using dataview in obsidian

Mastering Dataview in Obsidian: Unlock the Power of Your Notes

using dataview in obsidian is a transformative skill for anyone looking to leverage their knowledge management system to its fullest potential. This powerful plugin allows you to query your notes, extracting specific information and displaying it in dynamic, organized tables, lists, and even task lists. By treating your Obsidian vault as a structured database, Dataview moves beyond simple note-taking to enable sophisticated data analysis and personalized dashboards. This article will guide you through the fundamental concepts of Dataview, from initial setup and basic querying to advanced techniques for managing projects, tracking habits, and building custom workflows. We will explore how to define metadata, write DQL queries, and visualize your data in meaningful ways, empowering you to gain deeper insights and automate routine tasks within your Obsidian environment.

Table of Contents

Understanding Dataview Basics in Obsidian

Dataview fundamentally changes how you interact with your Obsidian vault by enabling you to treat your notes as structured data. Instead of passively reading through individual notes, you can actively query them to pull out relevant information. This capability is crucial for building dynamic knowledge systems where connections and patterns emerge from the data you’ve already captured. The plugin works by indexing the content and metadata of your notes, allowing you to write specific queries that retrieve and display this information in various formats.

The primary advantage of using Dataview lies in its ability to automate the creation of summaries, dashboards, and reports. Imagine needing to see all notes tagged with "project" and containing a specific status, or wanting a list of all books you've read in the last year with their author and rating. Dataview makes these scenarios not just possible, but straightforward to implement. This shifts your focus from manual data aggregation to strategic analysis and efficient information retrieval, making your Obsidian vault a truly dynamic and intelligent tool.

Setting Up Dataview in Your Obsidian Vault

Before you can harness the power of Dataview, it needs to be installed and enabled within your Obsidian vault. The process is straightforward and mirrors the installation of most other Obsidian community plugins. First, you'll need to navigate to the community plugins section within Obsidian's settings.

To install Dataview:

- Open Obsidian and go to **Settings** (the gear icon, usually in the bottom-left corner).
- Click on **Community plugins** in the left-hand sidebar.
- Ensure **Restricted mode** is turned off. If it's on, you'll need to disable it to install community plugins.
- Click the **Browse** button.
- In the search bar, type "Dataview" and select the plugin from the search results.
- Click the **Install** button.
- Once installed, click the **Enable** button.

After enabling Dataview, you don't typically need to configure anything initially. The plugin will start indexing your vault automatically. You can then begin creating Dataview queries in any note using a special code block.

Core Concepts: Fields and Metadata for Dataview

The effectiveness of Dataview hinges on the concept of fields, which are essentially metadata you attach to your notes. Think of fields as key-value pairs that describe your notes. These fields can be added in various ways, most commonly through YAML frontmatter or inline fields.

YAML frontmatter is a block of metadata at the very beginning of your note, enclosed by three hyphens (---). For example:

```
yaml
---
project: My Awesome Project
status: In Progress
due_date: 2023-12-31
priority: High
---
```

Inline fields, on the other hand, are added directly within the body of your note using a specific syntax: `[key:: value]`. For instance:

```
Author:: [[Jane Austen]]

Rating:: 5

Status:: Completed
```

Dataview can then query these fields to filter, sort, and display your notes. The more consistently you use these fields, the more powerful your Dataview queries will become. It’s highly recommended to establish a consistent metadata schema for your vault to ensure accurate and reliable data retrieval.

Introduction to Dataview Query Language (DQL)

Dataview Query Language (DQL) is the syntax used to tell Dataview what information to retrieve from your vault. DQL queries are written within Dataview code blocks, which are standard Markdown code blocks with the language identifier `dataview`.

A basic DQL query has a few core components:

- **The TASK or LIST keyword:** This specifies what kind of output you want. `TASK` is for tasks, and `LIST` is for general lists or tables.
- **The FROM clause:** This determines which notes the query should consider. You can filter by tags, folders, specific files, or even notes that contain certain text.
- **The WHERE clause:** This applies additional filters to narrow down the results. You can filter based on the values of your fields.
- **The SORT clause:** This orders the results according to specified fields.
- **The FLATTEN clause:** Used to deconstruct list fields into individual items.
- **The GROUP BY clause:** Aggregates results based on common field values.

For example, a simple query to list all notes tagged with "book" and sort them by title might look like this:

```
dataview
LIST
FROM book
SORT file.name ASC
```

Understanding these clauses is fundamental to building effective Dataview queries and unlocking the true potential of your Obsidian data.

Creating Tables with Dataview

Tables are one of the most common and powerful ways to visualize data with Dataview. They allow you to present multiple pieces of information from your notes in a structured, columnar format, making it easy to compare and digest data.

To create a table, you'll use the `TABLE` keyword followed by the fields you want to display as columns. The `FROM` clause specifies the notes to query, and the `WHERE` clause can filter these notes further.

Consider this example, which lists all notes tagged with "project" and displays their title, status, and due date:

```
dataview
TABLE status, due_date
FROM project
WHERE due_date
SORT due_date ASC
```

In this query:

- `TABLE status, due_date` indicates that we want a table with two columns: "status" and "due_date".
- `FROM project` tells Dataview to only look at notes that have the tag "project".
- `WHERE due_date` filters out any projects that do not have a due date specified.
- `SORT due_date ASC` orders the projects by their due date in ascending order.

You can include the file name (which represents the note title) by simply adding `file.link` or `file.name` as one of the columns. For example, `TABLE file.link, status, due_date` would add the note title as the first column.

Generating Lists with Dataview

While tables are excellent for structured data, lists provide a more flexible way to display information, especially when you have varying amounts of detail per note or when you want to present a simple, sequential output.

The `LIST` keyword is used to generate a bulleted list. You can display the file name, or you can format the list items to include specific fields.

A basic list of all notes tagged with "article" would look like this:

```
dataview
```

```
LIST
FROM article
```

This would simply render a bulleted list of the titles of all notes tagged with "article".

You can also format list items to be more descriptive. For instance, to list articles and include their author:

```
dataview
LIST author
FROM article
```

This query would display the author of each article. To show both the article title and its author, you can use a more complex formatting:

```
dataview
LIST "[[" + file.name + "]] by " + author
FROM article
WHERE author
```

This creates a list where each item is a link to the article followed by "by" and its author. The use of string concatenation (`+`) allows for custom text formatting within list items.

