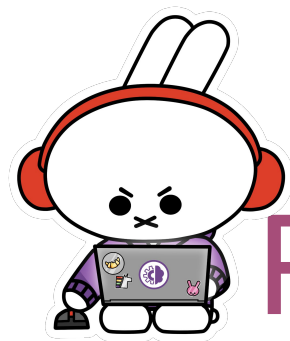


Promotion 2022-23

Projet



PolyNotes

A productivity and organization tool
Platform

Observations

- ❑ Managing project is hard;
- ❑ Collaborating is harder;
- ❑ productivity and organization tools are enablers for those matters.

=> Students need a platform for

- ❑ Notes taking (reports, wikis)
- ❑ Project management
(tasks, databases, project management documentation such as reports, etc.).
- ❑ And enabling collaboration.



Notion



Evernote



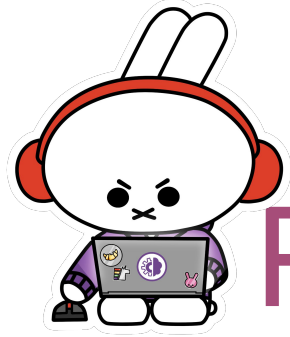
Basecamp

PolyNotes - Features

1. **Notes and Wikis:** Allows you to create and organize notes, documentation, and wikis in a flexible, customizable format.
2. **Tasks and Project Management:** Lets you create and manage tasks, to-do lists, and projects in a way that works best for you.
3. **Databases:** Enables you to create and manage databases to store and organize information such as contacts, products, or expenses.
4. **Calendars:** Lets you keep track of events, deadlines, and schedules using a calendar view.
5. **Embeds:** Allows you to embed content from other sources, such as Google Maps, YouTube, or Trello.
6. **Collaboration:** Lets you collaborate with others in real-time on shared pages and databases.
7. **Mobile apps:** Offers mobile apps for iOS and Android so you can access your PolyNotes workspace from anywhere.
8. **Integrations:** Integrates with other tools, such as Google Drive, Slack, and Zapier, to make your work even more efficient.

Key components

1. **Pages:** The fundamental building blocks of PolyNote, where you can create and organize notes, wikis, tasks, databases, and more.
2. **Databases:** A flexible and customizable way to store and organize information in PolyNote, such as contacts, products, expenses, etc.
3. **Blocks:** The building blocks of pages, which can be text, images, headings, checklists, databases, and more.
4. **Properties:** The fields within a database that define the type of information stored, such as name, description, date, etc.
5. **Views:** The different ways you can view and interact with your databases, such as tables, calendars, boards, etc.
6. **Templates:** Pre-built pages and databases that you can use as a starting point for your own work, or customize to fit your needs.
7. **Collaboration:** Allows multiple users to edit and collaborate on pages and databases in real-time, with version control and activity tracking.
8. **Integrations:** Connects PolyNote with other tools and services, such as Google Drive, Slack, Zapier, and more, to enhance your productivity and workflow.

