



# Final project – Note Taking App



# Objective

- Make the 'Notion' like Note Taking App
- You need to implement Basic functions and Additional functions
- Must be implemented with Next.js backed with Sqlite
- Demonstrate your App with presentation video

# Restriction

- You can use following modules only
  - Full-stack framework (Frontend + Backend) : Next.js
  - DB : SQLite (For ease of evaluation)
- You can freely add 3rd-party library for additional functionalities. (e.g. MDX, UI library, and etc...)
- You can use typescript if you want.

# Submission Deadline

- Due date
  - 11/26 18:00 ~ 12/18 23:59
- Late submission penalty
  - One day late penalty : 33%
  - Two days late penalty : 66%
  - Three or more days : You cannot get any points
- We will not accept any excuses.
  - I uploaded the file at 23:57 but the servers ~~~
  - I wrote the code but compression failed ~~~

# What to Submit

- You need submit following things
  - Your presentation video
  - Your whole code (project folder)
  - README file
- Name of the video file should be '2020123123\_김돌돌\_presentation'.  
Any video format is fine (please use standard ones like mp4)
- Do not include "node\_modules" as like previous homework
- Do not include DB(dev.db) and migration folder as like HW3
- Name of the project folder should be '2020123123\_김돌돌'.

# What to Submit

- README file instructs how to run your code
- Example Structure
  - 2020123123\_김돌돌.zip
    - README
    - 2020123123\_김돌돌\_presentation.mp4
    - 2020123123\_김돌돌
      - Your project files...
      - Your codes...

# Score Policy

- Total : 180 pts
  - Basic Functions : 40 pts
  - Additional Functions : 60 pts
  - Design : 20 pts
  - Presentation : 60 pts

# Presentation video

- You need to present following 2 parts 'in order'
  - Basic Functions
  - Additional Functions
- Presentation video cannot exceed 30 minutes
- Be aware that you cannot get any score without presentation video
- Score guideline
  - 60 pts : Fully demonstrated
  - 30 pts : Not properly demonstrated
  - 0 pts : Total mess



# Presentation order

- Introduction
  - How to run your code
- Basic functions section
  - Login / Register
  - Add New Note
  - Modify Note
  - Delete Note
- Additional Functions section
  - Specify what additional functions you implemented
  - Each addition functions ...

# Presentation – Functions

- In introduction, you need to present each functions (Basic and Addition)
- Each function should be presented with following things
  - Explanation of the code design while showing your code (NOT whole code, just essential part)
  - Demonstration specifed by guideline of each function
  - Changing of the DB table while doing backend interation  
(If you do not present this DB thing, you can get 0 scores for whole project)

# Design

- Design similar to Notion gets full score (We do not want to access your aesthetic sense)
- If you are creative enough, you can make your own design. If it's beautiful, you'll get full scores.
- Score guideline
  - 20 pts : Seems like Notion
  - 15 pts : Not beautiful, but acceptable
  - 0 pts : Total mess
- We expect almost everyone gets around 10~15 pts

# Basic Functions

- Core functions of Note taking App
- All students need to implement Basic Functions
- If you do not implement Basic Functions, you can not get points for Additional functions
- Basic Functions are
  - Login / Register
  - Add New Note
  - Modify Note
  - Delete Note

# Basic Function – Login / Register

- Simple Login / Register page
- You also need button to register new user
- Simple login form is like right one is fine
- Please do not make messy stuff
- **Demonstrate**
  - Register 2 new users and login to one account

## Note App

## Basic Function – Add New Note

- Make button for adding new note
- Same requirement as HW3. No need to improve
- **Demonstrate**
  - Click Add button and write anything on the note
  - Make another note and write anything on the note

## Basic Function – Modify Note

- Functionality to modify already existing note
- Same requirement as HW3. No need to improve
- **Demonstrate**
  - Click on the any note already made, and modify the title and contents of it

## Basic Function – Delete Note

- Functionality to delete the note
- You can follow the Notion's design, but it's not mandatory. Anything which is not messy is fine.
- **Demonstrate**
  - Delete the existing note



# Additional Functions

- You need to implement Additional Functionality to get full score
- You implement 6 Additional Functionality.  
If you Implement more than 6, you need to tell which Additional Functionalities to be accessed  
(Pick 6 functions to be accessed)
- You should mention Additional Functions you implemented at the start of this section in the presentation
- Total Score for Additional Functionality cannot exceed 60

# Additional Functions

- Additional Functionality are
  - Text Formatting
  - Search
  - Profile image
  - Comment
  - Favorite and Pin
  - Theme / Font change
  - Music Embed
  - Share
  - Note Directory
  - Table of Contents