Working with Task Lists in Dataview

One of the most powerful applications of Dataview is managing tasks within your Obsidian vault. Dataview can automatically aggregate and display tasks from multiple notes, creating dynamic to-do lists that update in real-time.

To work with tasks, you use the `TASK` keyword. Dataview recognizes standard Markdown checkboxes (`- [ ]`, `- [x]`) as tasks.

A simple query to list all incomplete tasks in your vault:

```
dataview
TASK
WHERE !completed
```

This query will show all tasks that have not been marked as completed. You can also filter tasks based on the notes they are in.

For example, to list all incomplete tasks within notes tagged with "project":

```
dataview
TASK
FROM project
WHERE !completed
```

You can also display task properties like due dates, priorities, or assignees if you've included them as inline fields on the same line as the task.

Example with due dates:

```
dataview
TASK due_date
```

```
WHERE !completed
SORT due_date ASC
```

This would list incomplete tasks, attempting to display their `due_date` property and sorting them chronologically. Dataview's task management capabilities are invaluable for project tracking and personal productivity.

Advanced Dataview Techniques and Use Cases

Beyond basic tables and lists, Dataview offers advanced features that unlock sophisticated workflows and data analysis within your Obsidian vault. These include grouping, flattening, and the ability to create more complex conditional logic in your queries.

The `GROUP BY` clause is particularly powerful. It allows you to aggregate notes based on a common field value. For instance, you can group all tasks by their project, or all books by their author.

Example of grouping tasks by project:

```
dataview
TASK
FROM project
GROUP BY project
```

This query would create a collapsible list, with each project name as a heading, followed by all tasks associated with that project. The `FLATTEN` clause is used when you have fields that contain lists themselves, allowing you to treat each item in that list as a separate entity for querying and filtering.

Additionally, you can use complex boolean logic (AND, OR, NOT) in your `WHERE` clauses to create highly specific filters. You can also chain multiple Dataview blocks together or even use JavaScript queries for ultimate flexibility, though this requires a deeper understanding of JavaScript.

Managing Projects with Dataview

Dataview excels at transforming your Obsidian vault into a powerful project management tool. By consistently using metadata for your projects, you can create dynamic dashboards that provide an overview of all your active initiatives.

To effectively manage projects, establish a convention for project notes. This might involve a specific tag (e.g., `project`), a folder structure, or a standardized YAML frontmatter key like `project_name`.

Here's how you can create a project overview table:

```
dataview
TABLE project_status, project_deadline, completion_percentage
FROM project
SORT project_deadline ASC
```

This query would list all notes tagged with `project`, displaying their status, deadline, and a custom `completion_percentage` field. You could also extend this to show the number of open tasks associated with each project.

To see tasks related to specific projects, you can use the `GROUP BY` clause as mentioned earlier, or filter by project name in your task queries. This allows you to quickly see what needs to be done for each individual project, all within your Obsidian vault.

Tracking Habits and Personal Development with Dataview

Dataview can be a fantastic companion for habit tracking and monitoring personal growth. By logging your daily activities, moods, or habit streaks, you can generate insightful reports that reveal patterns and progress over time.

The key to habit tracking with Dataview is consistent daily or weekly logging. You can create a template for your daily notes, which includes fields for each habit you want to track.

For example, a daily note might have:

```
yaml
---
date: 2023-11-15
mood: happy
exercise: true
meditation: false
reading_pages: 30
---
```

With this structure, you can create queries to visualize your progress. To see your exercise habit over the last 30 days:

```
dataview
TABLE exercise
FROM ""
WHERE date >= date(today) - dur(30 days)
SORT date DESC
```

This query would list the `exercise` status for each day in the last 30 days. You could also use this to calculate streaks or average mood scores, providing a quantitative overview of your personal development journey.

Customizing Dataview Output

Dataview offers a remarkable degree of flexibility in how you present your queried data. Beyond simple text, you can embed links, images, and even create custom conditional formatting to make your outputs more dynamic and informative.

One common customization is formatting dates. You can display dates in various formats using `file.mday` (modification day), `file.ctime` (creation time), or your custom date fields. For instance, `date(today) - dur(1 day)` is used to represent yesterday.

Conditional formatting can be achieved through clever use of inline fields and the `TABLE` format. For example, you could color-code project statuses:

```
dataview
TABLE
project_status as Status,
(if status = "In Progress" then "□ In Progress" else if status = "Completed" then "□ Completed" else
"□ Not Started") as Current Status
FROM project
```

This example uses a nested `if` statement to change the text displayed based on the `status` field. You can also incorporate inline JavaScript within Dataview code blocks for even more intricate formatting and logic, allowing you to tailor the output precisely to your needs.

Troubleshooting Common Dataview Issues

While Dataview is generally robust, you might encounter a few common issues as you learn and implement it. Understanding these problems and their solutions can save you significant troubleshooting time.

One frequent issue is that Dataview queries are not updating. This can happen if Dataview is not enabled, or if there's a conflict with another plugin. Ensure Dataview is enabled in your community plugins settings.

Another common problem is incorrect query syntax. Double-check your DQL for typos, missing colons, incorrect field names, or improper use of clauses like `FROM` or `WHERE`. Dataview often provides error messages within the code block itself, which can be helpful for debugging.

- **Data not appearing:** Verify that your metadata (YAML frontmatter or inline fields) is correctly formatted and that the field names in your query exactly match the field names in your notes.
- **Unexpected results:** Ensure your `FROM` clause is correctly targeting the desired notes (e.g., using the right tags or folder paths) and that your `WHERE` clauses are accurately filtering the data.
- **Performance issues:** Very large vaults with complex Dataview queries can sometimes lead to slow rendering. Try to optimize your queries by being as specific as possible in your `FROM` and `WHERE` clauses.

If you continue to face issues, the Dataview community forums and documentation are excellent resources for seeking help.

The Evolving Landscape of Dataview

The journey with Dataview in Obsidian is one of continuous discovery and refinement. As you become more adept at defining metadata and crafting queries, you’ll uncover new ways to leverage your notes. The ability to dynamically generate reports, manage tasks, and gain insights into your personal knowledge base is a powerful advantage for any user. Embracing Dataview is not just about using a plugin; it’s about fundamentally enhancing how you interact with and benefit from your digital information.