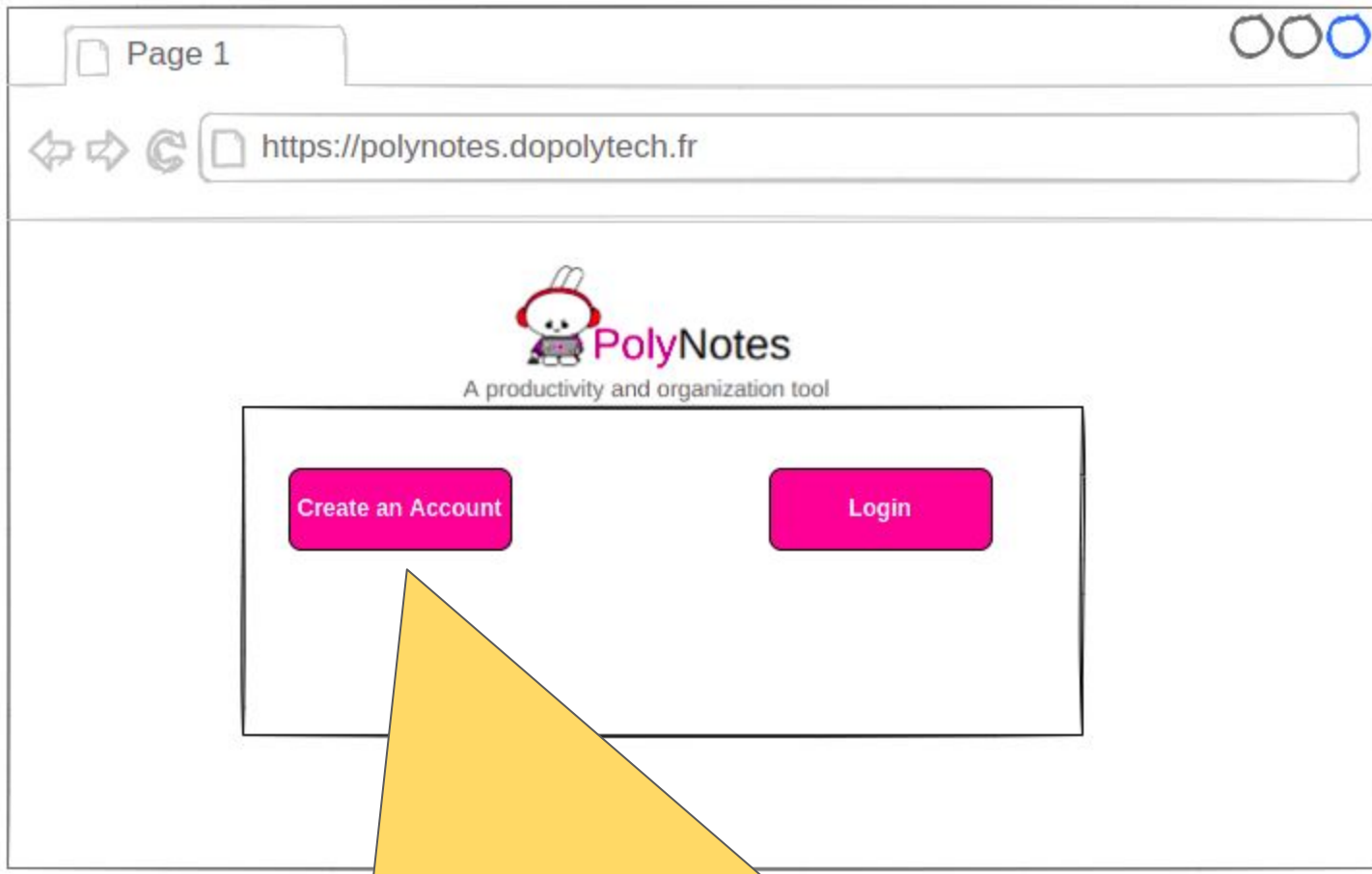


PolyNotes

Part 1 - Landing Page & Account



A landing page with a Start button => when clicked the user has to login or create an account



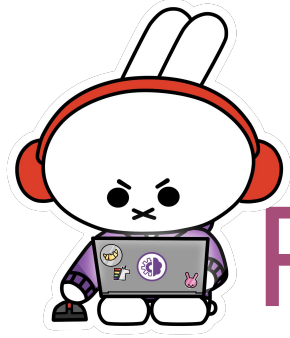
For now, in place authentication

Creation Form

Basic one for now:

- NickName*
- email*
- Password*
- Password confirmation*
- 13+ checkbox
- Accept CGU checkbox

Basic validations + Verifying email address through validation link (with token)



PolyNotes

Part 2 - Home Page



https://polynotes.dopolytech.fr



Search



Profile access

+ Create

Recent

> My Workspace

> Shared with Me



Tiles of reents
open documents
(infinite scroll)

