

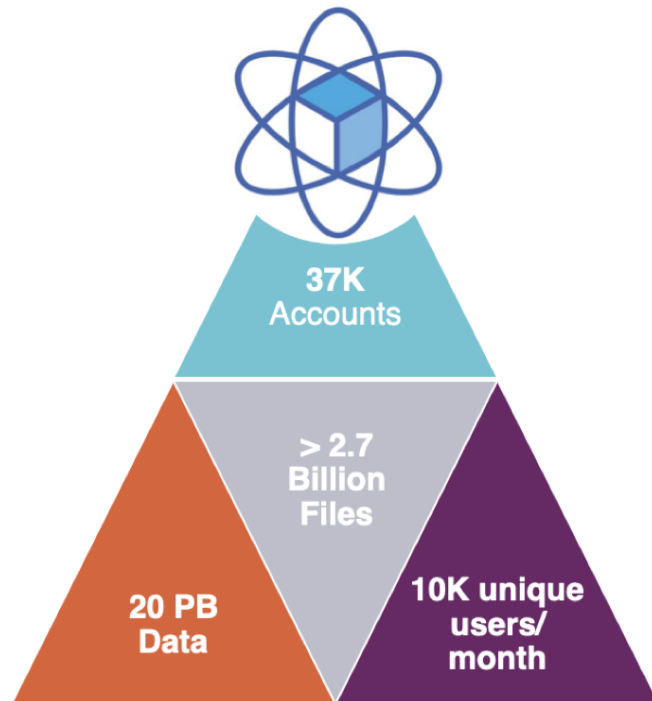


# A11Y @ CERNBox

For Digital Accessibility Workshop

Elizaveta Ragozina

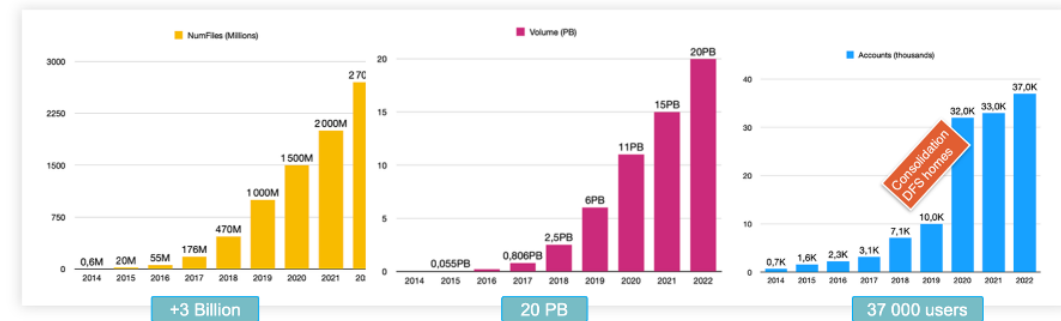
# Some statistics...



