

# Submission Worksheet

CLICK TO GRADE

<https://learn.ethereallab.app/assignment/IT202-452-M2024/it202-api-project-milestone-3-2024-m24/grade/mrs43>

IT202-452-M2024 - [IT202] API Project Milestone 3 2024 m24

## Submissions:

Submission Selection

1 Submission [active] 8/3/2024 9:41:04 PM

## Instructions

^ COLLAPSE ^

Overview Video: <https://youtu.be/-4hlb9MXrQE>

1. Implement the Milestone 3 features from the project's proposal document:  
<https://docs.google.com/document/d/1XE96a8DQ52Vp49XACBDTNCq0xYDt3kF29cO88EWVwfo/view>
2. Make sure you add your ucid/date as code comments where code changes are done
3. All code changes should reach the Milestone3 branch
4. Create a pull request from Milestone3 to dev and keep it open until you get the output PDF from this assignment.
5. Gather the evidence of feature completion based on the below tasks.
6. Once finished, get the output PDF and copy/move it to your repository folder on your local machine.
7. Run the necessary git add, commit, and push steps to move it to GitHub
8. Complete the pull request that was opened earlier
9. Create and merge a pull request from dev to prod
10. Upload the same output PDF to Canvas

Branch name: Milestone3

Tasks: 21 Points: 10.00



API (1 pt.)

^ COLLAPSE ^

 ^COLLAPSE ^**Task #1 - Points: 1****Text: Data Related to Users****Checklist**

\*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	What's the concept/association?
<input checked="" type="checkbox"/> #2	1	What sort of relationship is it (one to many, many to one, many to many, etc)
<input type="checkbox"/> #3	1	Note any other considerations

**Response:**

The data being fetched/entered is book data. The users look through books, then add them to their library. It is a many to many relationship because the same book can be added to everyone's library, but everyone can add all books to their libraries.

 ^COLLAPSE ^**Task #2 - Points: 1****Text: Updating Entities****Checklist**

\*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	When an update occurs either manually or from the API how does it affect associated data?
<input checked="" type="checkbox"/> #2	1	Do users see the old data, new data, does data need to be reassociated, etc?

**Response:**

The book data is associated with the user using a table with both of their ids. If the book data is updated, then the tables with only the book data are updated. The id will not change, so the user will still be associated with the same book based on the id, but the data will be updated. The user will see the new data.

**Handle Data Association (1 pt.)** ^COLLAPSE ^ ^COLLAPSE ^**Task #1 - Points: 1****Text: Screenshots of the code****Details:**

Option 1: Related pages will have a button to do association (like favorites or similar),

Option 2: a separate page will be used to associate entities to a user by some other user (like assignment of entities)

Include uuid/date comments for each code screenshot

### #1) Show the related code



**Caption (required)** ✓

***Describe/highlight what's being shown***

### Screenshots from VSCode to show process of user adding book to library

**Explanation (required)** ✓

*Explain in concise steps how this logically works and mention which option your application handles regarding association*



My application uses the Option 1. The first screenshot is the code used to add a book to the user's library (associate the user\_id and book\_id in a table). The second screenshot is the code used to render the book\_card, which is used on other pages. This card has the information about the book as well as a button to add/remove the book from the user's library. The third screenshot is an example of how the book card is used on a page. This is a screenshot of the page with all books fetched or created. Each book is represented by a book card.