Recent

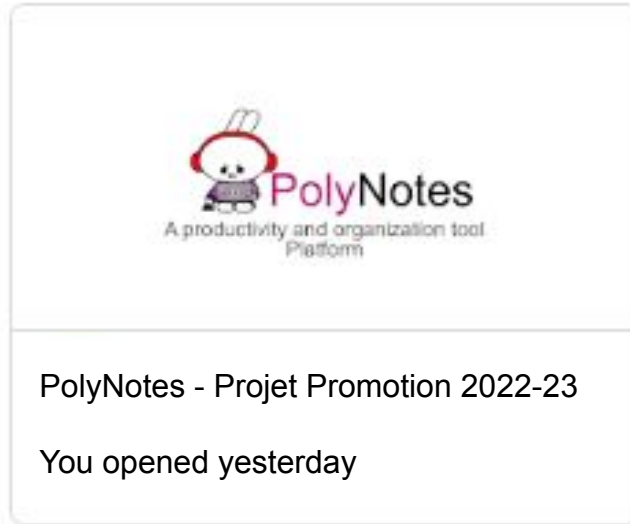
Stared

Trash

Nom	Owner	lastModified Data
Value 1	Value 2	Value 3
Value 4	Value 5	Value 6
Value 7	Value 8	Value 9
Value 10	Value 11	Value 12

File Explorer

Tile Example














Must have: at least 4 tiles

Should have: could slide (horizontally) up to 10 tiles

Nice to have: infinite horizontal scroll

File Explorer

Kind of File Explorer (see Nautilus)

Name	Size	Modified
 Polytech	47 items	ven.
 2022-2023	12 items	ven.
 DO	3 items	13 déc. 2022
 2021-2022	7 items	26 août 2022
 Administratif	8 items	14 avril 2022
 2018-2019	13 items	14 avril 2022
 Manning	3 items	14 avril 2022
 2020-2021	9 items	14 avril 2022
 2019-2020	8 items	14 avril 2022
 Cloud Design Patterns....	241,4 kB	16 déc. 2022
 AWS - Cloud Fondation...	192,4 kB	13 déc. 2022

Create Button



For now, clicking on “+ create” trigger the action of creating a new page

> My Workspace

> Shared with Me

My Workspace



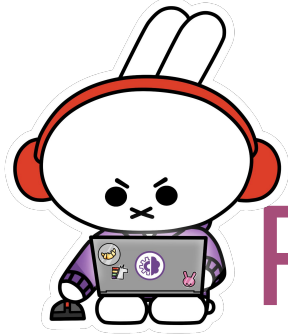
> My Workspace

> Shared with Me

Allow you to browse the folder tree:

▼ My Workspace

- ▶ Folder A
- ▶ Folder B
 - ▼ Folder B1
 - ▶ Folder B11
 - ▶ Folder B12
- ▶ Folder C



PolyNotes

Part 3 - Pages & Blocks

Pages & Blocks

- ❑ Page = The fundamental building component of PolyNote, where you can create and organize notes, wikis, tasks, databases, and more.
- ❑ Block = building blocks for creating pages and databases.

On PolyNote content can be think of as a block

Heading Block

Heading 2 Block

Image Block

Paragraph of Text

Quote Block

Database Block

PolyNotes!

A productivity and organization tool
Platform



"Think harder, don't work harder. Set your priorities right, because if you chase two rabbits, you will lose them both."

Managing project is hard;

- ❑ Collaborating is also hard;
- ❑ productivity and organization tools are key for this topics

=> Students need a platform for

- ❑ Notes taking
- ❑ Project management
- ❑ And enabling collaboration.