- +1000 Project areas
- 31 LHC and non-LHC experiments working areas

13k unique users/month

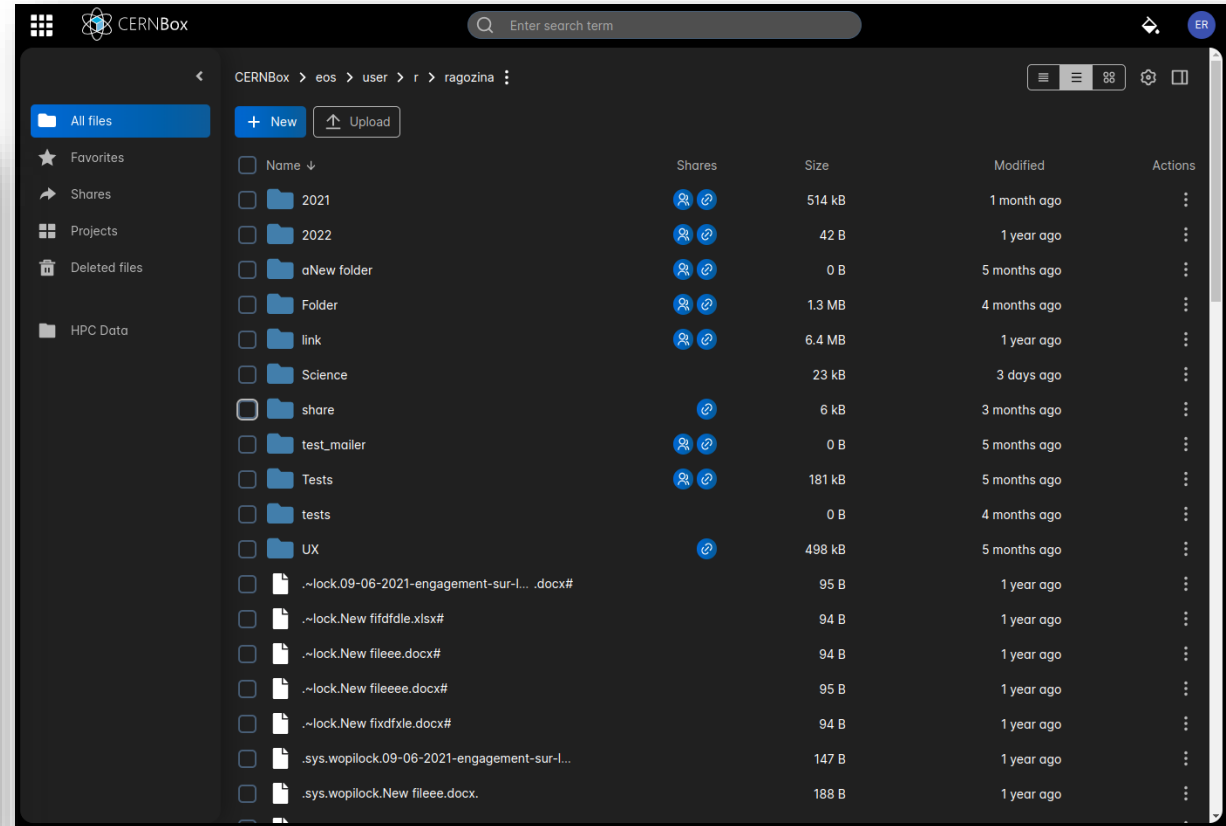
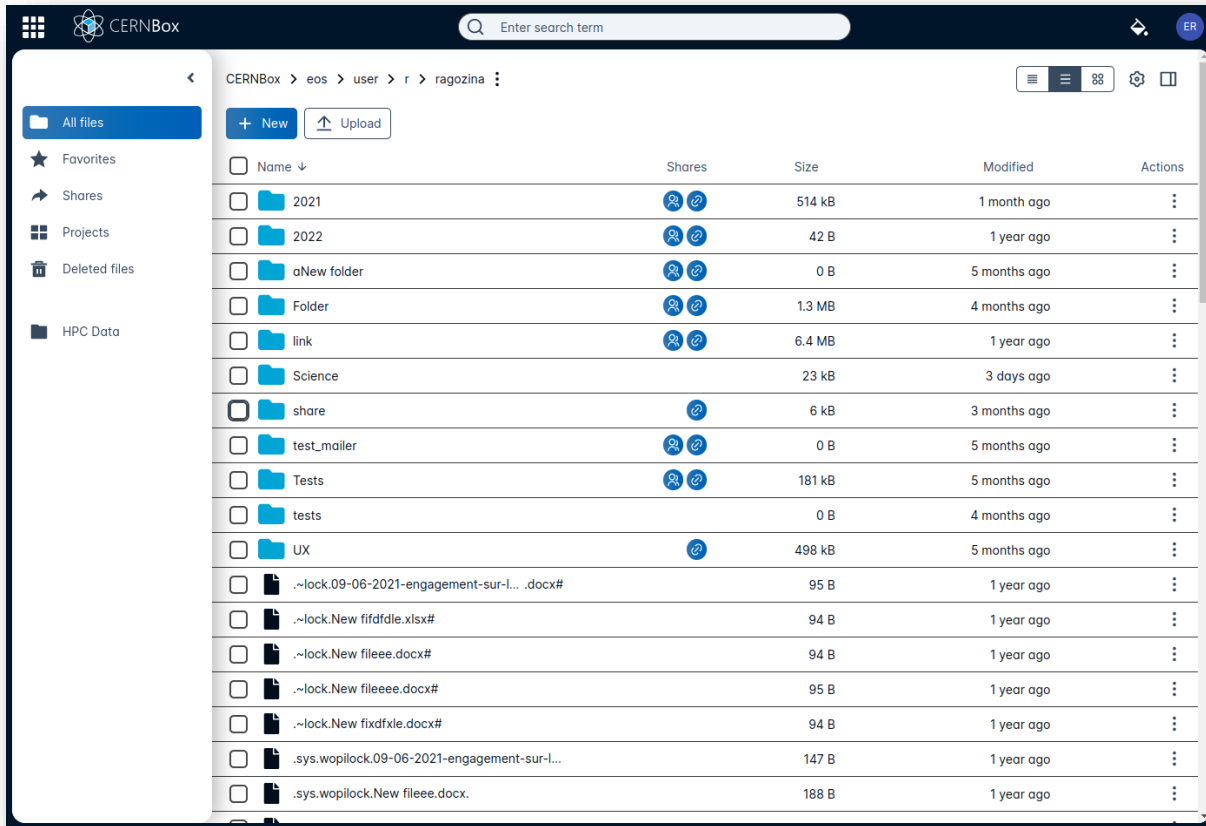
Skyrocketing usage



