# **How the PDF Merge Tool Works**

## 1. Page Overview

The HTML page provides a form to upload multiple PDF files, merge them into one, download the result, and preview it in the browser.

### 2. HTML Elements

- <input type='file'>: Lets users upload multiple PDF files.
- <button>: Starts the merging process.
- <a>: Becomes a download link after merging.
- <iframe>: Shows the preview of the merged PDF.

# 3. CSS Styling

The CSS gives the page a clean layout, centers content, styles the button, and hides the preview and download link until needed.

# 4. JavaScript Functionality

JavaScript listens for the 'Merge PDFs' button click. It reads all selected PDFs, uses PDF-lib to merge them, then creates a blob to preview and download the result.

#### 5. PDF Merging Logic

- Creates a new PDF using PDF-lib.
- Loops through each uploaded file.
- Reads the file, loads its pages, and adds them to the merged PDF.
- Converts final PDF to a downloadable blob.

#### 6. Output

After merging:

- The 'Download Merged PDF' link becomes active.
- A preview of the final PDF is shown in the iframe.

- The 'Merge PDFs' button is reset for new operations.