# Additional Function – Text Formatting

- Format the note like Notion
- Use markdown extension MDX
- Check this Page
- You need to stylise following things
  - Headings
  - Paragraph
  - Bullet list
  - Table
  - Bold
- **Demonstrate**
  - Write down the sample text written at the next page (Edit mode)
  - Change to View mode and check the result

# Additional Function – Text Formatting

User name	Page  # contents  Somethings..	Edit
Search		
Page1		
Page2		
Page3		

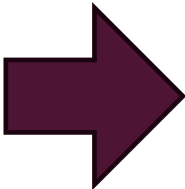
User name	<b>Page</b>  <b>contents</b>  Somethings..	View
Search		
Page1		
Page2		
Page3		

# Additional Function – Text Formatting

```
# H1
## H2-2
This is sample text.<br/>
Please replace it with your own content.
```

```
## H2-3
- Task 1
- Task 2
- Task 3
```

```
| Column 1 | Column 2 | Column 3 |
|-----|-----|-----|
| Row 1   | Data 1   | Data 2   |
| Row 2   | Data 3   | Data 4   |
```



H1

H2-2

This is **sample text**.  
Please replace it with your own content.

H2-3

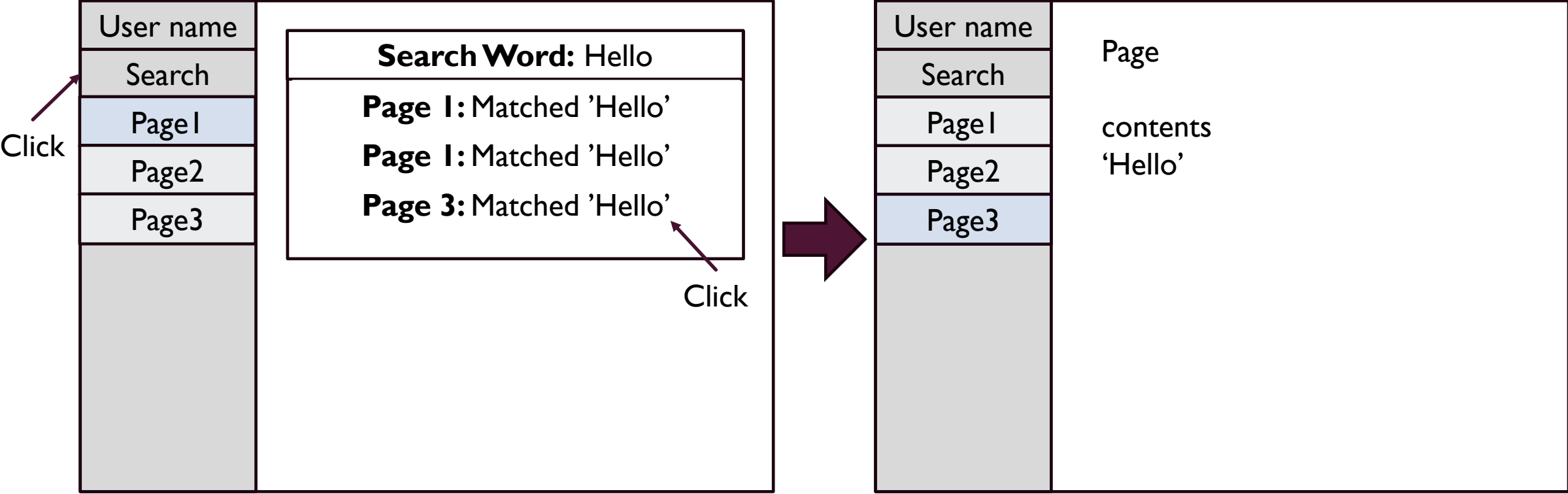
- Task 1
- Task 2
- Task 3

Column 1	Column 2	Column 3
Row 1	Data 1	Data 2
Row 2	Data 3	Data 4

## Additional Function – Search

- Make functionality for searching text in entire notes.
- Make Search button
- After clicking search result, page navigate to the page that contains search keyword
- **Demonstrate**
  - Click search button and search some text
  - Show your app jumps to the page and highlight the text

# Additional Function – Search




## Additional Function – Profile Image

- Make a functionality for changing a profile image.
- When the user clicks his/her name, navigate to the page where user can change(upload) profile image
- If the user uploads an image and clicks a change button, his/her profile image must be changed
- You can save image in DB with blob format or save on file system
- **Demonstrate**
  - Upload any image and change the user's profile image

<input type="radio"/> User name	<div>User name</div> <div>Upload</div> <div>Change</div>
Search	
Page1	
Page2	
Page3	