FAQ

Q: How do I update my Dataview queries to reflect changes in my notes?

A: Dataview queries typically update automatically when you make changes to your notes or when Obsidian reloads. If a query appears stale, try exiting and re-entering the note, or refreshing your Obsidian vault.

Q: Can Dataview query notes from subfolders?

A: Yes, you can specify subfolders in the `FROM` clause. For example, `FROM "My Folder/Subfolder"` will query notes only within that specific subfolder.

Q: What happens if a field I query in Dataview doesn't exist in a note?

A: If a field doesn't exist, Dataview will typically treat it as null or empty for that specific note. For example, if you query `due_date` and a note doesn't have it, it won't appear in that row's `due_date` column, and it will be excluded by `WHERE due_date` clauses.

Q: How can I link Dataview output back to the original notes?

A: When you display `file.link` or `file.name` as a column in a table or as an item in a list, it automatically creates a clickable link to that note.

Q: Is there a performance impact when using many Dataview queries?

A: Yes, very complex or numerous Dataview queries, especially in large vaults, can impact Obsidian's performance. It's recommended to optimize queries by being as specific as possible and avoiding unnecessary computations.

Q: Can Dataview be used to create diagrams or visualizations beyond tables and lists?

A: While Dataview itself primarily outputs text-based tables and lists, its output can be used as input for other Obsidian plugins that generate charts or diagrams. For example, you can export Dataview table data and use it with a charting plugin.

Q: What is the difference between YAML frontmatter and inline fields for Dataview?

A: YAML frontmatter is placed at the top of a note, enclosed by `---`, and is ideal for metadata that applies to the entire note. Inline fields `[key:: value]` are embedded directly within the note's content and are useful for metadata tied to specific sentences or paragraphs.

Q: How do I ensure my Dataview queries are portable across different vaults?

A: Use consistent tagging and metadata conventions. Standardize your field names (e.g., `created_date` instead of sometimes `creation_date`) and your tag hierarchy (e.g., `project/active`).

Using Dataview In Obsidian

Find other PDF articles:
https://testgruff.allegrograph.com/technology-for-daily-life-03/pdf?trackid=umk78-7888&title=govee-lights-google-home-integration.pdf

using dataview in obsidian: Machine Learning Algorithms and Concepts Sariya Ansari, 2023-09-13 This book is for machine learning professional & aspiring data scientist who wanted to be established themselves as a machine learning engineer or data science professional. Machine Learning Algorithms & Concepts gives complete idea to begin the phase of machine learning professional. This can be referred as a great starting point to switch the career path from existing profession to a machine learning professional. The book covers all major algorithms, its concept, usage, and other miscellaneous concepts based on situation which helps to its reader to decide in which situation what to be used. This book serves as guide to prepare for interviews, exams, campus work as well as for industry professional. It also covers basic programming which gives fair idea to its reader to learn how to code for machine learning problem statement even if he is a beginner in coding.

using dataview in obsidian: Experts' Guide to Obsidian Jeremy P. Jones, 2021-10-15 Obsidian is an innovative app for working with ideas, striving to serve as your second brain. That's an ambitious goal and Obsidian is an ambitious app, which has seen its popularity grow leaps and bounds over the past year. This book brings together tips from Expert Obsidian users who've tweaked and finessed their note-taking and sense-making process in Obsidian. In this book, you'll learn how to: * Learn for the long term by focusing on concepts rather than traditional notes; * Push your creative juices by discovering connections between concepts; * Manage a publishing workflow using a Kanban board, from capturing initial ideas to developing these through to completion; * Plan and organize your day in Obsidian, tracking your regular work and documenting your creative journey; * Work efficiently in Obsidian with shortcuts, templates and several plugins to boost your creative process. This book presents Experts' use of Obsidian. For a ground-up understanding of key concepts and techniques in Obsidian, pick up the related book Master Obsidian Quickly - Boost Your Learning & Productivity with a Free, Modern, Powerful Knowledge Toolkit by the same author.

using dataview in obsidian: Communication Patterns Jacqui Read, 2023-10-06 Chapter 3. Accessibility -- Relying on Color to Communicate -- Include a Legend -- Appropriate Labels -- Summary -- Chapter 4. Narrative -- The Big Picture Comes First -- Match Diagram Flow to Expectations -- Clear Relationships -- Summary -- Chapter 5. Notation -- Using Icons to Convey Meaning -- Using UML for UML's Sake -- Mixing Behavior and Structure -- Going Against Expectations -- Summary -- Chapter 6. Composition -- Illegible Diagrams -- Style Communicates -- Misleading Composition -- Create a Visual Balance -- Summary -- Part II. Multimodal Communication

using dataview in obsidian: *Maximiza tu productividad con Obsidian: Una Guía para organizar tus conocimientos* , 2024-03-31 ¿Alguna vez te has sentido abrumado por el diluvio diario de información valiosa, temiendo que pueda escaparse entre las grietas de tu memoria? □ ¿Te has encontrado navegando por un laberinto tratando de organizar tus pensamientos, ideas y percepciones en algo coherente y productivo? □ ¿Estás buscando aumentar tu productividad en el trabajo, mejorar la eficiencia, obtener claridad y tomar mejores decisiones? □ ¡No te preocupes, no estás solo! □ Muchos, incluido yo, sienten que tienen un tesoro de conocimiento valioso al alcance de la mano, pero luchan con cómo recopilarlo y organizarlo de manera efectiva. ¡Pero aquí está la buena noticia! □ Este libro te guiará a través de las mejores prácticas y herramientas para la gestión del conocimiento personal. Aprenderás a dar sentido a toda la información que has recopilado o deseas recopilar a lo largo de los años. Este viaje no solo mejora tu calidad de vida, sino que también aumenta tu capacidad y velocidad para realizar tareas, manejar, encontrar y gestionar la información. Te sentirás revitalizado, con más energía y motivación para alcanzar tus objetivos. □ Y todo esto es posible gracias al uso de una herramienta poderosa y sencilla como Obsidian.