# Our Examples for Accessibility Exercises

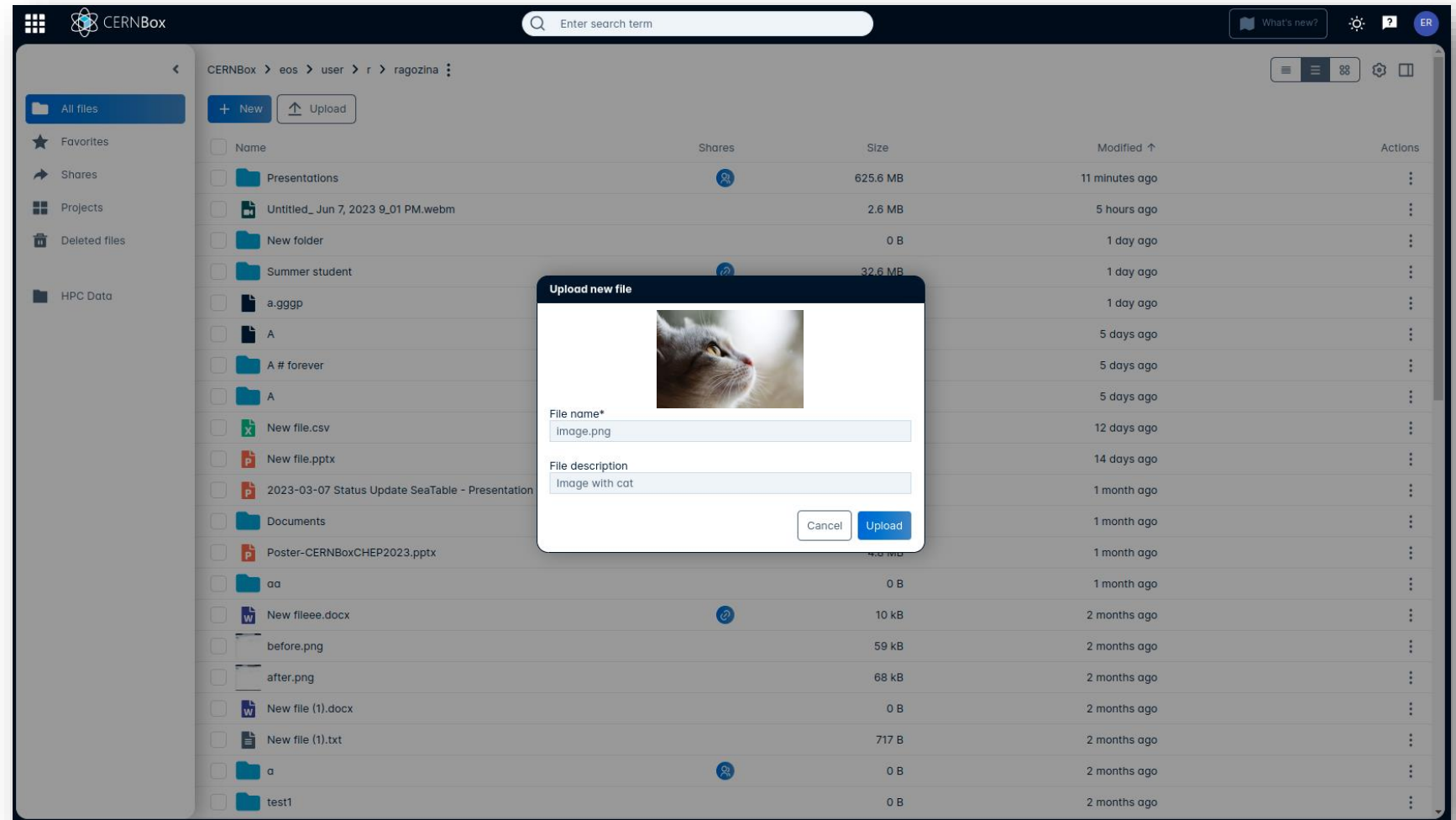
- Exercise 1: Low color contrast
  - Exercise 2: Missing Alternative text for images
  - Exercise 3: Empty links (icons to navigate without text)
  - Exercise 4: Missing form input labels
  - Exercise 5: Empty buttons (buttons as an image or icon without text)
  - Exercise 6: Missing document language
- 
- Exercise 10: Repetitive links
  - Exercise 11: Semantic HTML
  - Exercise 12: Zoom causing horizontal scrolling, overlap or non-visible text