### Task #2 - Points: 1

**Text: Screenshot of the association table(s)**



#1) Show the table(s) you made to handle the associations (Should have some example data)



The screenshot shows a VS Code editor with a SQL query in a file named 'query'. The query is: `SELECT * FROM 'IT202-S24-Overbooks' LIMIT 100`. The results are displayed in a table with 5 columns: `id`, `user_id`, `book_id`, `created_timestamp`, and `modified_timestamp`. The table contains 3 rows of data.

id	user_id	book_id	created_timestamp	modified_timestamp
1	13	51	2024-08-03 21:19:29	2024-08-03 21:19:29
2	13	52	2024-08-03 21:19:29	2024-08-03 21:19:29
3	13	52	2024-08-04 01:14:29	2024-08-04 01:14:29

### Caption (required) ✓

Describe/highlight what's being shown

Screenshot of association table from VSCode

### Explanation (required) ✓

Describe each column/association table

#### PREVIEW RESPONSE

There are five columns: `id`, `user_id`, `book_id`, `created`, and `modified`. The `id` is the auto incrementing id of the relationship, so each new association is one greater. The `user_id` is the id of the user from the `Users` table. The `book_id` is the id of the book data from the `IT202-S24-BOOKS` table. This row basically says user 13 and book 51 have a relationship, so if you have one id, you can reference this table to reference the other id. The `created` column is when the relationship was created and the `modified` column is when it was modified.

^COLLAPSE ^

Task #3 - Points: 1

Text: Add related links

### Checklist

\*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	Include the heroku prod link for the page that creates the association
<input checked="" type="checkbox"/> #2	1	Add the pull request link for the branch related to this feature Note: the link should end with /pull/#. Same pull request shouldn't be used for each feature

URL #1

<https://mrs43->

URL

<https://mrs43-prod-5f0e0e79560e.herokuapp.com>



prod-5f0e0e79560e.herokuapp.com/project/books.php

URL #2

[https://mrs43-prod-5f0e0e79560e.herokuapp.com/project/new\\_books.php](https://mrs43-prod-5f0e0e79560e.herokuapp.com/project/new_books.php)

URL #3

<https://github.com/m-sansone/mrs43-IT202-452/pull/88>

URL #4

<https://github.com/m-sansone/mrs43-IT202-452/files>

URL #5

<https://github.com/m-sansone/mrs43-IT202-452/pull/99>

URL #6

<https://github.com/m-sansone/mrs43-IT202-452/pull/103>

URL

<https://mrs43-prod-5f0e0e79560e.herokuapp.com>



URL

<https://github.com/m-sansone/mrs43-IT202-452>



URL

<https://github.com/m-sansone/mrs43-IT202-452>



URL

<https://github.com/m-sansone/mrs43-IT202-452>



URL

<https://github.com/m-sansone/mrs43-IT202-452>



+ ADD ANOTHER URL



Current User's Association Page (2 pts.)

^COLLAPSE ^



EXPAND

Task #1 - Points: 1

Text: Screenshots of this page



EXPAND

Task #2 - Points: 1

Text: Screenshot the code



EXPAND

Task #3 - Points: 1

Text: Add related links



All Users Association Page (likely an admin page) (2 pts.)

^COLLAPSE ^



EXPAND

Task #1 - Points: 1

Text: Screenshots of this page



EXPAND

Task #2 - Points: 1

Text: Screenshot the code

EXPAND

Task #3 - Points: 1

Text: Add related links

Unassociated Page (2 pts.)

COLLAPSE

Task #1 - Points: 1

Text: Screenshots of this page

**Details:**

Make sure the heroku dev url is visible in the address bar

Some screenshots may be repeated in subtasks, but ensure they highlight the specific subtask requirement.

#1) Show the summary of



**Caption (required)** ✓  
*Describe/highlight what's being shown*  
Screenshot of non-associated books with summaries

#2) Show the single view



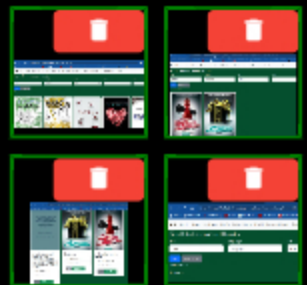
**Caption (required)** ✓  
*Describe/highlight what's being shown*  
The view button to the page with book details is on each book card