using dataview in obsidian: *Minerals Yearbook* , 1948

using dataview in obsidian: □□□ □□□□ □□□□ □□, 2024-06-29 □ □□ □ □□□ □□□□ □□□ □□□□! □ □□□ 60 □! □□□ □□□ □□ □□□ □□□□ □□ □□□□□□ □ □□□□ □□□□ □ □ □□□ □□□□ 200% □□□ □□□□ □□□ □□□□□□ □□ □□□□□ □□ □□ □□□□□. □□ □□□□□ □□ □□ □□□□□ □□□□□ □□ □□□□□ □□□□? □□ □□□ □□ □□ □□□□□ □□□□□ □□□□□. □□□□□ □□ □□□ □□ □□□ □□□□ □ □□ □□ □□ □□□□ □ □□ □□ □□□□□. □□ □□□□□ □□□ □□□□ □□□ □□□ □□ □□ ‘□□□ □□ □□ □□□ □□□'□□. □□□□ □ □□□□□ □□□□ □□□ □□□ □□□ □□□ □□ □□□□ □□□ □□□ □□□□. □□□ □□□□ 200% □□□ □□ □□ □□□□ □□□□□. □ □□ □□□ □ □□□□ □□ □□□□ □□ □□, □□□□ □□ □□ □□□□ □□□□□ □□□ □□□ 200% □□ □□□ □ □□ □□□□. □□ □□□□ □□□□□ □□□ □□ □ □□ □□□ □□□□ □□□□ □□□ □□□□□□ PARA□□ □□ □□□□□. □□□□ □□, □□□□ □□□□□ □□ □□□□ ‘□□□□□ □□□ □□□□□ □□□□, □□□□□ □□ □□□□' □□□□□□. □□ □□ □□□ □□□ □□ □□□ □□□□□ □□□□ □□□□□. □□□ □□□□ □□ □□, □□ □□□ □□ □□ □□, □□□ □□□□ □□ □□ □□□□□. □□ □□□ □□ □□ □□□ □□□□ □□□ □□□ □ □ □□□ □□□□□□. □ □□ □ □□□ □□□□□ □□ □□□ □□ □□ □□□ □ □□ □□□□. □ □□ □□ □□□□ □ □□ □□ □□□□ □□□□. □□□ □□ □ □□ □□ □□□ □□□□□□□ □□□? □□□□□ □□□□□! □ □□□□ □□ □□, □□□□ □□□ □□ □□□□ □□ □□ □□□□□ □□□ □□□ □□□□□□□ □□ □□ □□ □□□ □□ □□□ □□□□□□ □□ □□□□? □ □□□□ □□□ □□□ □ □□□ □□□ □□□□? □□□□□ □□□□ □ □□ □□ □□□□□. □□□ □□□□□ □□ □□□ □□□ □□□□ □□□ □□□□□. □ □□ □□□□□ □□□ □□□ □ □□□ □□□ □□□□ □□ □□□□ □□□ □□□ □□□□, □□□ □□□ □□□ □□□□ □□□□ □□□□□. □ □□□ □□□ □□□□ □ □□□ □□□□ □□□ □ □□□□! □ PARA□ □□□□□□□ □□□ □□□ □□□□! □□□□□ □□□□ □□ □□□ □□ □□□□. □ □□ □□□ □□ □□□ □□□□ □ □□ □□□ □□□ □□ □□. □□□□□ □□□ □□□ □□□□ □□□□ □□ □ □□□ □□□ □□ □□□□□. ‘Part 01 □□□□ □□□□ □□□□ □□□□’□□□ □□□□□ □□□ □□, □□ □□□□, □□□□□ □□ □□□□□. ‘Part 02 □□□ □□, □□□□ □□ □□ □□□□’□□□ □□□□, □□, □□ □ □□□ □□□□ □□□□ □□□□ □ □□ □□□ □□□□□. □□□ □□□□ □ □□□ □□□ □□□□□ □□□□□? □□□ □□□□ □□□□ □□□□□ □□ □□□□ □□□□□□. AI□ □□ □□□ □ □□□ □□□ □□□□□□. ‘Part 03 □□□ □□□□□□ □□ □□ □□□□’□□□ □□ □□ □□□ □□□□□ ‘PARA’□ ‘□□□□□’□ □□□□ □□□□, □□ □ □□ □□□□ □□ □□□ □□□ □□□□ □□ □□□ □□□□□. □□□ □□ □□ □□□ □□ □□□ □□ □□ □□□□ □□□□□. ‘Part 04 □□ □ □□□□ □ □ □□□□’□□ CSS□ HTML□ □□(□□□□ □□□)□ □□□ □□□□, □□□□□ □□□□□ □□□□□□□□□□□□□. □ □□ □□□□ □□□ 1000% □□ □□□! □ □□ □□ □□ □□□□ □□□ + □□□ + □□□ + □□□□ □□ □□□□□! <□□ 1> □□ □□□□ □□□ ______ open.kakao.com/o/gqF5fNog <□□ 2> □□□ : □□ □□ □□ ______ github.com/Sianmin/obsidian-goldenrabbit <□□ 3> □□ □□□ ______ youtube.com/@sian-prod <□□ 4> □□ □□□ ______ thinkingsian.com □ 200% □□□ □ □ □□ □□□ □□□□□! □ □□ □□ □□, 1□ □□, □□ □□□ □□□□ □□□□. □□ □□□□ □□□ □□□□ □□ □ □□ 82□□ □□□ □□□ □□□ □□□□ □ □□□ □□□□□. □□□□ □□ □□, □□□ □ □□□□ □□ □□□ 1□ □□□□ □ □□ □□□□□. □ □□□ □□ □ □□□□ □□□ □□ □□□ □□ □□ □□□ □□□. □□□□□ □□□□ □□□□□ □□□ □□ □□□ □□□□□□ □□ □ □□ □□□□□□ □□□□□□ □□ □□□ □□□□□. □□□ □□□□ □□□ □□ □□□ □□ □□□□□ □ □□ □□□ □□□□ □□□□□□. □□□□ □□ □□□□ □□□. □ □□□□□□ □□ □□ □□□ □□ □□□ □□□□□□! □□□ □□□□ □□ □□ + □□□ □□□ □□ □□□ □□ □□ □□□ □□□□□. □□ □□□(github.com/Sianmin/obsidian-goldenrabbit)□□ □□□□ □ □□□□. □□, □□□□ □ □□□ □□□ □□□ □□□ □ □□ □□□ □ □□ □□□ □□ □□□□ □□□□□. □□ □□ □□□□ □ □□□□ □□□□ □□□ □□□□ □□ □□□ □□□□ □□□□□□□ □□□□□. □□□ □□ □□□ □□□□□□ CSS, □□□□ □ □□□ □□□ □□□ □□□ □□□□ □□□ □□□□ □□□□□ □□ □□□□□□. □□□ □□□□(□□□) L□ AI □□□□ / <□□□□□ □□□ □□□□> □□□ □□ □□ “□□□□□ □□□ □□□ □□ □□ □□□ □□□□□ □□□□ □□□□□ □□□ □□ □□□□. □□ □□ □□ □□ □□□ □□□□ □□ □□, □□ □□ □□□ □□□ □□□□ □□ □□□ □□ □□□□□. □□□□ □□□□ □□□□, □□□ □□ □ □□□, □ □□ □□□□ □□ □□□□□. □□□ □□□□ □□ □□ □□□ □□□□ □□□ □□□□□ □□□ □□ □□□□, □□ □□□□ □□ □ □ □□□□. □□ 2 □□ □□ □□ □□□ □□□□ □□□□, □□□ □□ □□□□ □□ □□□, □□□□ □□□□□ □□ □□ □□ □□ □□ □ □□ □□□□. □ □□ □□ □□□□ □□□□□□ □□□ □□□□□ □□□ □□□□ □ □□□□ □□□□□. □□ □□□□□ □ □□□ □□□□□□ □□, □□ □□□□ □□□, □□□ □□ □□ □□ □□□□ □□□ □□ □ □□□□ □□□□ □□, □ □□□ □□ □□ □□□ □□□ □□ □□□ □ □□□□.” □□□ □□□□□□□ □□, □□□□□□□ □□ “□□□□□ □□□ □□ □□ □□□ □. □□□□□ □□□ □□□□, □□□□□, □□□ □ □□ □□□□ □□□□□. □ □□ □□□□□ □□□ □□ □□□□ □□□□ □□ □□□□ □□□□□. □□□ □□□□ □□□□ □□□ □□ □□□□. □□ □□□□ □□ PARA, □□□□□□ □□ □□□, □□ □□ □□□□□□ □□ □□□ □□□□□ □□□□ □□□ □ □□ □□□□. □

