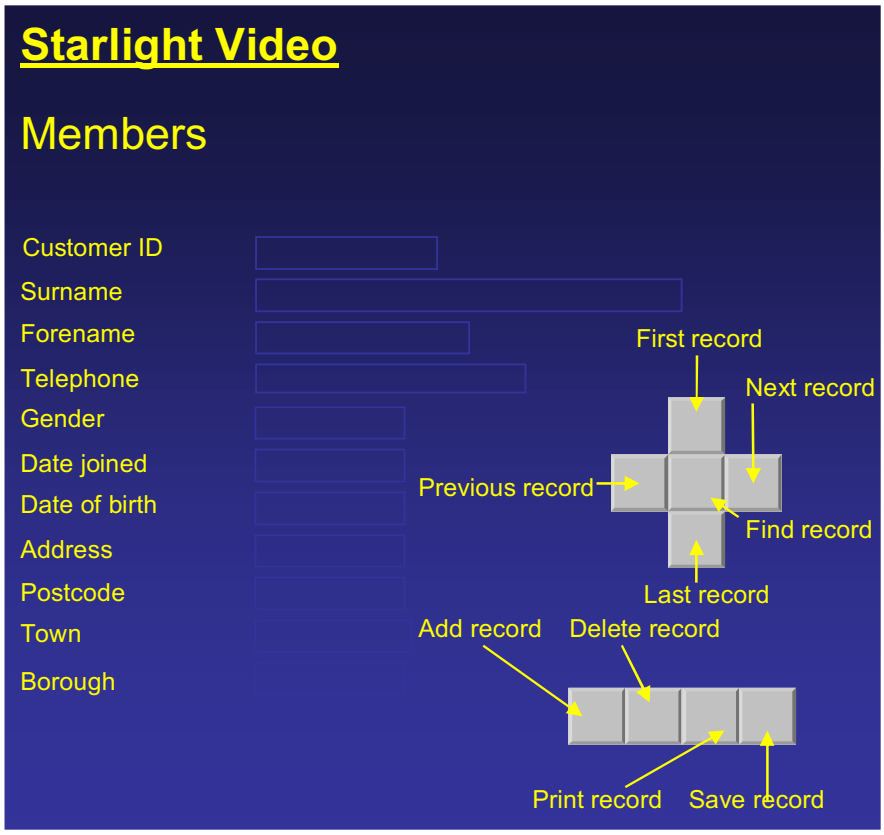
Rentals Menu



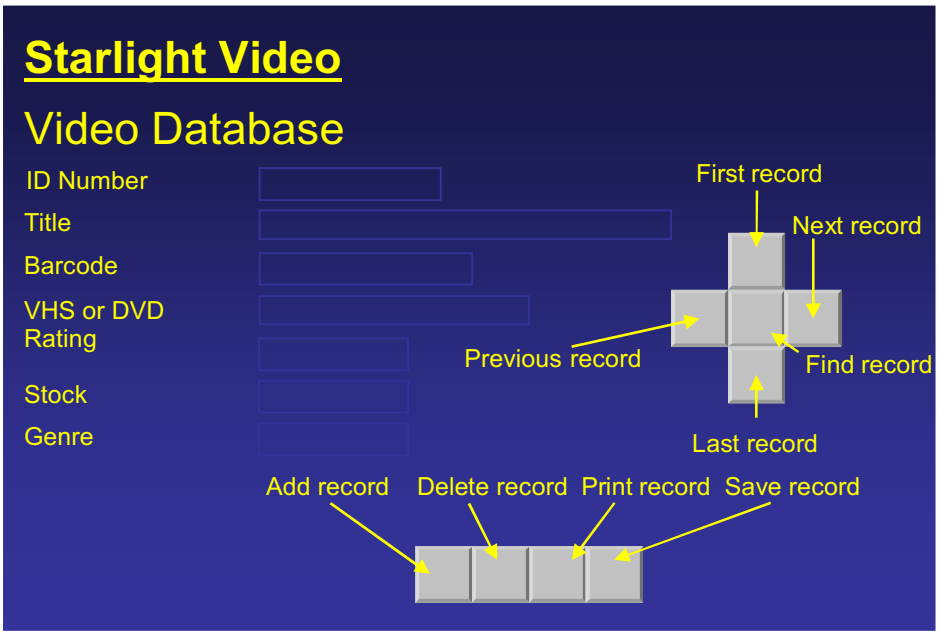
Membership Menu



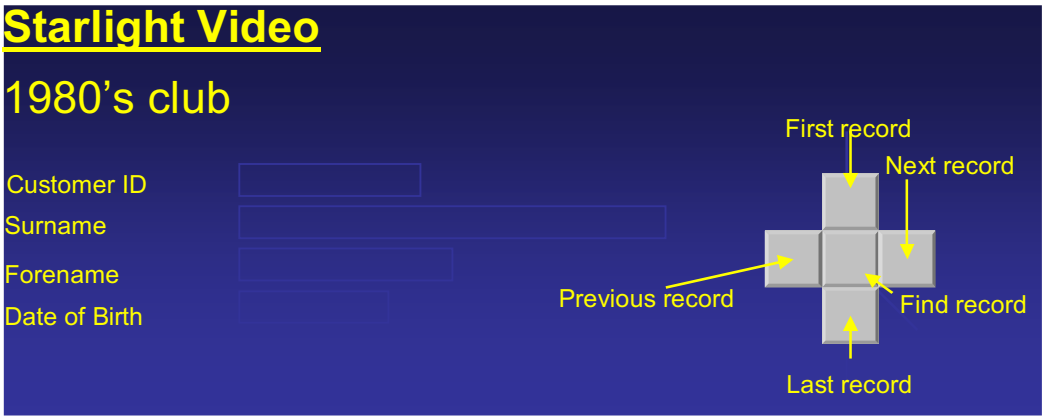
Member Information



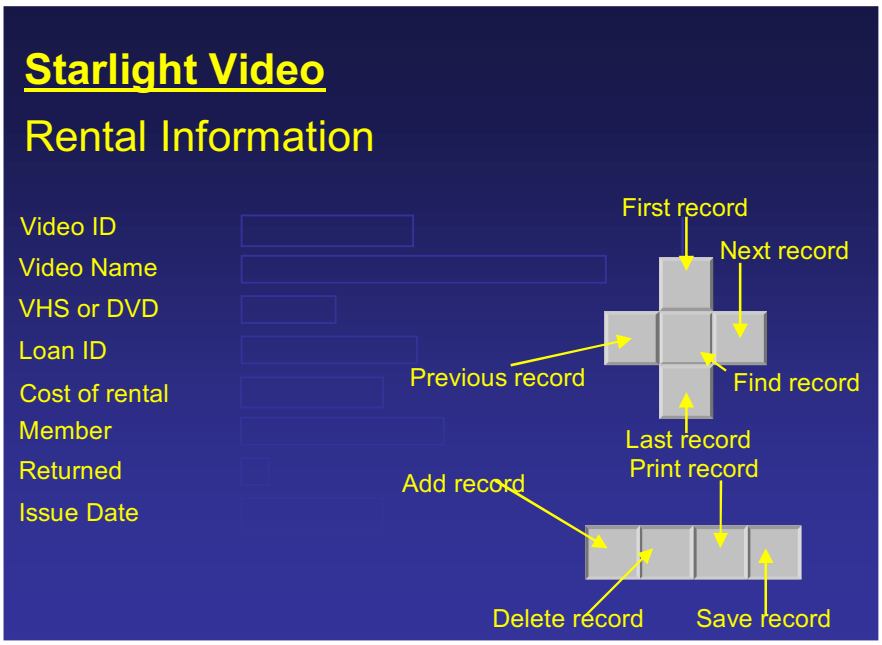
Video Database



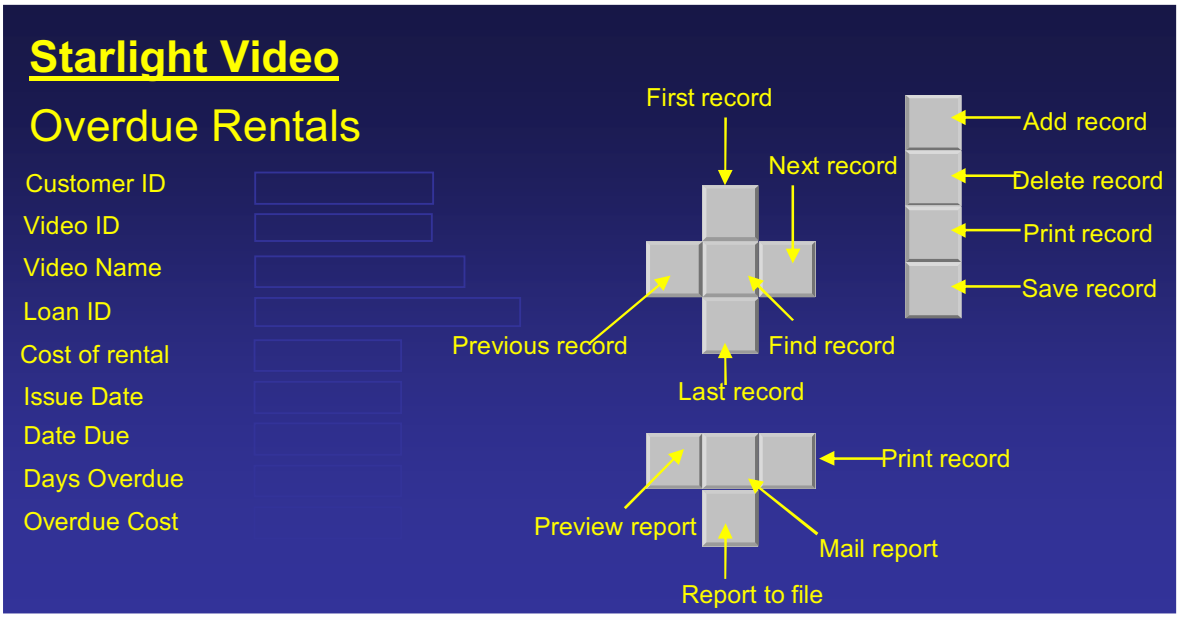
1980's Club



Rental Information



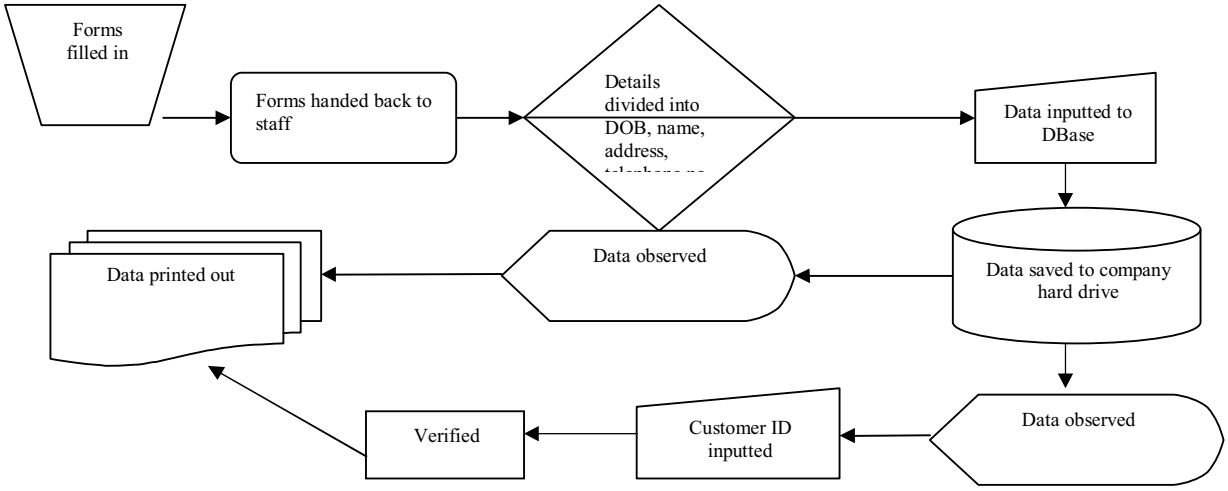