#3) Show variations of the number



**Caption (required)** ✓  
*Describe/highlight what's being shown*  
Filtering items changes number of books on page

#4) Show variations of the



**Caption (required)** ✓  
*Describe/highlight what's being shown*  
Varied results using filters and sort/order



COLLAPSE

Task #2 - Points: 1

Text: Screenshot the code

**Details:**

Include uuid/date comments for each code screenshot

#1) Show the code related to fetching all unassociated entities (including the query)

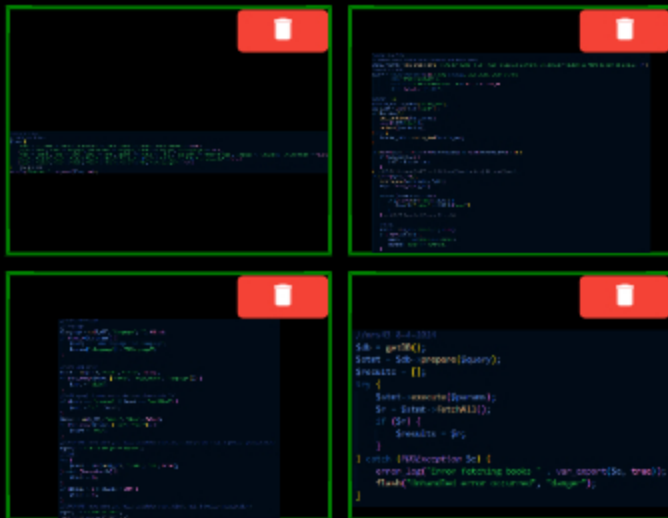


#2) Show the code related to the display of the results





unassociated entries (including the query)



### Caption (required) ✓

Describe/highlight what's being shown

Code used to get all books not associated with users

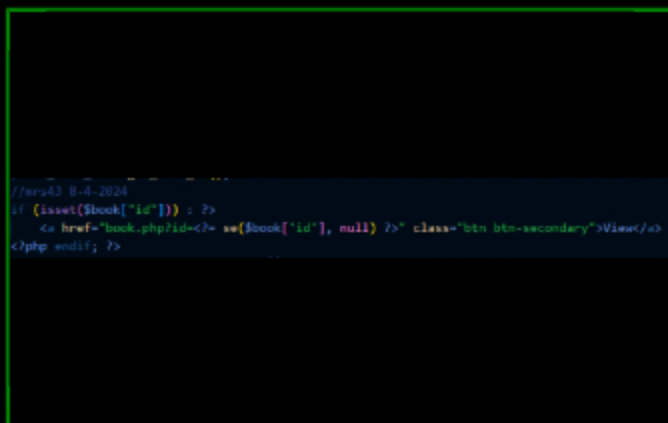
### Explanation (required) ✓

Explain in concise steps how this logically works and mention how you determine the result list (include the unassociated logic and filters)

#### PREVIEW RESPONSE

A form is setup with input fields for filtering. A query is created to select books that are not associated with users in IT202-S24-UserBooks. The parameters are adjusted according to the filters provided by the user in the input fields. This includes the username, title and language filter fields, the sort and order fields, and limit field. The query is then executed and the results are fetched and stored.