         .   .   .   .   ?   .” [Part 01   ] Chapter 01   ? _ [01]   _ [02]   Chapter 02   _ [03] PC   _ [04] [01]   ,   _ [05]   _ [06]   _ [07]   _ [08]   Chapter 03   _ [09]   _ [10]   _ [11]   _ [12]   _ [13]   _ [14]   _ [15]   Chapter 04   _ [16]   _ [17]   Chapter 05   _ [18]   ? _ [19]   Chapter 06   _ [20]   ! _ [21]   _ [22]   [Part 02   ,   ] Chapter 07   _ [23]   ,   _ [24]   _ [25]   _ [26]   _ [27]   _ [28]   Chapter 08   _ [29]   _ [30]   _ [31]   Chapter 09   _ [32]   _ [33]   Chapter 10   _ [34]   _ [35]   _ [36]   _ [37]   _ [38]   Chapter 11   _ [39]   _ [40]   Chapter 12   _ [41]   _ [42]   _ [43]   Chapter 13   _ [44]   _ [45]   _ [46]   _ [47]   Chapter 14   _ [48]   _ [49]   _ [50]   _ [51]   _ [52]   [Part 03   ] Chapter 15 PARA,   _ [53] PARA   _ [54] PARA 4   _ [55] PARA ,   _ [56] PARA 3   _ [57]   PARA   Chapter 16   PARA   _ [58] Importer   _ [59] 60   PARA   _ [60]   PARA   Chapter 17 ,   _ [61]   ,   _ [62]   _ [63]   _ [64]   5   _ [65]   Chapter 18   _ [66]   _ [67]   _ [68]   _ [69]   _ [70] Smart connections   AI   [Part 04   ] Chapter 19 HTML CSS   _ [71] HTML   _ [72] CSS   Chapter 20   _ [73]   _ [74]   _ [75]   _ [76]   _ [77]   _ [78]   DQL   _ [79]   [Chapter 21   ] _ [80]   _ [81]   _ [82]

using dataview in obsidian: *Duly Noted* Jorge Arango, 2024-01-02 Better thinking makes you a better person. And few things extend your mind as quickly and powerfully as the humble note. Notes let you fulfill commitments, manage complicated projects, and make your ideas real. Digital notes take you even further. By using the right tools and a bit of discipline, you can cultivate a “personal knowledge garden where your thinking will blossom. An informative guide to organizing and managing thoughts, with a digital focus.—Kirkus Reviews Who Should Read This Book? Anyone and everyone who wants to get control of their notes to generate better ideas, learning, and actions. Duly Noted is superb for students, academics, business people, technicians, writers, UX people, managers, leaders—virtually anyone who can benefit from taking and managing notes. Takeaways Learn best-practice note-taking principles so you can take more concise notes. Connect your notes to one another to create a personal network of ideas (your own personal “knowledge garden”). Capture ideas before you lose them. Organize your notes so that you can find and make sense of them later. Learn how connected notes can spark insight and lead to new ideas and learning. Explore how notes can help you collaborate with other minds, including artificial ones Learn how to use Obsidian, a powerful digital note-taking tool. Follow the how-to exercises to lead you through the note-taking maze.

using dataview in obsidian: Itinéraire d'un lecteur gâté : du papier à la machine à lire Yann Houry, 2024-07-06 On dit souvent que le papier présente un avantage irréfragable par rapport aux écrans de nos tablettes, que la concentration est meilleure quand on lit sur un livre qui ressemble peu ou pro à la forme que l'on connaît depuis ce bon vieil incunable. D'aucuns prétendent même qu'on retient mieux en fuyant les écrans. Mon expérience de lecteur va à l'encontre de tout cela. Je ne prétends évidemment pas à l'universalité et peut-être que ce qui vaut pour moi n'est valable que pour moi et personne d'autre, mais enfin je vous propose une réflexion sur le sujet en une dizaine d'articles tous consacrés à la lecture numérique. Nous parlerons des intérêts de la liseuse mais aussi de ses manques ; de confort et de capacité de concentration ; des multiples applications qui permettent de lire ; des moyens de conserver, trier, retrouver, mémoriser ces choses innombrables qu'on lit et oublie aussitôt ; d automatisation et d'intelligence artificielle ; de dictionnaires et d'applications de traduction ; mais aussi des maux qui attendent inéluctablement le lecteur numérique et de plein d'autres choses encore. Mais surtout nous verrons comment nos pratiques de lecture évoluent avec la technique et comment celle-ci est susceptible de faire de nous de meilleurs lecteurs.

