**Concept Diagram**

Library

Employees

Members

Suppliers

Items

has

has

are/add/update

deliver

Add/update

has

place order

Checkout/Check in

**Data Flow Diagram**

Library

Library\_ID

Library\_Name Library\_Contact\_Number Library\_Address …...

Employees

Employee\_Staff\_ID

Employee\_Staff\_Library\_Member\_ID

Employee\_Staff\_Designation

Employee\_Staff\_SSN………….

Members

Library\_Member\_ID

Library\_Member\_Library\_ID

Library\_Member\_Parent\_ID

Library\_Member\_First\_Name

Library\_Member\_Last\_Name

Library\_Member\_DOB

Library\_Member\_Address………

Suppliers

Supplier\_ID

Supplier\_Name

Supplier\_Address

Supplier\_City

Supplier\_State

Supplier\_Zip\_code

Supplier\_Phone\_No

Supplier\_Payment\_Due….

Items

Item\_ID

Item\_Title

Item\_Library\_ID

Item\_Format

Item\_Status……………

Library\_ID

Library\_ID

Library\_Member\_ID, Library\_Member\_Dues

Item\_ID, Item\_Title, Item\_Author, Item\_Status, Item\_Year\_Published…..

Library\_ID

Item\_ID, Item\_Title, Item\_Author, Item\_Status, Item\_Year\_Published

Orders\_ID, Supplier\_ID…………

Item\_Title, Item\_Author, Item\_Year\_Published……….

**Workflow Diagram for a Library Item**

**Media Status = On Shelf**

**Has the item been renewed 2 times OR is the item on Hold?**

**Media Status = Checked Out**

21 Days

**Media Status = Due**

Renew

After 14 days

**Media Status = Bill Item**

$1 collection fee

**Media Status = Returned**

**Media Status = Damaged**

**Media Status = Lost**