#3) Each record should have a button/link for single view



and results



### Caption (required) ✓

Describe/highlight what's being shown

Code used to display the summary of books not associated with users

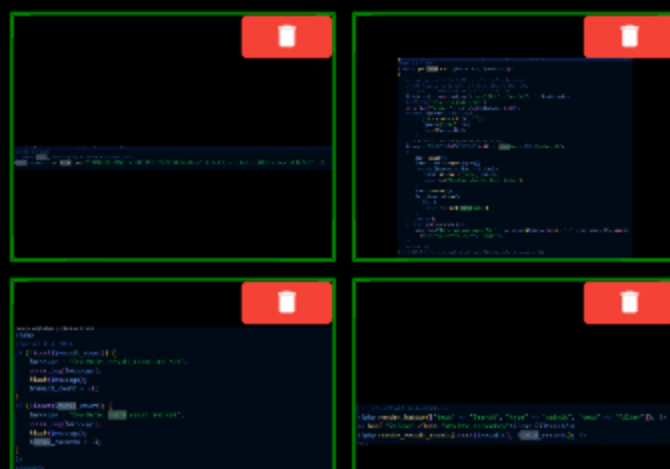
### Explanation (required) ✓

Explain in concise steps how this logically works

#### PREVIEW RESPONSE

Each book fetched is displayed in a book card, which displays basic information about the book. This includes the cover, title, page count, language, user count, and usernames associated with the book. The usernames can be clicked to view the user's public profile. There are also buttons to view the book details and remove the book from all libraries. If there are no results, an appropriate message is displayed.

#4) Show the logic related to the count of all unassociated items (even the ones not shown in the filtered results)



### Caption (required) ✓

Describe/highlight what's being shown

Code for button to display book details

### Explanation (required) ✓

Explain in concise steps how this logically works

 PREVIEW RESPONSE

A hyperlink is created to the page that shows book details with the appropriate book id. The book id is retrieved using a dynamic safer echo call. The hyperlink is displayed as a button using Bootstrap. The button has the text "View" displayed.

### Caption (required) ✓

Describe/highlight what's being shown

Code used to find total count of books not associated with users

### Explanation (required) ✓

Explain in concise steps how this logically works

 PREVIEW RESPONSE

The code creates a query to get the total count of books not associated with users using IT202-S24-UserBooks. This is then passed to get\_total\_count, which sanitizes the data and builds a query that retrieves the number of rows with unique books. The query is then executed and the result is fetched while handling errors.

#5) Show the logic related to the count of the items on the page (this value should change based on the filter applied)



```
function getBooks() {
    let books = [];
    // ... (code to fetch books) ...
    return books;
}

function getFilteredBooks(filter) {
    let books = getBooks();
    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

```
function getBooks() {
    let books = [];
    // ... (code to fetch books) ...
    return books;
}

function getFilteredBooks(filter) {
    let books = getBooks();
    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

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    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
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function getBookCount(filter) {
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    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

```
function getBooks() {
    let books = [];
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}

function getFilteredBooks(filter) {
    let books = getBooks();
    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

### Caption (required) ✓

Describe/highlight what's being shown

Code to get number of associated books after filters are applied

#6) Show the logic related to filter/sort (should include a partial match for username) (limit should be constrained)



```
function getBooks() {
    let books = [];
    // ... (code to fetch books) ...
    return books;
}

function getFilteredBooks(filter) {
    let books = getBooks();
    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

```
function getBooks() {
    let books = [];
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    let books = getBooks();
    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

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function getBooks() {
    let books = [];
    // ... (code to fetch books) ...
    return books;
}

function getFilteredBooks(filter) {
    let books = getBooks();
    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

```
function getBooks() {
    let books = [];
    // ... (code to fetch books) ...
    return books;
}

function getFilteredBooks(filter) {
    let books = getBooks();
    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

```
function getBooks() {
    let books = [];
    // ... (code to fetch books) ...
    return books;
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function getFilteredBooks(filter) {
    let books = getBooks();
    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

```
function getBooks() {
    let books = [];
    // ... (code to fetch books) ...
    return books;
}

function getFilteredBooks(filter) {
    let books = getBooks();
    if (filter === 'all') {
        return books;
    } else {
        return books.filter(book => book.category === filter);
    }
}