using dataview in obsidian: Система умных заметок Zettelkasten. Создайте свой второй мозг и генерируйте идеи бесконечно Сергей Маляров, 2025-06-05 В книге «Zettelkasten: создайте свой второй мозг и освободите мысли» представлены простые и эффективные принципы систематизации идей по методу Никласа Лумана, одного из самых продуктивных мыслителей XX века. Практические советы и пошаговые инструкции по настройке цифрового Zettelkasten в современных приложениях позволяют читателю быстро внедрить метод в повседневную жизнь.

using dataview in obsidian: *Metron* Karen Polinger Foster, Robert Laffineur, 2003 Contents: Foreword ; List of abbreviations ; A. KEYNOTE ADDRESS ; James D. MUHLY : Archaeology and Archaeometry: Why We Need (and Should Want) to Work Together ; B. MEASURING THE AEGEAN LANDSCAPE ; Gisela WALBERG: Measuring the Aegean Landscape ; Daniel J. PULLEN: Site Size, Territory, and Hierarchy: Measuring Levels of Integration and Social Change in Neolithic and Bronze Age Aegean Societies ; Richard ROTHAUS, Eduard REINHARDT, Thomas TARTARON and Jay NOLLER: A Geoarchaeological Approach for Understanding Prehistoric Usage of the Coastline of the Eastern Korinthia ; Anastasia DAKOURI-HILD, Eleni ANDRIKOU, Vassilis ARAVANTINOS and Elena KOUNTOURI: A GIS in Boeotian Thebes: Taking Measures for Heritage Management, Archaeological Research and Public Outreach ; C. MATERIALS CHARACTERIZATION ; Thomas F. TARTARON: The Characterization of Inorganic Materials in Aegean Prehistory ; Pat GETZ-GENTLE, Norman HERZ, Yannis MANIATIS and Kyriaki POLIKRETI: Sourcing the Marble of Early Cycladic Objects: : Tristan CARTER: Problematizing the Analysis of Obsidian in the Aegean and Surrounding Worlds ; Zofia A. STOS-GALE and Noel H. GALE: Lead Isotopic and other Isotopic Research in the Aegean ; Carole GILLIS, Robin CLAYTON, Ernst PERNICKA and Noel GALE: Tin in the Aegean Bronze Age ; Susan Ferrence, Kristalia Melessanaki, Maripaz Mateo, Philip P. Betancourt and Demetrios Anglos: Adaptation of Laser-Induced Breakdown Spectroscopy (LIBS) for the Analysis of Archaeological Artifacts ; Philip P. BETANCOURT: Interpreting Ceramic Petrography: The Special Product Model, a New Model for Pottery Distribution in the Early Minoan Period ; Evangelia KIRIATZI: Sherds, Fabrics and Clay Sources: Reconstructing the Ceramic Landscapes of Prehistoric Kythera ; Vassilis KILIKOGLOU, Evangelia KIRIATZI, Anna PHILIPPA-TOUCHAIS, Gilles TOUCHAIS and Ian WITHBREAD: Pottery Production and Supply at MH Aspis, Argos: The Evidence of Chemical and Petrographic Analyses ; D. ARTIFACT-BASED STUDIES ; Elizabeth HENDRIX: Some Methods for Revealing Paint on Early Cycladic Figures ; Walter MWalter MULLER: Minoan Works of Art - ; Thanos PANTAZIS, Andreas G. KARYDAS, Christos DOUMAS, Andreas VLACHOPOULOS, Petros NOMIKOS and Mark DINSMORE: X-Ray Fluorescence Analysis of a Gold Ibex and other Artifacts from Akrotiri ; Elizabeth B. SHANK and Costas BALAS: The MuSIS 2007 and its Application to the Throne Room Fresco at Knossos ; Ann BRYSBAERT: Rotating Angles in Measuring the Aegean Bronze Age. The Technology of Bronze Age Painted Plaster from the Aegean and the Eastern Mediterranean ; Maria C. SHAW: Grids and other Drafting Devices in Minoan and other Aegean Wall Painting. A Comparative Analysis Including Egypt ; E. EXPERIMENTAL ARCHAEOLOGY AND REPLICATION PROJECTS ; Elizabeth J.W. BARBER: Archaeology by Experiment and Reproduction ; Eva ANDERSSON and Marie-Louise B. NOSCH: With a Little Help from my Friends: Investigating

