Project Description: ALOHA Bangladesh Classroom Supplies Requisition System

Overview

The **ALOHA Bangladesh Classroom Supplies Requisition System** is a web-based application designed to streamline the process of requesting and managing classroom supplies for ALOHA Bangladesh branches. The system allows authorized users to create requisition slips, generate PDFs, upload them to Google Drive, and log the details in a Google Sheet for tracking and record-keeping.

This project leverages **Google Apps Script** for backend functionality, **HTML/CSS** for the frontend interface, and **Google Drive/Sheets** for storage and logging. The system is user-friendly, efficient, and ensures that all requisition data is securely stored and easily accessible.

Key Features

1. **Requisition Form:**
    - Users can fill out a dynamic form to request classroom supplies.
    - The form includes fields for:
        - Branch Name and Branch Code (dropdown selections).
        - Course Type, Item, Level, Batch No, Quantity, and Remarks (dynamic rows).
    - Users can add or remove rows as needed.
2. **PDF Generation:**
    - The system generates a professional PDF requisition slip based on the form data.
    - The PDF includes:
        - ALOHA Bangladesh branding (logo and title).
        - Requisition details (branch information, course type, items, quantities, etc.).
        - A signature section for authorization.
3. **Google Drive Integration:**
    - The generated PDF is automatically uploaded to a specified Google Drive folder.
    - The PDF is named using a unique requisition number for easy identification.
    - The PDF is shared with a public link for accessibility.
4. **Google Sheets Logging:**
    - All requisition details are logged in a Google Sheet for record-keeping.
    - The log includes:
        - Requisition Number.
        - Branch Name and Branch Code.
        - Date and Time of Requisition.
        - Google Drive link to the uploaded PDF.

5. **Dynamic Form Management:**
    - Users can add or remove rows dynamically to accommodate multiple items in a single requisition.
    - The form validates all required fields before submission.
6. **Error Handling and Success Messages:**
    - The system provides clear error messages for issues such as:
        - Failed PDF generation.
        - Google Drive upload failures.
        - Google Sheets logging errors.
    - Success messages are displayed upon successful completion of the requisition process.
7. **User-Friendly Interface:**
    - The interface is designed using **Tailwind CSS** for a modern and responsive layout.
    - The form is intuitive and easy to use, even for non-technical users.

Technical Stack

1. **Frontend:**
    - HTML5 for structure.
    - Tailwind CSS for styling.
    - JavaScript for dynamic form functionality and interaction with Google Apps Script.
2. **Backend:**
    - Google Apps Script for:
        - Generating PDFs.
        - Uploading files to Google Drive.
        - Logging data in Google Sheets.
    - Utilities for base64 encoding/decoding and blob handling.
3. **Storage:**
    - Google Drive for storing PDF requisition slips.
    - Google Sheets for logging requisition details.

Workflow

1. **Form Submission:**
    - The user fills out the requisition form and clicks "Save as PDF."
    - The form data is validated and sent to the backend.

2. **Backend Processing:**
    - A unique requisition number is generated.
    - The data is saved to Google Sheets.
    - A PDF is generated and uploaded to Google Drive.
    - The Google Drive link is logged in Google Sheets.
3. **User Feedback:**
    - The user receives a success message and can download the PDF.
    - If any step fails, the user is notified with an error message.

Benefits

1. **Efficiency:**
    - Automates the requisition process, reducing manual effort.
    - Eliminates the need for paper-based requisition slips.
2. **Transparency:**
    - All requisitions are logged in Google Sheets for easy tracking and auditing.
    - PDFs are stored in Google Drive with shareable links.
3. **Scalability:**
    - The system can handle multiple branches and requisitions simultaneously.
    - New branches or items can be added easily.
4. **Accessibility:**
    - The system is web-based and accessible from any device with an internet connection.

Future Enhancements

1. **Email Notifications:**
    - Send email notifications to relevant stakeholders upon requisition submission.
2. **User Authentication:**
    - Add login functionality to restrict access to authorized users.
3. **Advanced Reporting:**
    - Generate reports on requisition trends, branch-wise usage, etc.
4. **Mobile Optimization:**
    - Optimize the form for mobile devices for on-the-go access.

Conclusion

The **ALOHA Bangladesh Classroom Supplies Requisition System** is a robust and efficient solution for managing classroom supply requests. It combines the power of Google Apps Script, Google Drive, and Google Sheets to provide a seamless experience for users while ensuring data integrity and accessibility. This system is a significant step toward digitizing and streamlining ALOHA Bangladesh's administrative processes.