Todo

Wip

Done

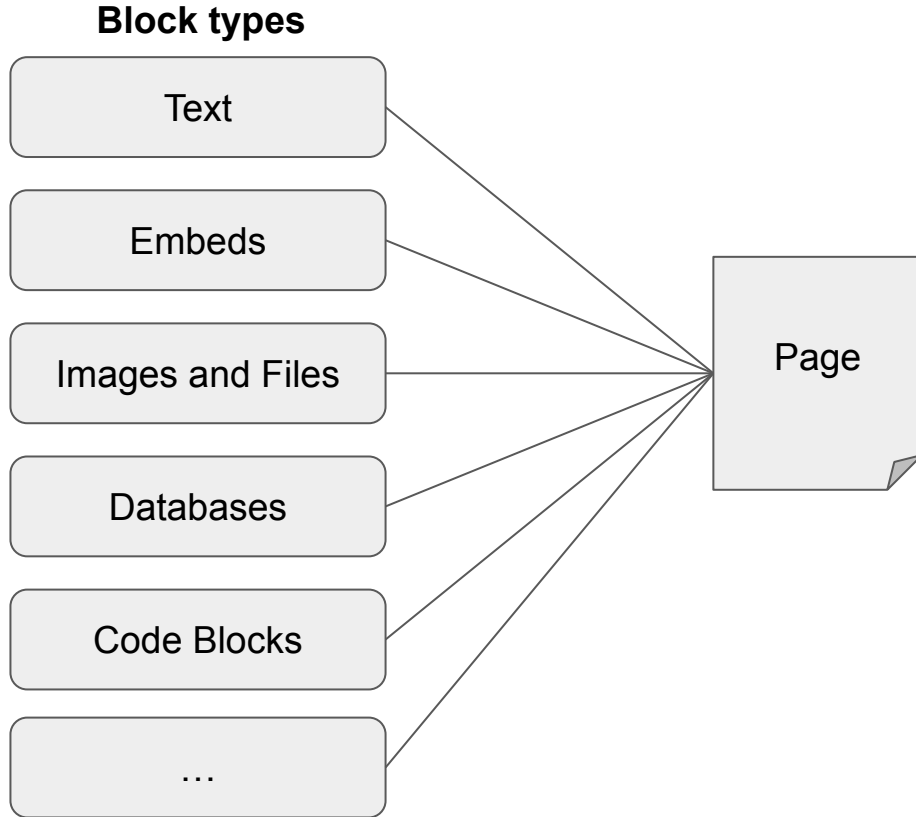
T2

T3

T1

T4

Blocks compose Pages



Blocks can be:

- ❑ Drag and Move
 - ❑ Up and Down
 - ❑ From a column to another (including multi-column layout)
- ❑ Copy / Delete / Modify
- ❑ Some have parameters
- ❑ Have a slash command (e.g: /h1)
- ❑ Markdown compliant

Main types of block

- ❑ **Text Blocks:** Allow users to write and format text, including headings, lists, and quotes.
- ❑ **Embeds:** Enable users to embed content from other sources, such as YouTube videos, Twitter posts, or CodePen snippets.
- ❑ **Images and Files:** Allow users to upload and insert images and files into their pages and databases.
- ❑ **Tasks:** Provide a way to create and manage tasks, with options for setting due dates, assigning tasks to team members, and tracking progress.
- ❑ **Databases:** Enable users to create and manage databases, with customizable fields and views. Databases can be used for a variety of purposes, such as project management, customer relationship management, or inventory tracking.
- ❑ **Pages and Sub-Pages:** Allow users to create and organize pages within a hierarchical structure, with options for linking pages to create a wiki-style navigation.
- ❑ **Code Blocks:** Enable users to insert code snippets and display the output, with support for a variety of programming languages.
- ❑ **Tables:** Provide a way to create and manage tabular data, with options for sorting, filtering, and aggregating data.
- ❑ **Gallery Blocks:** Allow users to display images in a grid or slideshow format, with options for customizing the display and navigation.

These are some of the main types of blocks in PolyNotes, and users can combine them in various ways to create customized pages and databases that meet their specific needs.

