


National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Web Programming	Semester:	Fall 2023
	Program:	BS(Computer Science)	Course Code:	CS4032
	Duration:	1 Hour	Weight:	15 %
	Evaluation Type:	Mid 2 Exam	Section:	All
	Name:		Roll Number:	

Important Note:

- The quality of the code will affect the marks.
- Students will receive **ZERO** marks if the answers are plagiarized.
- Use of **mobile phones, internet, and, ANY type of smart devices** during the exam is strictly prohibited.
- This is an open **note** exam.
- Discussion with other students is not allowed.
- **Exchange of notes and stationery** with other students are not allowed.
- If any of the above rules is violated by the student. The invigilator has the right to file DC case against that student and the invigilator also has the right to take your exam away and ask you to leave the exam hall.



Question**(Marks 40)**

Develop a React component for a library management system that encompasses the following features for books:

1. Title
2. Genre
3. Cover Image
4. Borrowing History (array of persons)
5. Publication Date
6. Description
7. Status (Available or Not)
8. Price

Additionally, Person should include these attributes:

1. ID
2. Person Name
3. Bank Name
4. Bank Account
5. Status (Book returned or not)
6. Amount Settled
7. Funds requested

(You can create one object for person and book in your code to show the format of your array)

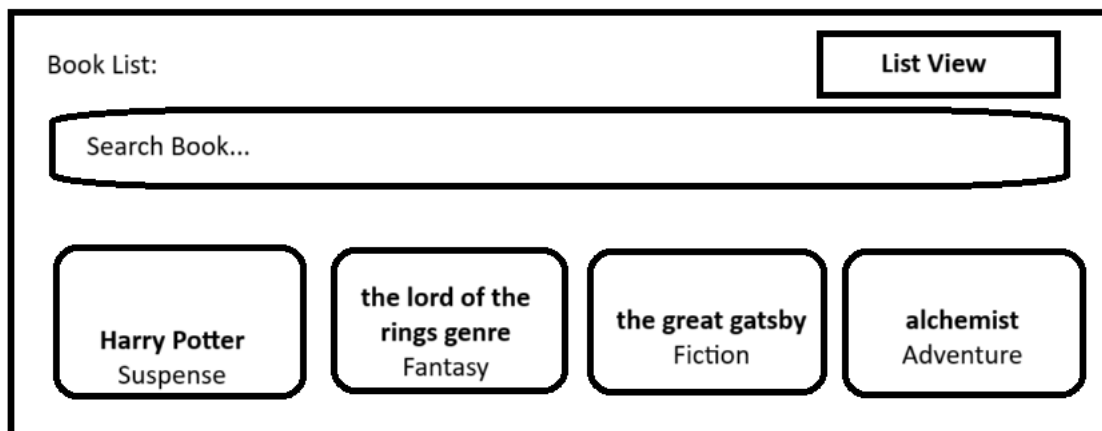


Fig 1

Create a page (Fig 1) with the following layout:

(10 marks)

1. Display books in a grid format, with each row containing a maximum of 4 books.
2. Implement a search bar for finding books by their names.
3. Include a button for switching to a list view.

Each book container in the grid should show the *book's name, genre, and a background image.*

(Ensure that the 4 book containers are displayed correctly on the web page.)

Now, when the user clicks on “list View” button. It should display the list of the books in the below shared image:

Book List:

Grid View

Search Book...

Book Name	Date of Publish	Description	Status
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Fig 2

(10 marks)

In list view (Fig 2), you can see the book name, date of publication, description, and status in a tabular format. Implement a search bar for finding books by their names. When the user clicks on “Grid View” button, it will display the content as shown in Fig 1.

Now, whenever the user clicks on any book, it should display the page below:

Borrowing History :

Search....

Select Filter: Bank Name

ID	Bank name	Amount Settled	Fund Requested	status
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Yes

Fig 3

Name: _____

Reg #: _____

Section: _____

(10 marks)

On this page we will display the persons that borrowed the book. Users can apply filters based on ID, Fund Requested, and Status using dropdowns. Users can also change the status of a person via a dropdown.

Create a Redux slice for books to facilitate state updates.

(10 marks)

Just create a **slice** for books and using **dispatch** update the state, whenever user change the 'status' property of person **(5+5)**

Name: _____

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