# Additional Function – Profile Image

	User name
Search	
Page1	
Page2	
Page3	

User name

Upload

Change

# Additional Function – Comment

- Make a functionality for commenting
- Make a sidebar for comments
- When the user clicks the comment button, the sidebar shows up and provides text area for the comment.
- If some comments already exists, the sidebar automatically unfolded when page is loaded.
- When the user leaves a comment, the comment is listed on the sidebar with the time.
- **Demonstrate**
  - Make a comment and show that the comment is created
  - Delete the comment and show that the comment is deleted

User name	Page contents	Comments
Search		Comment1 11/25 13:23
Page1		Comment2 11/23 1:43
Page2		
Page3		
		Type Sth Submit


## Additional Function – Favorite and Pin

- Make a favorite toggle button
- If the page is chosen by a “favorite page”, the page must be pinned on the upper parts of the page list.
- Show blank star when hovered
- Several pages can be favorite pages.
- **Demonstrate**
  - Make any two pages to favorite pages and show that they are pinned

User name	Page contents
Search	
★ Page3	
Page1	
☆ Page2	
When hovered	

# Additional Function – Theme and Fonts change

- Make a functionality for changing theme and fonts
- Make a setting button
- In the setting, the user can change the app's theme to light mode or dark mode
- Fonts can be changed to 3 types.  
(Pick any font you want)
- Style change should last permanently
- **Demonstrate**
  - Enter to the appearance tab and change the app's theme to dark mode.
  - Change the font type to the other. (Anythings are OK)

User name	Page  contents	
Search		
Page1		
Page2		
Page3		

# Additional Function – Theme and Fonts change

Settings	Theme ▼ Dark
Theme	
Fonts	

Settings	Fonts  Font A  Font B  Font C
Theme	
Fonts	





# Additional Function – Music Embed

- Make a music button
- If the user clicks a music button, the app shows sidebar which provides music upload button and music control pad
- You can save music on the server whatever way you want(DB or file system) but we recommend you to save it on the file system
- You can use 3<sup>rd</sup>-party library for rendering music control pad
- Make API points for uploading music file
- There must be 2 buttons.
  - Play and pause button
  - Reset button (Stop music and play from start)
- **Demonstrate**
  - Upload 2 musics
  - Play and pause music

User name	Page contents	Music
Search		
Page1		
Page2		
Page3		

# Additional Function – Music Embed

- Make a music button
- If the user clicks a music button, the app shows sidebar which provides music upload button and music control pad
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- You can use 3<sup>rd</sup>-party library for rendering music control pad
- Make API points for uploading music file
- There must be 2 buttons.
  - Play and pause button
  - Reset button (Stop music and play from start)
- **Demonstrate**
  - Upload 2 musics
  - Play and pause music

User name	Page contents	Upload
Search		
Page1		Music 1
Page2		 
Page3		Music 2
		 

## Additional Function – Share

- Make a functionality for sharing some pages with other users.
- Make share button
- You need not to implement real-time multi-access to a page.
- The user enters username to share the page.
- **Demonstrate**
  - Login to any user
  - Share any page to other user
  - Logout and log in to the user
  - Show that the page is shared

User name	Page contents	Share
Search		
Page1		
Page2		
Page3		



# Additional Function – Share

User1	Page1  Some contents for Shared page	Share
Search		
Page1		
Page2		
Page3		

User2	Page1  Some contents for Shared page	Share
Search		
Page1		
Page4		
Page5		

# Additional Function – Note directory

- Make a functionality for creating a note directory
- Make add folder button
- Make add file button in the folder list
- **Demonstrate**
  - Make a new folder
  - Make a new note to the folder

User name		Page  contents
Search		
Folder 1	+	
	Page 1	
	Page 2	
Page 3		
Add file		

# Additional Function – Table of Contents

- Make a functionality for Table of Contents
- Make a Table of Contents button
- The ToC should be located at the sidebar
- This is highly dependent with Text Formatting functionality(MDX).
- **Demonstrate**
  - Clicks the Table of Contents button
  - Show the ToC

User name	<b>Title</b>  <b>Something</b> <b>Cons</b> text <b>Pros</b> hi	ToC
Search		Title
Page1		• Something
Page2		• Cons
Page3		• Pros


# Prisma Studio

- Type 'npx prisma studio'
- Go To 'localhost:5555'
- You can view the current DB status