# Example 1: Low color contrast



# Example 2: Missing Alternative text for images

- What to do with uploaded images?
- --> concept



# Example 3: Empty links (icons to navigate without text)

The image illustrates the process of removing empty links (icons) from a web application. It is divided into three main sections:

- Code Editor:** Shows the source code for `OcResourceLink.vue`. A comment indicates the goal: `remove empty oc-resource`. The code defines a prop `ariaLabel` with a `required: true` constraint. An orange arrow points from this code to the WAVE tool.
- WAVE Summary:** A screenshot of the WAVE accessibility tool interface. The summary shows 46 errors, 47 alerts, 19 structural elements, 3 contrast errors, 26 features, and 408 ARIA elements. A button labeled "View details" is visible.
- Web Application:** A screenshot of a web application interface (CERNBox) showing a sidebar with navigation icons. The icons are highlighted with red 'X' marks, indicating they are identified as empty links by the WAVE tool. The sidebar includes sections like "All files", "Favorites", "Shares", "Projects", "Deleted files", "HPC Data", and "Documents".

The word "removes" is written in the center, with an orange arrow pointing from the code editor to the WAVE tool, indicating the action being taken.

# Example 4: Missing form input labels

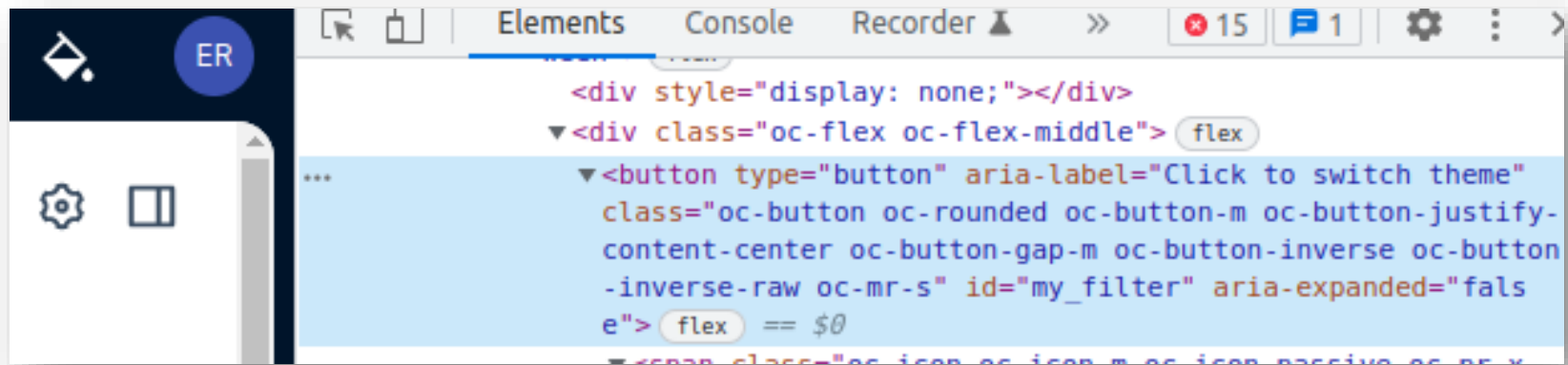
- Programmatically include in labels as required attribute