function getBookCount(filter) {
    let books = getFilteredBooks(filter);
    return books.length;
}
```

### Caption (required) ✓

Describe/highlight what's being shown

Code used to filter books that are not associated with users



Explanation (required) ✓

Explain in concise steps how this logically works

PREVIEW RESPONSE

A query is prepared with all of the filters to be used on IT202-S24-UserBooks stored as parameters. The query is executed, then the results are counted, while errors are handled.

Explanation (required) ✓

Explain in concise steps how this logically works

PREVIEW RESPONSE

A form is created for the user to input the filters they want to apply to the nonassociated books. An SQL query is built to retrieve the unique books that are not associated with users. The filters the user input are then stored as parameters. The query is executed and the results are stored, while errors are handled.

COLLAPSE

Task #3 - Points: 1

Text: Add related links

#### Checklist

\*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	Include the heroku prod link for the page that creates the association
<input type="checkbox"/> #2	1	Add the pull request link for the branch related to this feature Note: the link should end with /pull/#. Same pull request shouldn't be used for each feature

URL #1

[https://mrs43-prod-5f0e0e79560e.herokuapp.com/project/new\\_books.php](https://mrs43-prod-5f0e0e79560e.herokuapp.com/project/new_books.php)

URL

<https://mrs43-prod-5f0e0e79560e.herokuapp.com>



URL #2

<https://github.com/m-sansone/mrs43-IT202-452/pull/92>

URL

<https://github.com/m-sansone/mrs43-IT202-452>



URL #3

<https://github.com/m-sansone/mrs43-IT202-452/pull/93>

URL

<https://github.com/m-sansone/mrs43-IT202-452>



URL #4

<https://github.com/m-sansone/mrs43-IT202-452/pull/99>

URL

<https://github.com/m-sansone/mrs43-IT202-452>



URL #5

<https://github.com/m-sansone/mrs43-IT202-452/pull/103>

URL

<https://github.com/m-sansone/mrs43-IT202-452>



+ ADD ANOTHER URL

COLLAPSE

Admin Association Management (like UserRoles) (1 pt.)

EXPAND

Task #1 - Points: 1

Text: Screenshots of the page

EXPAND

Task #2 - Points: 1  
Text: Screenshots of the code

EXPAND

Task #3 - Points: 1  
Text: Add related links

COLLAPSE

Misc (1 pt.)

COLLAPSE

Task #1 - Points: 1  
Text: Screenshot of your project board from GitHub (tasks should be in the proper column)

Task Screenshots:

Gallery Style: Large View

Small

Medium

Large

m-sansone / Projects / My IT202 2024 Project

My IT202 2024 Project

View 1 + New view

Filter by keyword or by field

**Todo** 0  
This item hasn't been started

**In Progress** 0  
This is actively being worked on

**Done** 22  
This has been completed

- ms43-IT202-452 #81  
MS3 - API Data Association
- ms43-IT202-452 #83  
MS3 - Logged in user's associated entities page
- ms43-IT202-452 #84  
MS3 - All Users association page
- ms43-IT202-452 #86  
MS3 - Admin can associate any entity with any users

+ Add item

Screenshot of project board on GitHub

COLLAPSE

Task #2 - Points: 1  
Text: Provide a direct link to the project board on GitHub

URL #1

<https://github.com/users/m-sansone/projects/2/views/1>

URL

<https://github.com/users/m-sansone/projects/2>

+ ADD ANOTHER URL



^COLLAPSE ^

Task #3 - Points: 1

Text: Talk about any issues or learnings during this assignment

Response:


I ran into a variety of issues ranging from small typos that were difficult to find but easy to fix, to taking longer to work on the project because I was sick. I also kept having problems with everything related to my API, so I have learned a lot about APIs due to spending hours trying to solve my errors. The most important thing I learned with this assignment was how to utilize git and GitHub effectively, which I plan to do from the beginning for my future projects.



^COLLAPSE ^

Task #4 - Points: 1

Text: WakaTime Screenshot

 Details:

Grab a snippet showing the approximate time involved that clearly shows your repository. The duration isn't considered for grading, but there should be some time involved

Task Screenshots:

Gallery Style: Large View

Small

Medium

Large

Screenshot of WakaTime from VSCode

The number in VSCode seemed very low, so I found the total time on WakaTime's website

End of Assignment