	Todo ×	+				⚙️
↻	Filters	None	Fields	All	Showing 3 of 3	Add record
<input type="checkbox"/>	id #	title A	content A	done <input type="checkbox"/>	dueDate <input type="checkbox"/>	
<input type="checkbox"/>	33	R.I.P.	Quincy Jones	false	2024-11-03T00:	
<input type="checkbox"/>	34	Wash Dishes	DO IT RIGHT NOW	false	2024-11-05T10:	
<input type="checkbox"/>	35	PPT	Too Long	true	2024-11-05T03:	

# How to view your DB file


- Install SQLite Viewer in VS Code



## SQLite Viewer v0.3.13

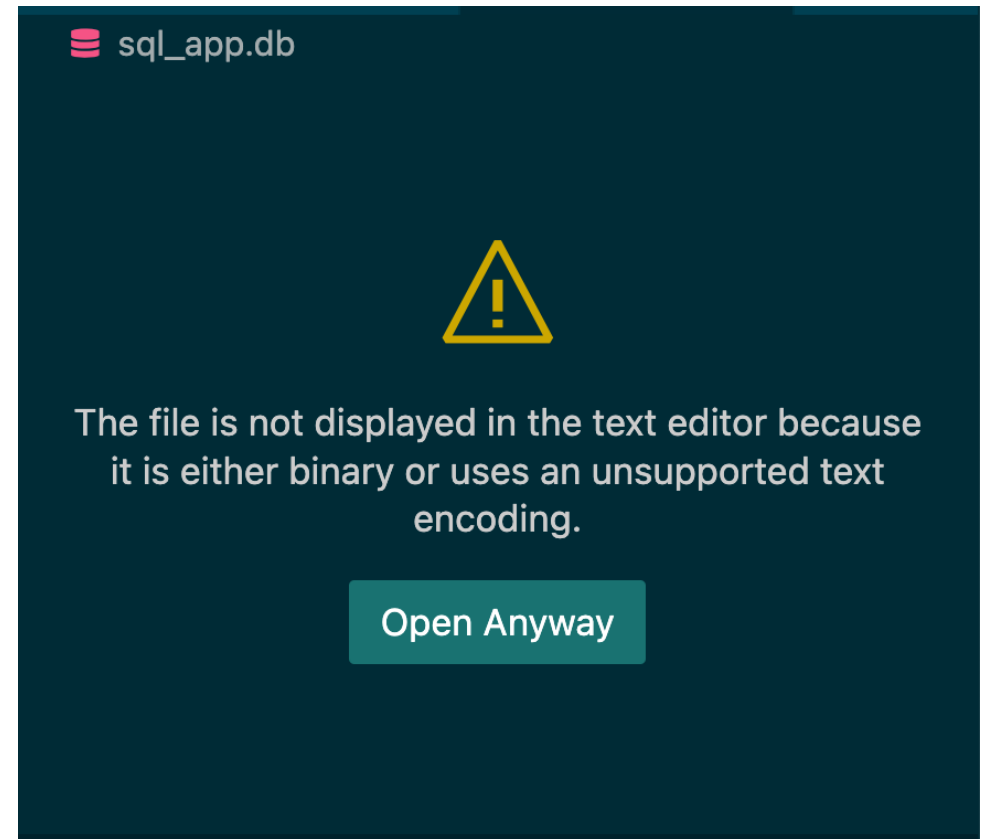
Florian Klampfer  [qwtel.com](https://qwtel.com) |  720,023 |  (42)

SQLite Viewer for VSCode

[Install](#) 

