***OOAD\_Homework\_04\_Group1***

***Q1***

**IDENTIFY CLASS :**

*RAW CLASS :*

User User book book library author email member membership

User User book book system admin email member membership

User User book book system admin email member membership

User User book book system admin email member visa card

User User book library system waiting list email member

User book book library system history records personal email member

***Q2***

**REFIND CLASS :**

*Remove duplicate :*

User admin membership

Book waiting list visa card

Library system history record

System email

author member

*After eliminating irelevant class :*

User admin

Book waiting list

Library system history record

system membership

author email

member

*Reviewing the redundant classes and building a common vocabulary :*

Library system, system => Library system

User admin history record

Book email membership

Library system member

author waiting list

*Combining some classes, or split them into some other classes :*

*(none)*

*Reviewing possible attributes.*

User member

Book

Library system

admin

email

*Analyzing Adjectives Classes :*

member inherit from User

***Q3***

**Identify Responsibilities**

Book :

RESPONSIBILITIES COLABORATION

Id

Title

author

insert book

remove book

search book

Library :

RESPONSIBILITIES COLABORATION

id

branch

address

borrow book

return book

remove user user

renew membership

User :

RESPONSIBILITIES COLABORATION

Id

Name

Gender

Email

Phone Number

Borrow book Library

Return book Library

Search book Book

view history record

Admin :

RESPONSIBILITIES COLABORATION

id

Name

Gender

Email

PhoneNumber

insert book Book

remove book Book

remove user User

Email :

RESPONSIBILITIES COLABORATION

Subject

Content

Recipient

Send email

member : (INHERIT FROM USER)

RESPONSIBILITIES COLABORATION

id User

Name User

Gender User

Email User

Phone Number User

Borrow book Book

Return book Book

Search book Book

View history record User

renew membership Library