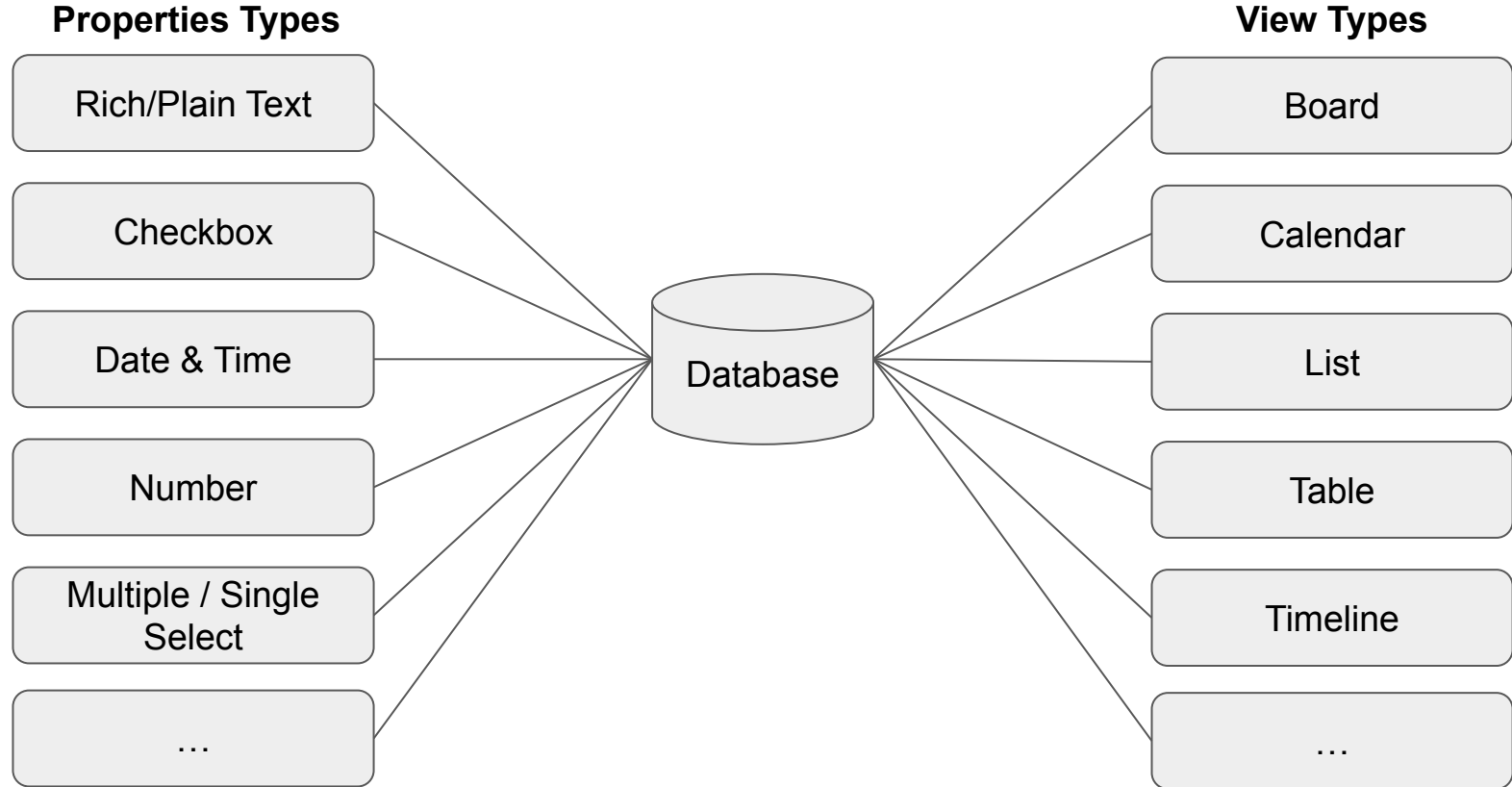
A Focus on Database Block

Database Block Enables you to create and manage databases to store and organize information such as contacts, products, or expenses.