The screenshot displays the CERNBox web interface. A modal dialog titled "Rename folder Presentations" is open, featuring a text input field with the current folder name "Presentations" and "Cancel" and "Rename" buttons. The background shows a file list with columns for Name, Shares, Size, Modified, and Actions. On the right, the browser's developer tools are open, showing the HTML structure of the dialog and the CSS styles applied to the input field, including a missing `aria-label` attribute.

```
HTML * {  
  font-family: var(--oc-font-family);  
}  
div {  
  display: block;  
}  
Inherited from div.oc-modal-body  
.oc-modal-body {  
  background-color: var(--oc-color-background-default);  
  border: 1px solid var(--oc-color-swatch-brand-default);  
  border-bottom-left-radius: 15px;  
  border-bottom-right-radius: 15px;  
  box-shadow: 5px 8.25px #0000004d;  
  color: var(--oc-color-text-default);  
  padding: var(--oc-space-medium);  
}  
Inherited from body  
body, h1, h2, h3, h4, h5, h6, p {  
  color: var(--oc-color-text-default);  
}  
Inherited from html.wf-inter-n4-active.wf_  
style attribute {  
  --oc-color-background-highlight: #edf3fa;  
  --oc-color-background-secondary: #ffffff;  
  --oc-color-background-hover: #f8f8f8;  
  --oc-color-input-bg: #f0f4f8;  
  --oc-color-swatch-brand-default: #03142b;  
  --oc-color-swatch-brand-hover: #03142b;
```

# Example 5: Empty buttons (buttons as an image or icon without text)

- A lot of "image only" buttons
- Programmatically include aria labels as required attributes





# Example 6: Missing document language

The screenshot shows a web browser displaying the CERNBox account management page. The page title is "Compte" and it contains a section for "Informations de compte". The user's name is "Elizaveta Ragozina" and their email is "elizaveta.ragozina@cern.ch". The language is set to "Français". A developer tools window is open on the right, showing the HTML structure. The root element is a `<html lang="fr" class="...">` tag, where the `lang="fr"` attribute is highlighted with a red box. This indicates that the document language is explicitly set to French, which contradicts the example title "Missing document language".

