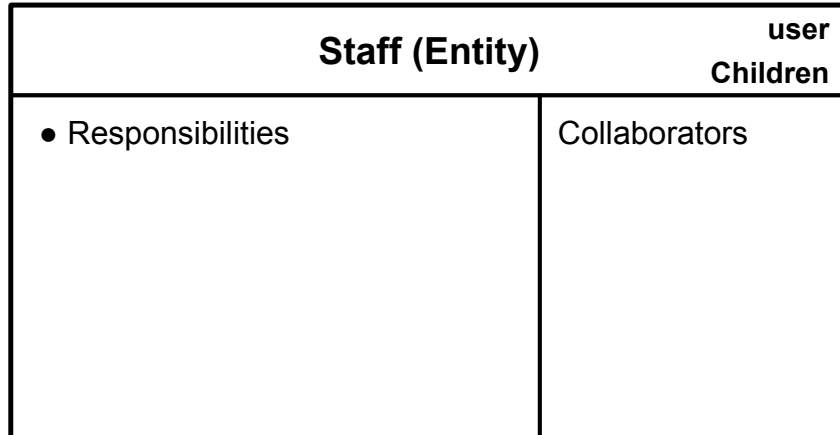
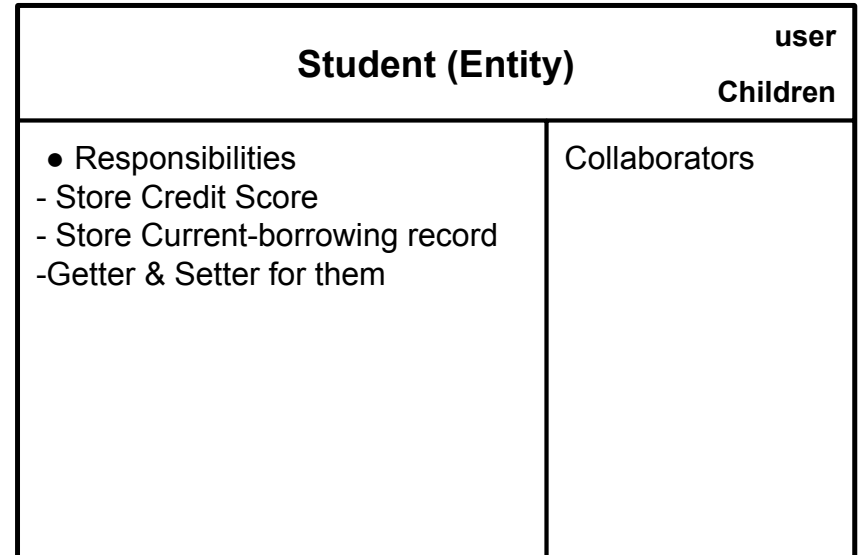
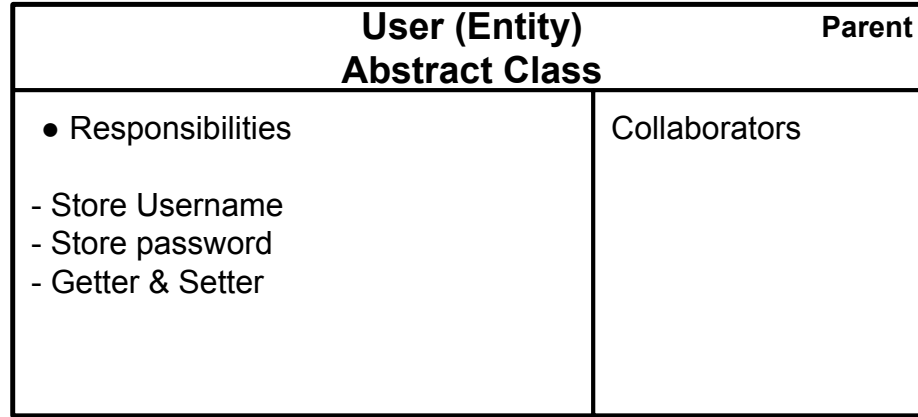


CRC model

- Team Magic conch shell
- Library Management System



Book (Entity)		Parent
<ul style="list-style-type: none"> ● Responsibilities <ul style="list-style-type: none"> - Store the name of the book - Store book ID - Store ISBN - Store publish date - Store the author/editor - Store Status: lent or not_lent - Store Return date 	Collaborators BookManager	

Magazine (Entity)		Book Children
<ul style="list-style-type: none"> ● Responsibilities <ul style="list-style-type: none"> - store the series name of the magazine - Store the category of the magazine 	Collaborators	

Dictionary (Entity)		Book Children
<ul style="list-style-type: none"> ● Responsibilities <ul style="list-style-type: none"> - store the language of the dictionary 	Collaborators	

Textbook (Entity)		Book Children
<ul style="list-style-type: none"> ● Responsibilities <ul style="list-style-type: none"> - Store the subject of the textbook 	Collaborators	

<div> <div>Research Paper (Entity)</div> <div>Book Children</div> </div>	
<ul style="list-style-type: none"> Responsibilities <ul style="list-style-type: none"> Store the Subject of the Article/Report Store the Peer-Reviewed Status Store the Language of the Article/Report 	Collaborators

<div> <div>Literature(Entity)</div> <div>Book Children</div> </div>	
<ul style="list-style-type: none"> Responsibilities <ul style="list-style-type: none"> Store the time period 	Collaborators

UserManager (Use Case)

- Responsibilities'

- Create new users (Staff / Students)
- Delete users
- Store all users (Staff / Student)
- Check & modify credit score
- Modify password
- Modify Current-borrowing record

Collaborators

User

BookManager (Use Case)

- Responsibilities

- Store all books
- Add books
- Delete books if they are damaged
- Search Book
- Check & Change Inventory
- Change Book status
- Check & Change Return Dates of Book

Collaborators

Book

BorrowBook (Controller)

- Responsibilities
 - Navigate between UserManager and BookManager
 - Search & check conditions of User & Book status for lending books using UserManager/BookManager
 - Use BookManager to take out books if the conditions of borrowing books are met.
 - Receive request of extending return deadlines and pass to UserManager if the condition of extending Return Date is met.

Collaborators

UserManager
BookManager

InventoryController (Controller)

- Responsibilities
 - Add new books using BookManager
 - Delete damaged books using BookManager

Collaborators

BookManager

ReturnBook (Controller)

- Responsibilities
 - Modify credit score of the user by UserManager as necessary
 - Use BookManager to return the book by changing book status and return dates.

Collaborators

BookManager
UserManager

LoginWindow (Controller)

- Responsibilities

- Create UserManager
- Store UserManager
- Receive request to create new User and pass to UserManager
- Allow user to declare user type when login in to the system.
- Receive login request and pass to UserManager
- Receive request of changing password and pass to UserManager
- Check whether username and password are matched

Collaborators

UserManager

Main (Controller)

- Responsibilities
 - Instantiate LoginWindow

Collaborators

LoginWindow