

## Flows of Events

### Requirement 2a.

1. The clerk comes across a situation in which a new customer needs to be added to the system. (ie. Wants to rent a video, or simply wants to open an account, etc.)
2. The clerk inputs the customer's information into the system.
3. The clerk verifies that the information is correct.

### Requirement 3a.

1. Manager logs into the system.
2. Manager inputs information about a given title.
3. Manager verifies that the information is correct.

### Requirement 4a.

1. Manager logs into the system.
2. Manager selects the title of the Dvd to add.
3. Manager inputs number of copies to add to the system
4. Manager gets new id numbers for the new copies.
5. Manager verifies that the information on the physical copies matches that in the system. (ie, title information, id number)

### requirement 7a-c

1. Manager logs into the system
2. manager selects all, overdue, or outstanding customers.
3. System outputs appropriate information, which includes Name and basic information, total number of rentals out, and information on currently overdue rentals.

### Requirement 8a,b

1. Manager logs into the system
2. Manager selects title report
3. system outputs information, includes name and other basic information, number of copies currently rented, number of copies on hold, and number of copies currently in stock, and the total number of copies owned.

Use Case	Function being tested	Initial State	Input	Expected Output
Add Customer.	Customer is added to system.	Customer is not in the system.	Customer details.	Customer is now in the system.
Add Title.	Title is added to the system.	Title is not in the system, and manager is logged in.	Title details.	Title is now in the system.
Add Rentables.	Rentables are added to the system.	Rentable's Title is in the system, and manager is logged in.	Number of rentables.	System returns new id numbers for rentables.
Produce Customer Report.	All customers can be reported.	Manager logged in.	"all customers" is selected.	System reports on all customers.
Produce Customer Report.	Overdue customers can be reported.	Manager logged in.	"Overdue Customers" is selected.	System reports on all overdue customers.
Produce Customer Report.	Outstanding customers can be reported.	Manager logged in.	"Outstanding Customers" is selected.	System reports on all outstanding customers.
Produce Title Report.	Title report can be given.	Manager logged in.	"Title Report" is selected.	System reports on all titles.

Some of this is not new information, but is an electronic version of old stuff.

### CRC Cards

#### GUI Card:

##### *Responsibilities*

##### *Collaborators*

---

To accept input from the user  
To initiate use cases

Controller

#### Controller Card:

##### *Responsibilities*

##### *Collaborators*

---

To oversee use cases

Database  
Customer  
Title  
Rentable  
DVD  
Game  
Rental

#### Database Card:

##### *Responsibilities*

##### *Collaborators*

---

To store and manipulate  
information pertinent to the system

Customer  
Title  
Game  
DVD  
Rentable  
Rental

#### Customer Card:

##### *Responsibilities*

##### *Collaborators*

---

Keep track of rentals  
Keep track of customer information

Rental

#### Title Card:

##### *Responsibilities*

##### *Collaborators*

---

Keep track of information about  
a title (which is an abstraction of  
rentable)

Game  
DVD

#### Game Card:

##### *Responsibilities*

##### *Collaborators*

---

Keep track of information pertinent  
to Games  
Keep track of Rentables of its type  
Keep track of rental rate for all games

Rentable

#### DVD Card:

*Responsibilities*

*Collaborators*

---

Same as Game, but with information pertinent to DVD's  
Rentables Card:

*Responsibilities*

*Collaborators*

---

Keep track of its current rental

Rental

Keep track of its Title

Title

Keep track of its information

Keep track of who it's on hold for

Customer