Mycenaean Textiles with Help from Scandinavian Experimental Archaeology ; F. ENVIRONMENTAL AND BIOLOGICAL ANALYSES ; Robert ARNOTT and Elizabeth STUCKEY: Finding the Hydra: The Search for Malaria in the Prehistoric Aegean ; Sevi TRIANTAPHYLLOU: A Bioarchaeological Approach to Bronze Age Cemetery Populations from Western and Central Greek Macedonia ; Margaret SERPICO: Quantifying Resin Trade in the Eastern Mediterranean during the Late Bronze Age ; G. ARCHITECTURAL AND CONSTRUCTIONAL STUDIES ; Donald PREZIOSI: What Does a Module Mean? ; Joseph W. SHAW: Palatial Proportions: A Study of the Relative Proportions between Minoan Palaces and Their Settlements ; David Gilman ROMANO: Minoan Surveyors and Town Planning at Gournia ; Louise A. HITCHCOCK: Louise A. HITCHCOCK: And Above Were Costly Stones, Hewn According to Measurement: ; Michael C. NELSON: Leveling Ashlar Walls ; H. WEIGHTS AND MEASURES ; Maria Emanuela ALBERTI: Weighting and Dying between East and West Weighing Materials from LBA Aegean Funerary Contexts ; Karl M. PETRUSO: Quantal Analysis of Some Mycenaean Balance Weights ; Lorenz RAHMSTORF: The Identification of Early Helladic Weights and Their Wider Implications ; Anna MICHAILIDOU: Measuring Weight and Value in Bronze Age Economies in the Aegean and the Near East: A Discussion on Metal Axes of No Practical Use ; I. STATISTICAL ANALYSES OF CERAMICS ; Marianna NIKOLAIDOU, Nikos MEROUSIS, Aikaterini PAPANTHIMOU and Angeliki PAPASTERIOU: From Metron to Context in Neolithic/Early Bronze Age Mandalon, Northwestern Greece: The Example of Ceramics ; Iris TZACHILI: Quantitative Analysis of the Pottery from the Peak Sanctuary at Vrysinas, Rethymnon ; J. MEASURING AND LINEAR A ; Dimitri NAKASSIS and Kevin PLUTA: Linear A and Multidimensional Scaling ; Massimo PERNA: Ideograms of Vases and Fractions in Linear A Script ; K. MEASURING ACROSS SPACE AND TIME ; George F. BASS: Carolyn: A Submersible for Underwater Archaeology ; Robert LAFFINEUR and Jean-Noel ANSLIJN: Laser Plotting and 3D Reconstruction of Aegaean Archaeological Remains. From the River Meuse to the Aegaean Sea ; Benjamin R. FOSTER: The Measure of Ancient Mesopotamia ; Malcolm H. WIENER: Time Out: The Current Impasse in Bronze Age Archaeological Dating ; L. POSTERS ; Paolo BELLI: On Measuring Tholoi in the Aegean Bronze Age ; Andrew BEVAN and Doniert EVELY: The Andrew BEVAN and Doniert EVELY: The Stone Vessels of the Bronze Age Aegean ; Giuliana BIANCO: Two Different Building Modules of Measurement at Kommos - A Neopalatial Module in Building T and a Postpalatial Module in Building P ; Janice L. CROWLEY: IconA: Classification and Database for Aegean Glyptic ; Cesare D''ANNIBALE and Dan LONG: Replicating Bronze Age Obsidian Blade Manufacture: Towards an Assessment of the Scale of Production during the Minoan Period ; Karen Polinger FOSTER and Max BICHLER: Theran Pumice from Egyptian Graves? ; Bernice JONES: Veils and Mantles: An Investigation of the Construction and Function of the Costumes of the Veiled Dancer from Thera and the Camp Stool Banqueter from Knossos ; Walther KAMM: The Nippur-measuring-rod and its Reference to the Linear-Measure Used during the Aegean Bronze Age ; Athanasia KRAHTOPOULOU: Geomorphic Processes and the Creation of the Modern Archaeological Record of Northern Pieria, Macedonia, Greece ; Robert LAFFINEUR: Automatic Profile Drawing of Sherds and Vases at the University of Liege ; Abby LILLETHUN: The Recreation of Aegean Cloth and Clothing ; Severine LIVIN : An Advanced Skill in Hydraulic Engineering at Knossos? ; Walter MULLER : Precision Measurements of Minoan and Mycenaean Gold Rings with Ultrasound ; Steven SOETENS, Apostolos SARRIS, Klaas VANSTEENHUYSE and Sofia TOPOUZI: GIS Variations on a Cretan Theme: Minoan Peak Sanctuaries ; Gisela WALBERG and John HANCOCK : Digital Midea: An Interactive Computer Model of a Mycenaean Citadel ; John G. YOUNGER: Calculating Vessel Volumes ; M. ABSTRACTS ; Stelios ANDREOU, Sarantis DIMITRIADIS, Vassilis KILIKOGLOU, Evangelia KIRIATZI, Kostas KOTSAKIS and Alexandra TSOLAKIDOU: Measuring Demand and Supply of Mycenaean and Protogeometric Style Pottery in Late Bronze Age Macedonia with Special Reference to Thessaloniki Toumba ; Andrew BEVAN: Exploring Kythera: Island Dynamics and GIS ; Keri A. BROWN, Christine FLAHERTY, John PRAG and Terence A. BROWN: Families, Faces and Ancient DNA at Mycenae ; James CONOLLY: Quantitative Analysis of Aegean Survey Data: A Case Study from Kythera ; Charles FREDERICK, Athanasia KRAHTOPOULOU and Maria KOUSOULAKOU: Polycyclic Terracing: The

View from Kythera ; Thea A. POLITIS, Meg H. ABRAHAM and J. Peter NORTHOVER: PIXE, Gold, and Granulation: Potential Applications for Measuring Social and Technological Interaction in the Aegean Bronze Age ; Sven VAN LOKEREN: Metallurgical Technologies and Production Organisation on LBA Kythera ; N. CLOSING ADDRESS ; Paul REHAK and John G. YOUNGER: Concluding Remarks.

using dataview in obsidian: Aegaeum , 1987

using dataview in obsidian: □□□□□□□ *Mermaid* □□□□□□ □□□□□, 2025-06-23 □□□□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□□□□□□ □□□ “□□□□□□□□□□□” □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□ flow □□□□□□□□□□□□□□□□, □□□□□□□□□□□□□□□□□□□, □□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□... □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ (drag-and-drop) □□□□□□□□□□□□□□□□□□ □□□□□□□□□□ □□□ version control □□□□□ Git □□□□□□□□□□□□□ **Mermaid** □□□□□□□□□□□□□□□□□□□□□□! Mermaid □□□ “□□□□□□□□□□□□□□” (text-based syntax) □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□ □□□□□□□ □□□□□□□□ □□□□□□□□□□□□□□□□□□□ Markdown, GitHub, Obsidian □□□□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ **□□□□□□□□□□ Mermaid □□□□□□**
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□□□□□□□□ syntax □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ □□□□ Flowchart, Sequence Diagram, ERD, Class Diagram, Gantt Chart □□□□□□□□ □□□□□□□□□□ □□□ “□□□□□□□□□□□□□□□□□□□□□□□□” □□ □□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□□ □□□ — Mermaid □□
□□□ □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□? □□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□□□

Related to using dataview in obsidian

What are the uses of "using" in C#? - Stack Overflow User kokos answered the wonderful Hidden Features of C# question by mentioning the using keyword. Can you elaborate on that? What are the uses of using?

