

LIBRARY MANAGEMENT SYSTEM

1. Create a Postgre database with the following tables. Define field types based on your understanding.

Borrower

- a. Id (PK)
- b. City

Book

- a. Id (PK)
 - b. BookName
 - c. Author
 - d. BorrowerId (It should be set as a foreign key to **Borrower** table)
 - e. BorrowerName
 - f. DateOfIssue
 - g. City
 - h. Genre
2. Create a .NET core MVC project using repository pattern
 3. Use Entity framework with PostgreSQL with Data first approach.
 4. Create a screen to show the list of records as shown in first screenshot
 5. Create Add/Edit form as shown in 2nd image
 - Add/Edit methods must be separate. Use partial view for Add and Edit forms.
 - If you are not going for nice to have features 1 & 2, use Dropdown control to populate existing **Borrower** and use its Id to save the **Book** record.
 - On click of Delete, record should get deleted from the database and record should get disappeared from the list on UI.

Nice To Have:

1. **City** field must be auto-suggest control. If user selects existing **Borrower**, then it should use its Id in the new/existing **Book** record while saving to database.
2. If user enters name that doesn't exist in the **Borrower** table, then on click of Save button, it should create a new **Borrower** record in the **Borrower** table and its Id should be used in the new/existing **Book** record in Add/edit form
3. Paging / Pagination
4. Use Validations on front-end

Note: Finish the task within the specified timeframe of 5 hours, from **1:30 PM to 6:30 PM**, and establish a new folder name **Assignment** within the same project repository in

GitHub. Ensure that the assignment is **committed before 7:00 PM**; Any changes made after **7:00 PM will not be accepted and will result in the negative marking**. Share the GitHub link with the coordinator once the assignment is completed within the designated time.

Feel free to make any decisions to implement this solution, you do not need to ask questions for clarification. If you can identify what is the best solution/answer, then you can go for it. For example, do I need to do the server-side validations? If you think yes then you should, if you do not think so then do not implement it. We do not want you asking unnecessary questions or less significant questions to coordinators.

Library Management System

Search

ADD BOOK

| Book ID | Book Name | Author | Borrower Name | Date of Issue | City | Genre | Action |
|---------|--|-----------------|---------------|--------------------------|-----------|------------------|-----------------------|
| 1 | Whispers in the Night | Sarah Blackwood | Brinn | 1981-10-06T18:30:00.000Z | Ahemdabad | Mystery | <div>EditDelete</div> |
| 2 | The Shadow of Suspicion | Alex Cross | Kenneth | 2024-02-06T18:30:00.000Z | Indore | Thriller | <div>EditDelete</div> |
| 3 | Deadly Echoes | Lisa Gardner | Kimmy | 1980-05-13T18:30:00.000Z | Jabalpur | Mystery | <div>EditDelete</div> |
| 4 | The Enchanted Forest | Guillard | Amity | 1992-04-14T18:30:00.000Z | Mumbai | Fantasy | <div>EditDelete</div> |
| 5 | Echoes of Eternity | Wrangle | Ken | 2002-06-11T18:30:00.000Z | Pune | Fantasy | <div>EditDelete</div> |
| 6 | Wanderlust: Chronicles of the Lost Realm | Lammenga | Hunter | 1990-01-18T18:30:00.000Z | Bangalore | Fantasy | <div>EditDelete</div> |
| 7 | Whispers of Love | Staterfield | Dot | 1983-12-27T18:30:00.000Z | Hyderabad | Romance | <div>EditDelete</div> |
| 8 | Beyond the Stars | Noni | Monika | 2021-07-14T18:30:00.000Z | Mumbai | Science Fiction | <div>EditDelete</div> |
| 9 | Echoes from the Future | Cammacke | Ganny | 1997-01-14T18:30:00.000Z | Mumbai | Science Fiction | <div>EditDelete</div> |
| 10 | Echoes of Revolution | Farnish | William | 1991-11-19T18:30:00.000Z | Bangalore | Historic Fiction | <div>EditDelete</div> |

Items per page: 10

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Search

ADD BOOK

| Book ID | Book Name | Author | Borrower Name | Date of Issue | City | Genre | Action |
|---------|--|--------------------|---------------|--------------------------|-----------|------------------|-----------------------|
| 1 | Whispers in the Night | Sarah Blackwood | | | Ahemdabad | Mystery | <div>EditDelete</div> |
| 2 | The Shadow of Suspicion | Alexander Dumas | | | Indore | Thriller | <div>EditDelete</div> |
| 3 | Deadly Echoes | Lisa Thompson | | | Jabalpur | Mystery | <div>EditDelete</div> |
| 4 | The Enchanted Forest | Gulliver's Travels | | | Mumbai | Fantasy | <div>EditDelete</div> |
| 5 | Echoes of Eternity | Walter Scott | | | Pune | Fantasy | <div>EditDelete</div> |
| 6 | Wanderlust: Chronicles of the Lost Realm | Laura J. Roberts | | | Bangalore | Fantasy | <div>EditDelete</div> |
| 7 | Whispers of Love | Statue of Liberty | | | Hyderabad | Romance | <div>EditDelete</div> |
| 8 | Beyond the Stars | Non-Fiction | | | Mumbai | Science Fiction | <div>EditDelete</div> |
| 9 | Echoes from the Future | Cartoon | | | Mumbai | Science Fiction | <div>EditDelete</div> |
| 10 | Echoes of Revolution | Farmhouse | William | 1991-11-19T18:30:00.000Z | Bangalore | Historic Fiction | <div>EditDelete</div> |

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Search

ADD BOOK

| Book ID | Book Name | Author | Borrower Name | Date of Issue | City | Genre | Action |
|---------|--|--------------------|---------------|--------------------------|-----------|------------------|-----------------------|
| 1 | Whispers in the Night | Sarah Blackwood | | | Ahemdabad | Mystery | <div>EditDelete</div> |
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