**Compte**

**Informations de compte**

Nom d'utilisateur  
ragozina

ID utilisateur  
ragozina

Afficher le nom  
Elizaveta Ragozina

Email  
elizaveta.ragozina@cern.ch

Language  
Français

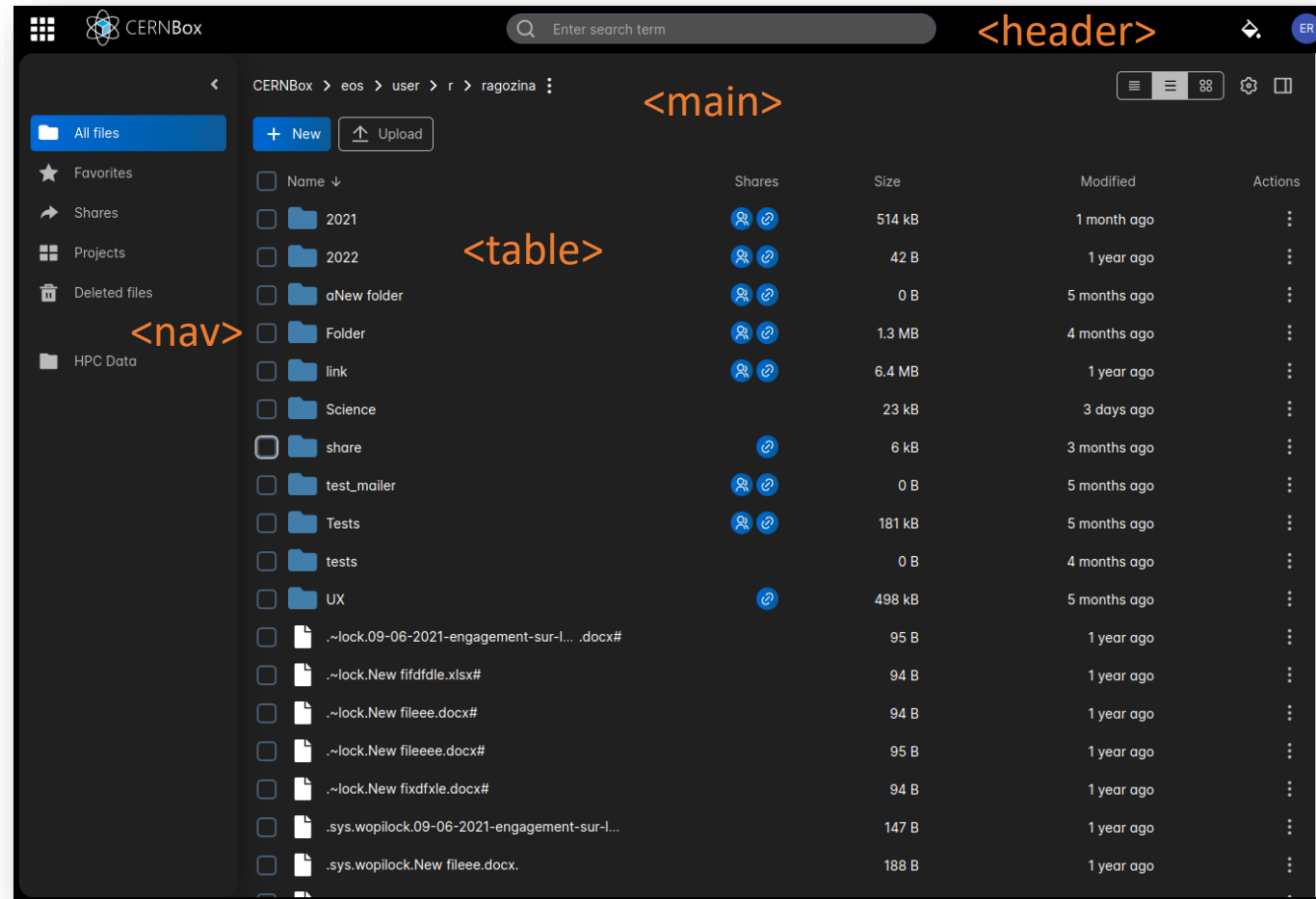
```
<!DOCTYPE html>  
<html lang="fr" class="...>  
  <head>...</head>  
  <body cz-shortcut-lis...>  
    <div id="splash-inc...>  
      <div id="splash-loa...>  
        <div id="owncloud" ...>  
          <div id="web">  
            <span id="ch18ax...>  
              live="polite" ar...>  
            </div>  
          </div>  
        </div>  
      </div>  
    </div>  
  </body>  
</html>
```