c# - try/catch + using, right syntax - Stack Overflow That "using" keyword has been around for a while and it's meaning is quite clear to me. And using it helps make the rest of my code clearer by keeping the amount of clutter to a minimum

What is the difference between using and await using? And how can It looks like you can only use await using with a IAsyncDisposable and you can only use using with a IDisposable since neither one inherits from the other. The only time you

What is the logic behind the "using" keyword in C++? 239 What is the logic behind the "using" keyword in C++? It is used in different situations and I am trying to find if all those have something in common and there is a reason

.net - use of "using" keyword in c# - Stack Overflow Using the using keyword can be useful. Using using helps prevent problems using exceptions. Using using can help you use disposable objects more usefully. Using a different

What's the problem with "using namespace std;"? The problem with putting using namespace in the header files of your classes is that it forces anyone who wants to use your classes (by including your header files) to also be 'using' (i.e.

grammar - 'I was using', 'I have used', 'I have been using', 'I had I had been using cocaine. Meaning, with a reference point in the past, starting a time before then up to the reference point, I was habitually using cocaine up to and including

MySQL JOIN ON vs USING? - Stack Overflow Extremely good point. Of all the advantages using provides, it can't be combined with other predicates: select*from t join t2 using(i) and on 1 wouldnt work

How does `USING` keyword work in PostgreSQL? - Stack Overflow I am confused with the USING keyword which is used to join two tables in postgres. I first saw it in another SO post Compare two tables in postgres. I checked the

Why use a using statement with a SqlTransaction? During my Googling I see many people using a using statement with a SqlTransaction. What is the benefit and/or difference of using this type of statement with a SqlTransaction?

What are the uses of "using" in C#? - Stack Overflow User kokos answered the wonderful Hidden Features of C# question by mentioning the using keyword. Can you elaborate on that? What are the uses of using?

c# - try/catch + using, right syntax - Stack Overflow That "using" keyword has been around for a while and it's meaning is quite clear to me. And using it helps make the rest of my code clearer by keeping the amount of clutter to a minimum

What is the difference between using and await using? And how It looks like you can only use await using with a IAsyncDisposable and you can only use using with a IDisposable since neither one inherits from the other. The only time you

What is the logic behind the "using" keyword in C++? 239 What is the logic behind the "using" keyword in C++? It is used in different situations and I am trying to find if all those have something in common and there is a reason

.net - use of "using" keyword in c# - Stack Overflow Using the using keyword can be useful. Using using helps prevent problems using exceptions. Using using can help you use disposable objects more usefully. Using a different

What's the problem with "using namespace std;"? The problem with putting using namespace in the header files of your classes is that it forces anyone who wants to use your classes (by including your header files) to also be 'using' (i.e.

grammar - 'I was using', 'I have used', 'I have been using', 'I had I had been using cocaine. Meaning, with a reference point in the past, starting a time before then up to the reference point, I was habitually using cocaine up to and including

MySQL JOIN ON vs USING? - Stack Overflow Extremely good point. Of all the advantages using provides, it can't be combined with other predicates: select*from t join t2 using(i) and on 1 wouldnt work

How does `USING` keyword work in PostgreSQL? - Stack Overflow I am confused with the USING keyword which is used to join two tables in postgres. I first saw it in another SO post Compare two tables in postgres. I checked the

Why use a using statement with a SqlTransaction? During my Googling I see many people using a using statement with a SqlTransaction. What is the benefit and/or difference of using this type of statement with a SqlTransaction?

What are the uses of "using" in C#? - Stack Overflow User kokos answered the wonderful Hidden Features of C# question by mentioning the using keyword. Can you elaborate on that? What are the uses of using?

c# - try/catch + using, right syntax - Stack Overflow That "using" keyword has been around for a while and it's meaning is quite clear to me. And using it helps make the rest of my code clearer by keeping the amount of clutter to a minimum

What is the difference between using and await using? And how can It looks like you can only use await using with a IAsyncDisposable and you can only use using with a IDisposable since neither one inherits from the other. The only time you

What is the logic behind the "using" keyword in C++? 239 What is the logic behind the "using" keyword in C++? It is used in different situations and I am trying to find if all those have something in common and there is a reason

.net - use of "using" keyword in c# - Stack Overflow Using the using keyword can be useful. Using using helps prevent problems using exceptions. Using using can help you use disposable objects more usefully. Using a different

What's the problem with "using namespace std;"? The problem with putting using namespace in the header files of your classes is that it forces anyone who wants to use your classes (by including your header files) to also be 'using' (i.e.

grammar - 'I was using', 'I have used', 'I have been using', 'I had I had been using cocaine. Meaning, with a reference point in the past, starting a time before then up to the reference point, I was habitually using cocaine up to and including

MySQL JOIN ON vs USING? - Stack Overflow Extremely good point. Of all the advantages using provides, it can't be combined with other predicates: select*from t join t2 using(i) and on 1 wouldnt work

How does `USING` keyword work in PostgreSQL? - Stack Overflow I am confused with the USING keyword which is used to join two tables in postgres. I first saw it in another SO post Compare two tables in postgres. I checked the

Why use a using statement with a SqlTransaction? During my Googling I see many people using a using statement with a SqlTransaction. What is the benefit and/or difference of using this type of statement with a SqlTransaction?

Related to using dataview in obsidian

I still use Obsidian, but I wish they'd fix its plugin dependency (XDA Developers on MSN12d) Obsidian's flexibility and plugin ecosystem are its greatest strengths, but relying heavily on third-party plugins carries

I still use Obsidian, but I wish they'd fix its plugin dependency (XDA Developers on MSN12d) Obsidian's flexibility and plugin ecosystem are its greatest strengths, but relying heavily on third-party plugins carries

I turned my Obsidian notes into charts and now I love tracking my progress (MUO on MSN11d) Then, I discovered how to transform my Obsidian notes into visual progress charts, and everything changed. Suddenly, tracking

I turned my Obsidian notes into charts and now I love tracking my progress (MUO on MSN11d) Then, I discovered how to transform my Obsidian notes into visual progress charts, and everything changed. Suddenly, tracking

Back to Home: https://testgruff.allegrograph.com