Daily Bulletin

General Summary & Table Of Contents

Table of Contents

The Daily Bulletin Staff Page is a part of a staff only google site. It can be found at: sites.google.com/isd391.org/cleveland-staff-site

It is only available to members of the cps-staff@isd391.org email group.

The bulletin page itself is provided to the google site by a google apps script deployed as a web app. It formats and displays the data in the spreadsheet at: docs.google.com/spreadsheets/d/1ITgzDy-8jQq2Ss_P0UEWisbmvRJ7NL0oBoKv1p_Fdvs To make edits to this spreadsheet you must be a member of the DailyBulletin-Group@isd391.org email group.

It pulls event information from two calendars, the Cleveland Staff Only calendar (https://calendar.google.com/calendar/embed?src=cleveland%40cleveland.k12.mn.us&ctz=America%2FChicago) and the Cleveland Community calendar (https://calendar.google.com/calendar/embed?src=c_7ueu4b0leo6otmfp8rkam08b94%40group.calendar.google.com&ctz=America%2FChicago). Staff can request events be added via the **Announcements & Events** google form linked on the Daily Bulletin page.

Yearly maintenance must be done each summer to populate the next years school dates and birthdays. See Yearly Maintenance on **Page 7**

The **webmaster@isd391.org** account is the owner of the entire project. (Google Sheet, Google Apps Script, Google Site, Google Forms, & Google Cloud)
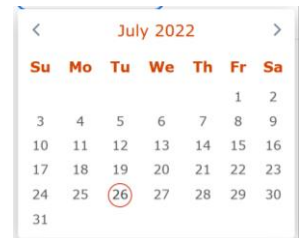
Daily Bulletin
Main Page

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a) Date Selector: It has a popup calendar widget (shown right). Upon selecting a date, the information for that date is fetched and the Data Fields are updated.

b) Refresh Button: Upon clicking this the information for the date selected in *a* is fetched again, and the Data Fields are updated.

c) Print Button: See *Printing* on Page 5 for more information.

d) Edit Data Button: Shown only to members of the *DailyBulletin-Group@isd391.org* email group. It links to the Google Sheet that holds the data for each day. See *Data Entry* on Page 3 for more information.

e) Change Request Button: It is shown to all users. It takes users to a Google Form that allows them to add announcements and request changes to bulletins and the events calendar. For more information, see *Announcement & Event Form* on Page 6.

f) Birthdays – Data Field: A field that is filled with data from the Daily Bulletin Google Sheet.

g) Staff Out – Data Field: A field that is filled with data from the Daily Bulletin Google Sheet.

h) Upcoming Events: This displays 4 months of events starting from the date selected in *a*. It shows both the "Cleveland Website Calendar" and the "Cleveland School – Staff Only" calendar. The links at the bottom allow users to subscribe to the two calendars in Google Calendars. For more information on this feature see *Code Summary* on Page X

i) Announcements – Data Field: A field that is filled with data from the Daily Bulletin Google Sheet.

Daily Bulletin
Data Entry

All the data for the daily bulletin is stored in Google Sheets. This spreadsheet can be accessed by members of the DailyBulletin-Group@isd391.org email group through the **Edit Spreadsheet Data** button in the upper righthand corner of the Daily Bulletin page. Below is a description of the various sections of the spreadsheet:

a) The date column is automatically populated during the yearly setup. Every weekday during the school year is added, holidays can be manually deleted if desired.

b) The staff out column is used to let staff know who is gone that day, who is covering their classes, and what times still need to be covered. It is manually entered and updated for each day. Each staff entry should be separated by a blank line to improve readability.

c) The birthday column is automatically populated during the yearly setup. Summer birthdays are listed on their half birthdays and weekend birthdays are placed on the following Monday. The only time this column must be manually edited is to move birthdays listed on days without school and when new students join after the yearly setup.

d) Staff can submit announcements to be added automatically through the **Add, Edit, or Remove Announcements & Events** form linked from the daily bulletin page. In addition to these automatically added announcements, members of the daily bulletin email group can edit the announcement data directly in the sheet to add, correct, or remove announcements.

e) See next Page

Daily Bulletin
Data Entry

e) The spreadsheet has three visible tabs and one hidden tab. The Bulletin_Data tab holds all the future bulletins and the current day's bulletin. The Archived_Bulletins tab holds all the previous bulletin data. Each night the current day's bulletin is moved to the Archived_Bulletins tab. The Birthday_Data tab is only used during the yearly setup and is not needed for any other time. Adding birthdays to it will not automatically add them to the corresponding bulletin, unless the yearly setup functions are run again. The hidden tab is the responses from the **Add, Edit, or Remove Announcements & Events** form. It is attached to the spreadsheet so that it's script can interact with the bulletins to add announcements. This tab doesn't ever need to be accessed as any relevant information that is submitted to it is processed, reformatted, and either added automatically or emailed to the DailyBulletin-Group@isd391.org email group