It relies on two main concepts:

- ❑ Properties: The fields within a database that define the type of information stored, such as name, description, date, etc.
- ❑ Views: The different ways you can view and interact with your databases, such as tables, calendars, boards, etc.

Database

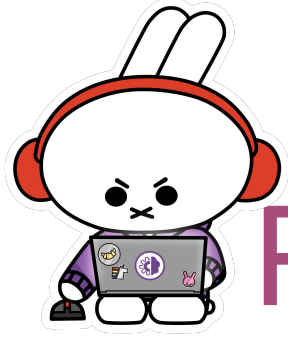


Main types of Properties

- ❑ **Rich text:** Allows users to format text with different styles, such as bold, italic, and underline, as well as insert images and other multimedia elements.
- ❑ **Plain text:** A simple text field that stores unformatted text.
- ❑ **Checkbox:** A field that allows users to check or uncheck a box to indicate completion or status of a task.
- ❑ **Date & time:** A field that stores dates and times and can be used to sort and filter database entries.
- ❑ **Number:** A field that stores numerical values and can be used for calculations and sorting.
- ❑ **Multiple select:** A field that allows users to select multiple options from a list.
- ❑ **Single select:** A field that allows users to select one option from a list.
- ❑ **URL:** A field that stores web addresses and links.
- ❑ **Relation:** A field that allows users to create relationships between databases and easily cross-reference information.
- ❑ **Formula:** A field that allows users to use mathematical formulas and calculations to analyze and display data.

Main types of View

- ❑ **Board:** A view that displays database entries as cards that can be moved and organized.
- ❑ **Calendar:** A view that displays database entries as events on a calendar.
- ❑ **List:** A simple view that displays database entries in a list format.
- ❑ **Gallery:** A view that displays database entries as images and allows users to view more information by clicking on the image.
- ❑ **Table:** A view that displays database entries in a tabular format, with columns and rows.
- ❑ **Kanban:** A view that displays database entries as cards on a kanban board, allowing users to easily see the progress of tasks and projects.
- ❑ **Timeline:** A view that displays database entries as events on a timeline, showing the sequence of events.
- ❑ **Map:** A view that displays database entries as markers on a map, allowing users to visualize data geographically.



PolyNotes

Part 4 - Collaboration

Users

Users can create, edit, and collaborate on a variety of content types, including notes, wikis, databases, and tasks. The following is a general overview of how users work with PolyNotes:

- ❑ **Account creation:** Users can create a PolyNotes account using their email address or by signing up through systems like Google.
- ❑ **Workspace setup:** Once logged in, users can create a new workspace or join an existing one. Workspaces allow users to organize their content and collaborate with others.
- ❑ **Content creation:** Users can create various types of content within their workspace, including notes, wikis, databases, and tasks. They can add text, images, videos, and other types of media to their content.
- ❑ **Collaboration:** Users can share their content with others and collaborate in real-time. They can leave comments, make edits, and use @mentions to notify others of updates.
- ❑ **Access controls:** Users can control who has access to their content and what level of access they have. They can also use version history to keep track of changes made to their content.
- ❑ **Mobile access:** PolyNotes has a mobile app that allows users to access their content and collaborate with others on-the-go.
- ❑ **Integrations:** PolyNotes integrates with a variety of tools and services, including Google Drive, Slack, Trello, and Zapier, making it easy for users to share information and collaborate with others.

Focus on Sharing Content

A user can create a sharable link:

- ☐ Readable by anonymous
- ☐ Modifiable by anonymous
- ☐ Commentable by anonymous
- ☐ Duplicable by anonymous

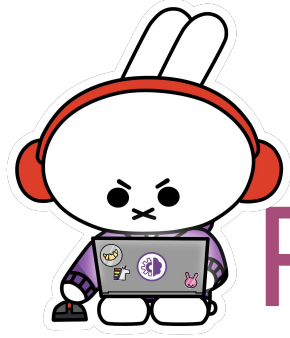
A user can also invite someone (1) or a group (2)