Overdue Rentals



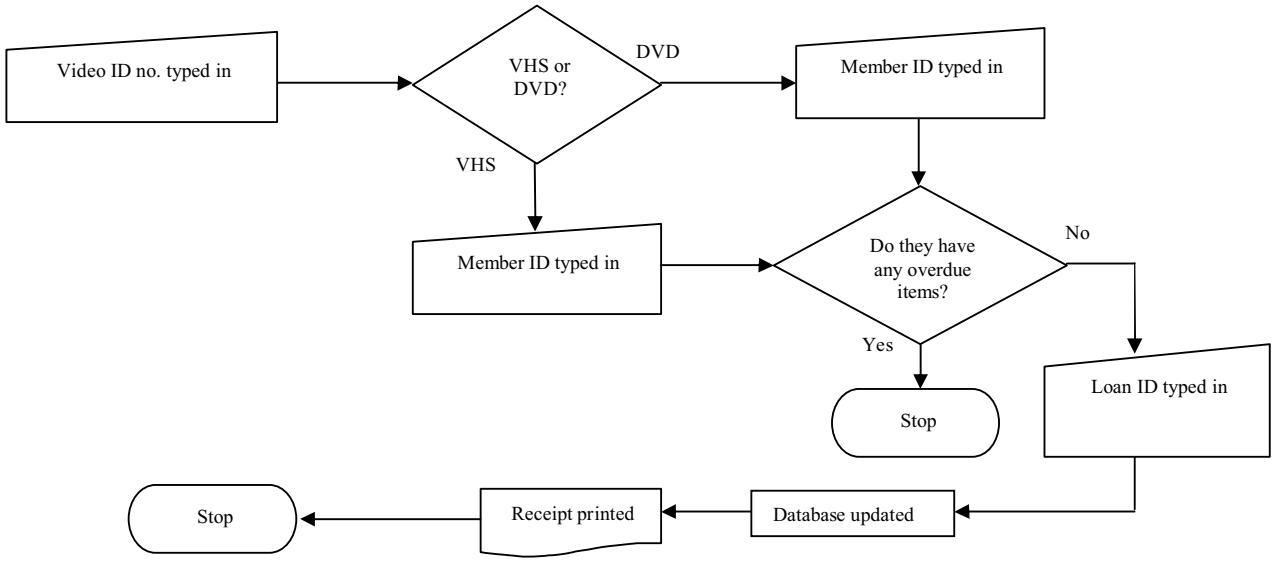
Test Plan Designs

User Requirement	How It will be tested
Members details be able to update easily	System testing – allow users to edit database
Show the price of rentals and can automatically update and indicate staff when video is overdue on the day and every other day	System testing – allow users to access Overdue Rentals form.
Staff can easily search to find member information for overdue video rentals and the member's information.	
Able to print hard copies for manual backup	System testing – allow users to print records and reports
Can be saved and stored for backup	System testing – work through forms and save databases