Daily Bulletin

Printing
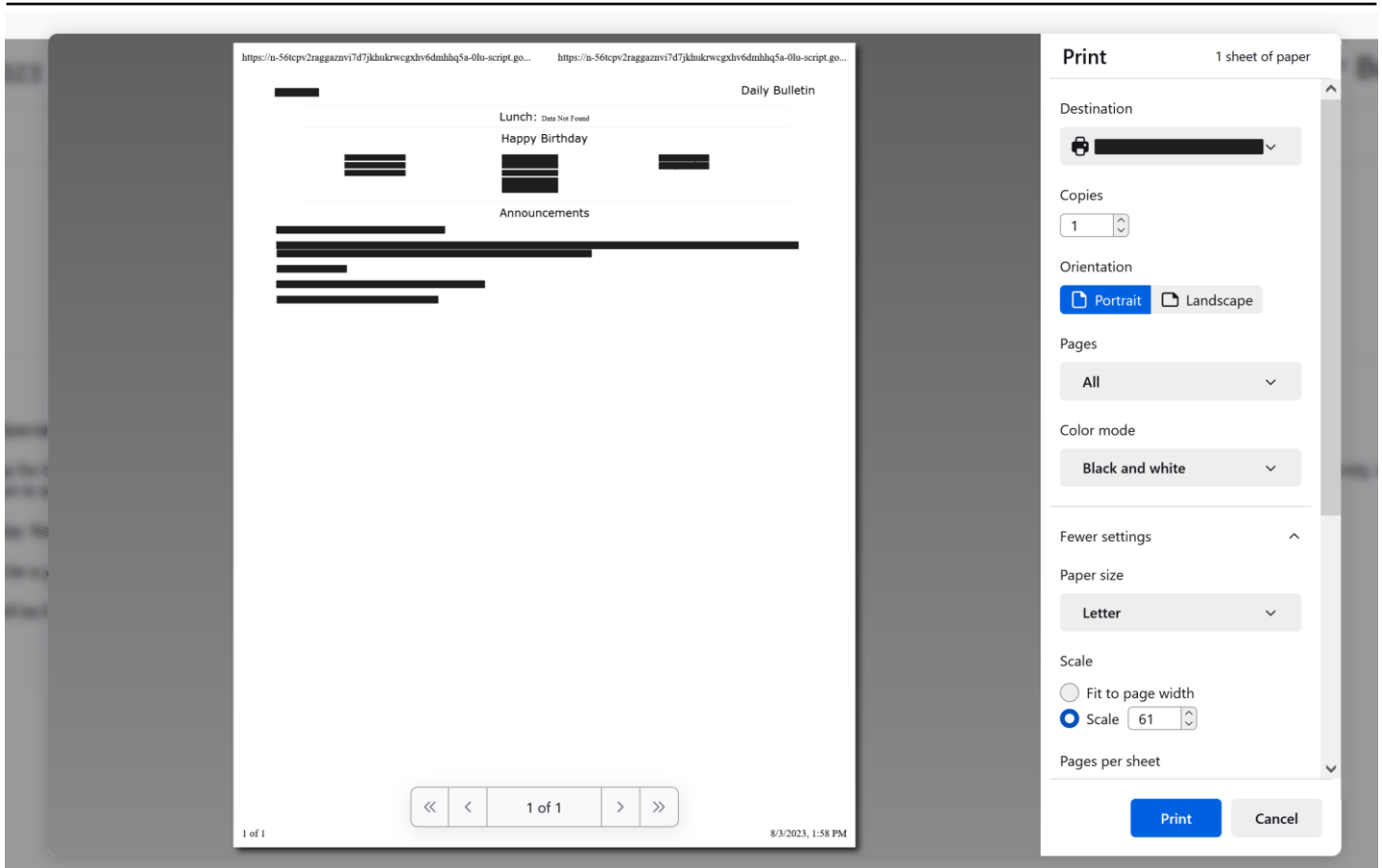
After clicking on the print icon 🖨 on the main page, a JavaScript function is triggered. That function creates a new page, adds the Announcements, Birthdays, and Lunch menu to it, then opens the print dialog. After printing the new page is closed automatically, bringing you back to the daily bulletin. Because it gets printed off daily, styling is kept to a minimum in order to use the least amount of paper and ink. The staff out of building section is left off for privacy, as the printout is handed to students. The calendar is left of simply for space reasons, it used more much paper and cluttered the printout.