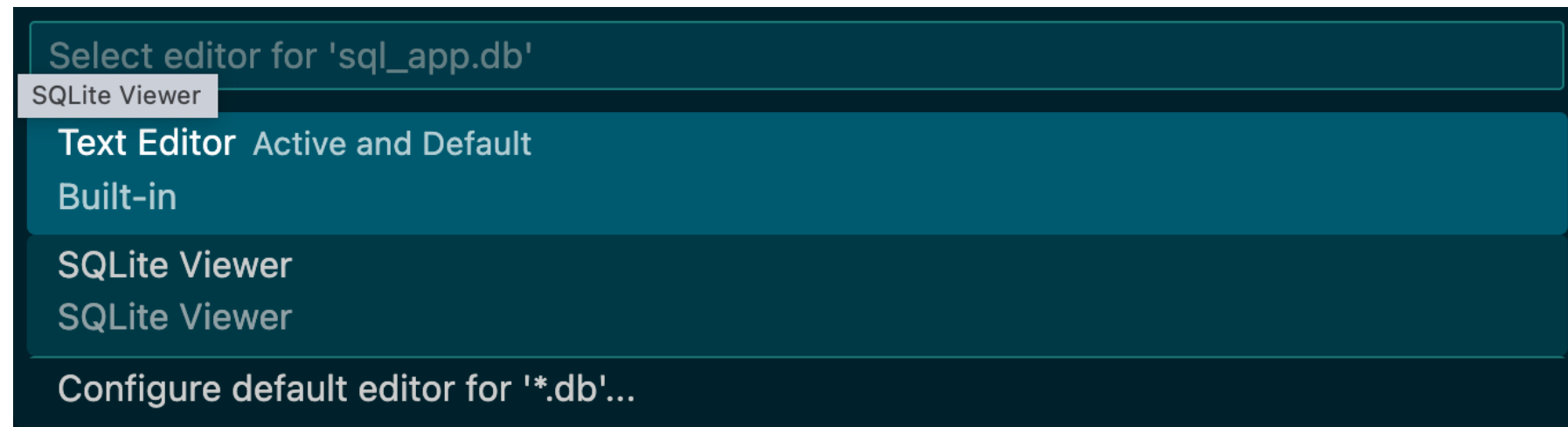
# How to view your DB file

- Click the sql\_app.db (or any other sqlite db file)
- Click open anyway



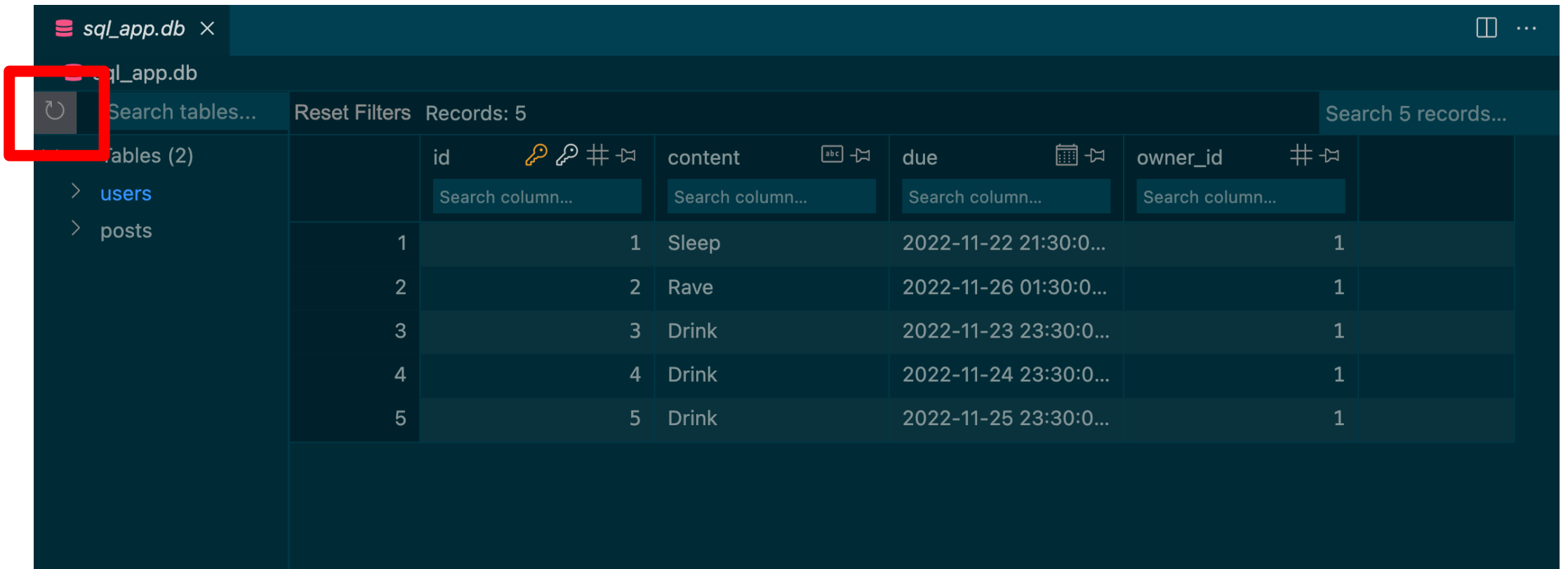
# How to view your DB file

- Click SQLite Viewer



# How to view your DB file

- You can see the DB
- To reload the new data, click update button



sql\_app.db ×

sql\_app.db

Search tables... Reset Filters Records: 5 Search 5 records...

	id	content	due	owner_id
1	1	Sleep	2022-11-22 21:30:0...	1
2	2	Rave	2022-11-26 01:30:0...	1
3	3	Drink	2022-11-23 23:30:0...	1
4	4	Drink	2022-11-24 23:30:0...	1
5	5	Drink	2022-11-25 23:30:0...	1