# Example 10: Repetitive links

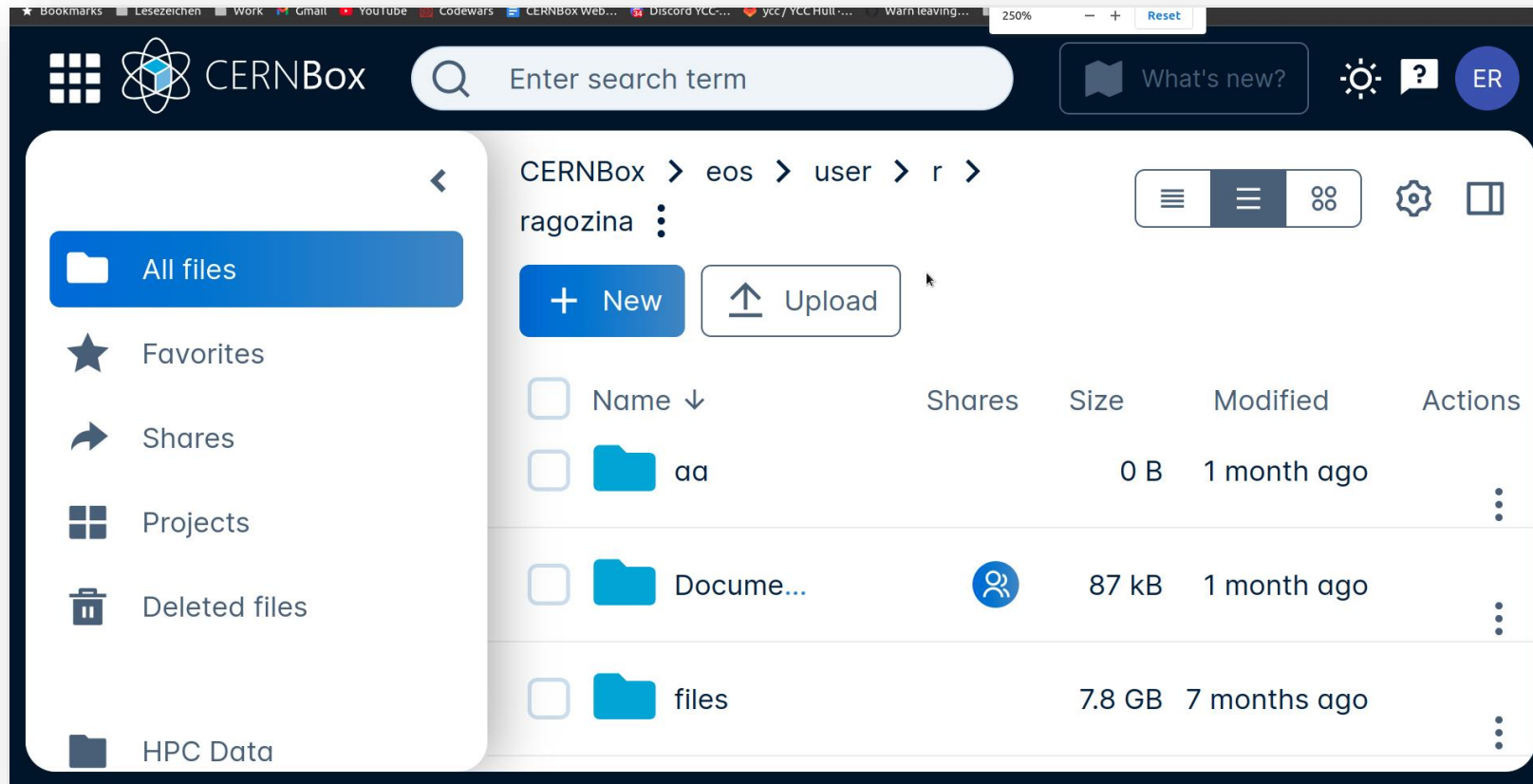
The image shows a screenshot of the CERNBox web interface. The main content is a file list table with columns for Name, Shares, Size, Modified, and Actions. The file list includes various documents and spreadsheets, such as 'no-versions-webconflict-2...docx', 'New file.zmd', 'New file.xlsx', 'New file.vsd', 'New file.txt', 'New file.root', 'New file.odt', 'New file.md', 'New file.docx', 'New file-webconflict-2023...docx', 'New file (3).xlsx', 'New file (2).xlsx', 'New file (1).txt', 'manage\_your\_files.pdf', 'main.ipynb', 'Jupyter Notebook Users ... .ipynb', and 'FR A1 U2 (1).pdf'. A tooltip is visible over the 'New file.txt' row, showing a share link: 'button#files-sharing-eoshome-r2707947.oc-button.oc-rounded.oc-button-moc-button-just...'. On the right side, the browser's developer tools are open, showing the HTML structure of the page. A red box highlights a specific button element in the DOM tree: '<button type="button" aria-label="Show invited people for resource 'New file.docx"' class="oc-...'. This illustrates repetitive links in the interface.

Name	Shares	Size	Modified	Actions
no-versions-webconflict-2...docx		10 kB	1 month ago	
no-versions-webconflict-2...docx		10 kB	1 month ago	
New file.zmd		0 B	8 months ago	
New file.xlsx		23.39 × 23.39	1 month ago	
New file.vsd			1 month ago	
New file.txt		34 B	1 month ago	
New file.root		0 B	1 year ago	
New file.odt		0 B	1 year ago	
New file.md		0 B	1 year ago	
New file.docx		10 kB	1 month ago	
New file-webconflict-2023...docx		10 kB	1 month ago	
New file (3).xlsx		0 B	9 months ago	
New file (2).xlsx		0 B	9 months ago	
New file (1).txt		0 B	1 month ago	
manage_your_files.pdf		329 kB	5 months ago	
main.ipynb		197 kB	7 months ago	
Jupyter Notebook Users ... .ipynb		87 kB	1 year ago	
FR A1 U2 (1).pdf		29.7 MB	1 year ago	

# Example 11: Semantic HTML



# Example 12: Zoom causing horizontal scrolling, overlap or non-visible text





Still a lot to do...

We can always  
improve!