Daily Bulletin

Announcement & Event Form

The Announcement & Event Form allows staff members to add announcements and events to the daily bulletin and request changes to existing announcements or events. Some of this process is automated, but parts must be done by hand. If a staff member submits the form to add a new announcement, the announcement will be added automatically. If they make any other selection regarding announcements, the request will be sent to the DailyBulletin-Group@isd391.org email group to be completed manually. If a staff member submits the form to add a new event to the Cleveland Community Calendar (visible on the daily bulletin & isd391.org) the request is added to a moderation google form. The DailyBulletin-Group@isd391.org then receives an email with a link asking them to review the request. If they approve the request, its automatically added to the calendar. If a staff member submits the form to add a new event to the Staff Only calendar (visible only on the daily bulletin) it is automatically added without a review process. For any other request, the DailyBulletin-Group@isd391.org email group receives a notification email containing the request details. They then must manually complete the request.

Daily Bulletin
Yearly Setup

1) Open the **Daily Bulletin**

2) Click **Edit Spreadsheet Data** in the upper right corner.

Note: If you don't see this button, make sure you are signed in under an account that is part of the group **DailyBulletin-Group@isd391.org**

3) Select the **Birthday_Data** tab

4) Paste in the birthday data of all current students. The following data should be included in order: **Last Name**, **First Name**, **Grade**, **Birthdate**. Birthdate should be formatted like 1/6/2013

5) In a separate browser, container, or private window (Important!) log into **script.google.com** as webmaster@isd391.org

6) Click **My Projects** in the menu on the right.

7) Open **Daily Bulletin Website & Spreadsheet Scripts**

Daily Bulletin
Yearly Setup

8) Ensure the **Yearly Setup Script** tab is selected

9) Update **School_Start_Date** and **School_End_Date** to match the District Calendar for the coming year.

10) Highlight the commented-out code labeled **Uncomment When Needed**. Hit **ctrl** +**/** to uncomment the code.
Note: this code is a function called **fill_bulletin_days_School_Year** and is found near lines 9-25.

11) Hit **ctrl** + **s** to save

12) Open the dropdown menu between **Debug** and **Execution Log**

13) Select **fill_bulletin_days_School_Year**
Note: If this does not appear as an option, make sure that you have saved since uncommenting the code.

14) Click **Run**

The **Execution Log** window will open, and the code will run for a couple minutes. When it is done it will display a yellow highlighted notice saying **Execution Complete**

15) Open the dropdown menu

16) Select **load_birthdays**

17) Click **Run**

The code should only run very quickly and when it is done it will display a yellow highlighted notice saying **Execution Complete**

18) Highlight the code from *Step 10* again. Hit **ctrl** +**/** then **ctrl** + **s** to re-comment it out and save it.

Daily Bulletin

Technical Summary

Introduction

In total the Daily Bulletin System involves an Apps Script project, a Google Site, a Google Sheet, two Google Forms, and a Google Cloud project. It also uses the cps-staff@isd391.org and DailyBulletin-Group@isd391.org email groups to sort and verify users.

Google Apps Script

The Daily Bulletin code is held in a Google Apps Script project linked to the Daily Bulletin Spreadsheet. It can be accessed at script.google.com or via the spreadsheet under Extensions > Apps Script (Login as webmaster@isd391.org for either method). It's named **Daily Bulletin Website & Spreadsheet Scripts**.

The Apps Script project contains 7 Google Script files and 3 HTML files. The project is published as a web app, which is loaded inside an iframe on the Daily Bulletin Google Site. It was implemented as a web app to allow us more control of the layout and functionalities of the daily bulletin. In the following section, **Code Summary**, each file will be gone over individually.

Google Site

The site is named **Cleveland Staff Site**. Its home page is the Daily Bulletin page, but it has also had other useful pages and links. The published site is set to only be available to the cps-staff@isd391.org email group, this allows most of user authentication to be offloaded onto Google. The only item on the Daily Bulletin page is an embedded URL to the Apps Script project's web app. This embedded block was made very tall so that it never clipped off announcements, even if the list got very long.

Google Sheet & Google Forms

The Google Forms and Google Sheet are addressed in more depth in the **Announcement & Event Form** and **Data Entry** sections of this document. The forms are titled **Daily Bulletin Add/Edit/Delete** and **Daily Bulletin Events Approval**. The first is available to all staff to submit information for the bulletin. The second is sent out to the DailyBulletin-Group@isd391.org email group when a staff member submits an event they want added to the public calendar. This allows for moderation to catch duplicate events and events that should be on the private calendar vs the public one. The Google Sheet is named **Daily Bulletin** and is the storage place for all the projects data.

Google Cloud Project

The Cloud project is named **Daily Bulletin**. It is linked with the Google Apps Script project for authentication and sets up the Google Calendar API for the Upcoming Events section of the bulletin to use.