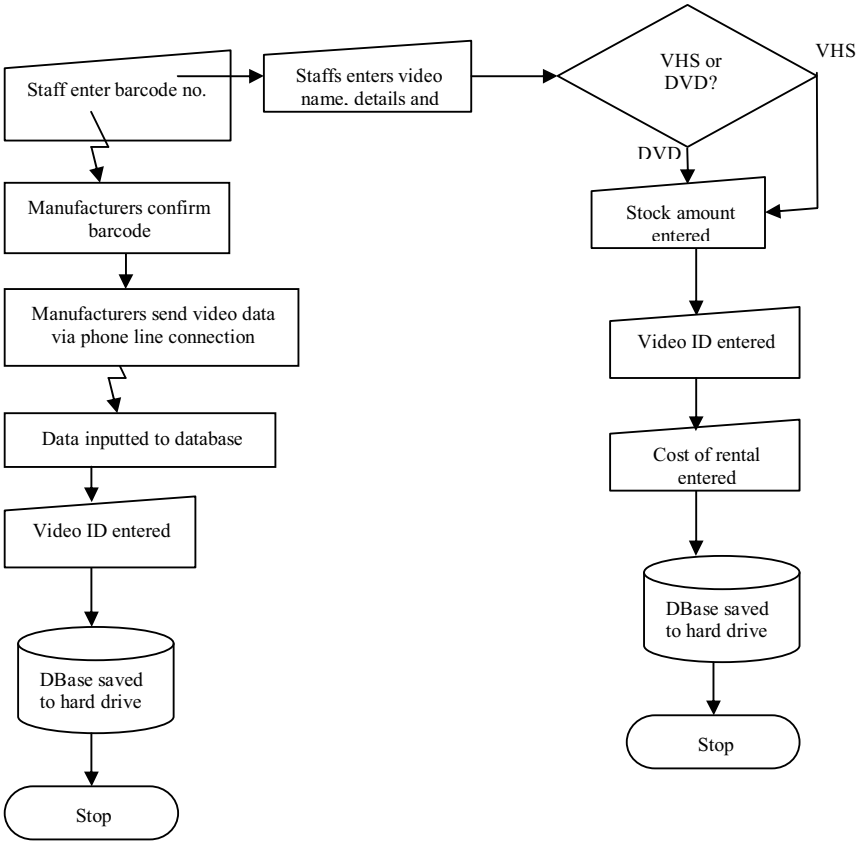
System Flowchart – Entering new members



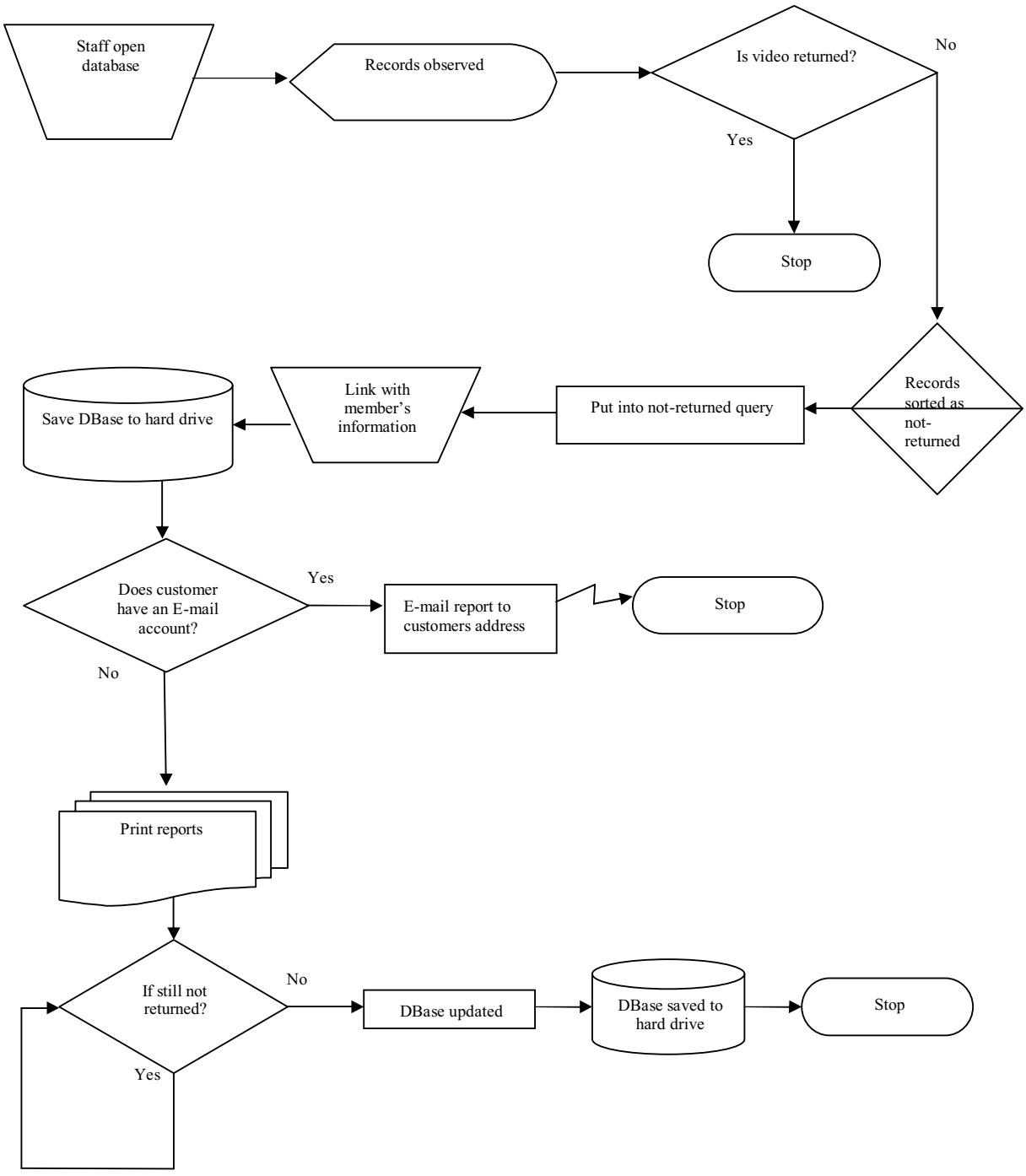
Renting a video



Entering new video's



Overdue Video's


Staff open database
Records observed
Is video returned?
No
Yes
Stop
Records sorted as not-returned
Put into not-returned query
Link with member's information
Save DBase to hard drive
Does customer have an E-mail account?
Yes
E-mail report to customers address
Stop
No
Print reports
If still not returned?
No
DBase updated
DBase saved to hard drive
Stop
Yes