(1) by username or email address

(2) By group name

Collaboration main features

- ❑ **Shared databases:** Allows multiple users to access and edit the same database, making it easy for teams to collaborate on projects and tasks.
- ❑ **Real-time collaboration:** Allows users to see changes made by other users in real-time, eliminating the need for manual updates and reducing the risk of data inconsistencies.
- ❑ **Version history:** Keeps track of all changes made to a database and allows users to revert to previous versions if needed.
- ❑ **Commenting:** Allows users to add comments to database entries, making it easy to discuss and resolve issues in real-time.
- ❑ **@mentions:** Allows users to mention other users in comments or database entries, ensuring that the right people are notified of updates and changes.
- ❑ **Access controls:** Allows administrators to control who has access to a database and what level of access they have, ensuring that sensitive information is protected.
- ❑ **Integrations:** Integrates with a variety of tools and services, including Google Drive, Slack, Trello, and Zapier, making it easy to share information and collaborate with other team members.
- ❑ **Sharing:** allow publication and share-link to users



PolyNotes Iterations

Iterations

This project is iteration based (not sprint-based, this is up to you to decide).

For this year, you will have at least two Iterations:

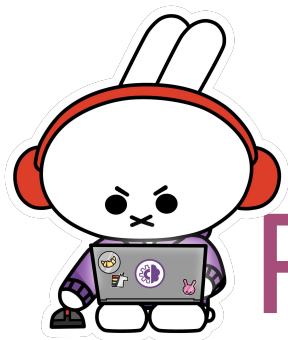
- ❑ Iteration I1: Individual Work
Each student will have to complete the full assignment
- ❑ Iteration I2: Team Work
The assignment is team-based

Later... (not this year)

- ❑ OAuth Authentication,
- ❑ Mobile App,
- ❑ Integration with Third Party,
- ❑ Templates,
- ❑ etc.

Requirements

- ❑ Typescript
- ❑ React
- ❑ RDBMS and or NoSQL Doc.
- ❑ ES 2023+



PolyNotes

Iteration I1

Perimeter (1/2)

Each student has to make the full work of this assignment. Here is a synthetic overview of the tasks:

☐ Part 1:

- ☐ a full manifesto page
- ☐ An In place Authentication (JWT auth) - no Oauth or third party authentication
- ☐ A minimal CGU (e.g: a paragraph of CGU and an acceptance checkbox)
- ☐ form validation (of course) and email verification

☐ Part 2:

- ☐ A simplified Profile: only name and a logout button
- ☐ Tiles of recent open documents
(infinite horizontal scroll is not mandatory; tiles information is just the title of the content)
- ☐ Shared With Me, recent, trash and stated are not actionable,
- ☐ File Explorer (minimal version - at least name, size, creation/last updated)
- ☐ + Create should create a new Page when clicked (positioned in the current user path)
- ☐ My Workspace

Continue on next page

Perimeter (2/2)

- ❑ Part 3:
 - ❑ Pages and SubPages
 - ❑ One or Two Columns (multicolumn $n > 2$ not mandatory)
 - ❑ Blocks:
 - ❑ Text Blocks: headers, list (bullet & ordered), paragraph
 - ❑ Image Block (only via url)
 - ❑ Database:
 - ❑ Properties: Rich/plain Text, Checkbox, Date & Time, Single Select, Number, Checkbox
 - ❑ Views: Table, Kanban (~+/- Trello TodoList)
- ❑ Part 4:
 - ❑ Content can be read or modifiable for an anonymous user
 - ❑ Sharing content to anonymous through links, choosing between Readable and Modifiable for now
- ❑ Misc
 - ❑ CI/CD
 - ❑ Deployed on your app (or whatever accessible online server)
 - ❑ TAD
(3-5 pages with architectural design schemas, db schema, pros/cons of tech and post mortem as markdown files in the repository)

Deadline

- ❑ Source code: Sunday 09th April - 11:42 pm
- ❑ Oral Presentation: End of April



?