Daily Bulletin

Code Summary

Yearly Setup Script.gs

The purpose of the code within this file is to set the daily bulletin up for the new school year. Detailed instructions on how to complete that setup can be found under the **Yearly Setup** section of this document. The file has 2 executable functions (**fill_bulletin_days_School_Year** & **load_birthdays**) and many helper functions.

fill_bulletin_days_School_Year: This function takes the start and end dates provided as global constants and appends a new row to the Bulletin_Data sheet for each weekday between those dates. The only data that the new row contains is the date the row is for.

load_birthdays: This function loads in the data in the Birthday_Data spreadsheet and all the filled in dates on the Bulletin_Data spreadsheet. First it sorts out summer birthdays. Then it checks all the remaining birthdays against the list of bulletin dates and places any birthday on its matching date. Birthdays that don't match are placed on the first bulletin date after they happened. Summer birthdays are converted to their half birthdays, labeled, and then have the same process applied to them. After all the birthdays are placed the data is written back to the spreadsheet.

Archive Scripts.gs

These functions run nightly from 3am-4am to remove the previous days bulletin. It takes the old data from the bulletin_data sheet and copies it to the top of the archive sheet to store for future reference.

Form Submission Handler.gs

These functions handle submissions to the **Announcement & Event Form** (Also referred to as the Daily Bulletin Add/Edit/Delete Form). The code tries to automatically create announcements with the **autoAddAnnouncement_** function and calls the **handleCalendarAddition_** function defined in **Calendar Approval Handler.gs** to try to add calendar events. If the request is for anything other than adding an announcement or adding an event, or if the automatic processes fail, an email is formed and sent to the DailyBulletin-Group@isd391.org email group. This email contains all the information needed to fulfill the requests.

autoAddAnnouncement_: This function takes in a form response and loads the data for all future bulletins. It checks whether the announcement is for a single day or multiple days and adds the announcement to all the days its supposed to be on. Then it writes that data back to the spreadsheet.

Daily Bulletin
Code Summary

Calendar Approval Handler.gs

This file contains all the functions needed to handle the addition and moderation of new calendar events. It has two access point. The first is **handleCalendar Addition_** which is called from **Form Submission Handler.gs** when someone requests a new event be added. The second is **onApprovalFormTriggerSubmit** which is triggered when someone submits a response to the **Daily Bulletin Events Approval** Google Form.

handleCalendar Addition_: This function processes the form submission passed to it from the **Form Submission Handler.gs** file. If the request is for the staff only calendar, it automatically adds it to the calendar. If the request is for the public community calendar the event is added to a moderation form and an email is sent to the moderators requesting approval for the event.

onApprovalFormSubmit_: This function handles the approval form responses. For any accepted events it adds them to the events calendar. For rejected events and events that are going to be manually added it just removes them from the form.

Web App Data Sender.gs

This file contains main functions for the web app deployment. It includes the function that serves the html pages as well as the function the retrieves bulletin data for the requested day.

doGet: This function is the default function to handle a get request for a web app. As our site is only serving data to users, it only needs to handle get requests. First it checks if the user is a part of the cps-staff@isd391.org email group. If the user is not, it returns the **DenyAccess.html** file. This is just an extra layer of security incase someone got ahold of the direct link, as the Google Site also requires you to be signed in as a member of the group. If the user is a member of the staff group, it checks if they are also a member of the DailyBulletin-Group@isd391.org group. This determines whether it fills in the **Edit Spreadsheet Data** button before it sends the **DailyBulletin.html** file to the user.

getJsonData: This function directs bulletin requests to the cache, the Archived_Bulletins sheet, or the Bulletin_Data sheet.

getArchivedBulletinData_ & getBulletinData_: Both functions retrieve a row from their respective spreadsheets. They then process the announcements and turn any links into clickable links before returning the data.

Daily Bulletin
Code Summary

Maintain Cache.gs

This file maintains a cache of the daily bulletins for the next 5 days as well as the bulletin for the current day and the previous day. These bulletins are used the most and by caching them it speeds loading the bulletin. The cache updates every night between 4am and 5am and anytime a change is made to the spreadsheet. It preps the data for each bulletin and stores it as a script property with the date as its key.

DailyBulletin.html

This file holds the html and JavaScript for the main Daily Bulletin page. It is served to the user via **doGet** in **Web App Data Sender.gs**

DenyAccess.html

This file holds the html page that informs users they do not have access. It is served to the user via **doGet** in **Web App Data Sender.gs** when the user is not a part of the cps-staff@isd391.org email group.

FullCalendarIO_ModifiedForOauth.html

This file holds JavaScript that runs the Upcoming Events portion of the daily bulletin. It doesn't use the file hosted on isd391.org because it had to have modifications made to the authentication in order to function through the web app. Credit for the script and base calendar functionality go to https://fullcalendar.io/

GetSportsEvents.gs

This file has been retired.