SheetFormR — OAuth Scope Justification

1. Application Overview

SheetFormR is a Google Workspace Add-on for Google Sheets that converts spreadsheet data into Google Forms and Quizzes. It is designed primarily for educators who need to efficiently create assessments, import class rosters from Google Classroom, track quiz submissions, and synchronize grades — all from within Google Sheets.

SheetFormR supports multiple question types (Multiple Choice, Checkbox, Grid, Short Answer, Paragraph, Dropdown, Linear Scale, Date, Time, Section Headers), quiz mode with auto-grading, image embedding, AI-powered question generation (Forge AI), AI-powered question improvement (Polish), Google Classroom integration (roster import and assignment creation), and Grade Sync for tracking student submissions against class rosters.

Privacy principle: SheetFormR requests the minimum scopes necessary for each feature. Where a narrower scope exists (e.g., *spreadsheets.currentonly* instead of *spreadsheets*), SheetFormR uses the narrower scope. Classroom and AI features are entirely opt-in — scopes related to these features are only exercised when the user explicitly initiates the corresponding action.

2. Scope Summary

Scope	Sensitivity	User Action Required
Container UI	**Sensitive**	Always active
Google Forms	**Non-sensitive**	Always active
Google Forms REST API (forms.body)	**Sensitive**	User-initiated only
Current Spreadsheet Only	**Non-sensitive**	Always active
User Email Address	**Non-sensitive**	Always active
External Network Requests	**Sensitive**	Always active
Classroom Courses (Read-only)	**Non-sensitive**	User-initiated only
Classroom Rosters (Read-only)	**Non-sensitive**	User-initiated only
Classroom Coursework (Students)	**Non-sensitive**	User-initiated only
Classroom Student Email Addresses	**Sensitive**	User-initiated only

| Locale | Non-sensitive | Always active |

3. Detailed Scope Justifications

3.1 Container UI

`https://www.googleapis.com/auth/script.container.ui`

Sensitivity: Sensitive

Purpose
Display the SheetFormR sidebar and modal dialogs within Google Sheets.

How It Is Used
- Renders the main SheetFormR Builder sidebar (HtmlService.createTemplateFromFile) where users configure column mappings, toggle quiz settings, and initiate form creation.
- Displays wide-format modal dialogs for form preview and the Forge AI interface.
- Shows native alert dialogs for license denial messages and confirmation prompts via SpreadsheetApp.getUi().

Why This Scope Is Necessary
This is the only way for a Google Workspace Add-on to present a user interface inside Google Sheets. Without it, SheetFormR would have no way to interact with the user.

Source Files
UI.js (lines 66-70), License.js (line 166)

3.2 Google Forms

`https://www.googleapis.com/auth/forms`

Sensitivity: Non-sensitive

Purpose
Create and configure Google Forms and Quizzes from the user's spreadsheet data.

How It Is Used
- Creates new Google Forms via FormApp.create() with user-specified titles, descriptions, and settings.
- Adds questions of all supported types: Multiple Choice, Checkbox, Short Answer, Paragraph, Dropdown, Linear Scale, Grid, Date, Time, and Section Headers.
- Configures quiz mode (setIsQuiz), shuffle settings, required fields, response collection (setCollectEmail, setRequireLogin), and links the Form's response destination to the current spreadsheet.
- Embeds images in Forms from user-provided URLs or Google Drive links.

Why This Scope Is Necessary
This is the core scope that enables SheetFormR's primary function: converting spreadsheet data into Google Forms. The standard FormApp service handles form creation, question building, and most quiz settings.

Source Files
FormBuilder.js (lines 509-900+), DriveHelpers.js

3.3   Google Forms REST API (forms.body)

`https://www.googleapis.com/auth/forms.body`

Purpose

Apply correct answers and point values to Grid-type quiz questions, and read form structure for grade synchronization.

How It Is Used

• **Grid question answer keys:** Google's FormApp service (the standard *forms* scope) does not support setting correct answers or point values on Grid question rows. The Forms REST API (forms.googleapis.com/v1/forms) is the only way to programmatically apply per-row answer keys and point values to Multiple Choice Grid and Checkbox Grid questions. SheetFormR reads the form structure to find Grid item IDs, then sends a batchUpdate request to set grading metadata.

• **Text-based answer keys:** Similarly, the REST API is used to set correct answers and feedback on Short Answer and Paragraph questions, which FormApp does not fully support for quiz grading.

• **Grade Sync form reading:** The REST API reads the complete form structure (question titles, point values, correct answers) to accurately calculate maximum possible scores for the Grade Sync feature, which matches quiz responses to classroom rosters.

Why This Scope Is Necessary

The standard FormApp service cannot set answer keys or point values on Grid questions. Without forms.body, any quiz containing Grid questions would have no answer key and no auto-grading — a critical gap for educators who use Grid questions for matching, categorization, and matrix-style assessments. This scope is used only for reading form structure and writing answer/grading metadata; it never modifies question text or form settings.

Source Files

GridAnswerAPI.js (lines 26, 184), TextAnswerAPI.js (lines 26, 130), ResultsSheet.js (lines 175, 242)

3.4   Current Spreadsheet Only

`https://www.googleapis.com/auth/spreadsheets.currentonly`

Sensitivity: Non-sensitive

Purpose
Read data from and write results to the currently open Google Spreadsheet only.

How It Is Used
• Reads question text, answer choices, column headers, and configuration from the active sheet to build Google Forms.

• Writes Forge AI-generated questions back into a designated sheet within the current spreadsheet.

• Writes Grade Sync results (student scores, submission status) into a results sheet within the current spreadsheet.

• Stores and retrieves user preferences (column mappings, toggle states) via spreadsheet properties.

Why This Scope Is Necessary
SheetFormR deliberately uses *spreadsheets.currentonly* rather than the broader *spreadsheets* scope. This ensures the add-on can only access the spreadsheet the user currently has open — it cannot read or modify any other spreadsheets in the user's account. This is the minimum-privilege scope for a Sheets add-on.

Source Files
FormBuilder.js, ForgeAI.js, Storage.js, ResultsSheet.js, RosterTools.js, Helpers.js

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3.5   User Email Address

`https://www.googleapis.com/auth/userinfo.email`

Sensitivity: Non-sensitive

Purpose
Identify the current user for license verification and subscription management.

How It Is Used
• **License verification:** Before each form build, SheetFormR calls Session.getActiveUser().getEmail() and sends the email to our Firebase Cloud Function (checkLicense) to verify whether the user has an active trial, pro subscription, or permanent license. The email is transmitted over HTTPS and is used only as a lookup key in our Firestore database.

• **Stripe checkout:** When a user initiates a subscription upgrade, their email is sent to our createCheckoutSession Cloud Function to create a Stripe checkout session pre-filled with the correct customer record.

• **AI feature gating:** The Forge AI and Polish features send the user's email to the respective Cloud Functions to verify license status before processing AI requests.

Why This Scope Is Necessary
SheetFormR is a paid product with a free trial. The user's email is the only stable, unique identifier available in Google Apps Script for associating a user with their subscription record. Without this scope, SheetFormR cannot determine whether a user is on a trial, has an active subscription, or needs to upgrade — making the entire licensing and payment system non-functional. The email is never used for marketing, analytics, advertising, or any purpose beyond license verification and checkout.

Source Files
License.js (lines 23, 227, 264), ForgeAI.js (line 23), Polish.js (line 35), FormBuilder.js (line 26)

3.6 External Network Requests

`https://www.googleapis.com/auth/script.external_request`

Sensitivity: Sensitive

Purpose

Make HTTPS requests to SheetFormR's own backend services and approved third-party services.

How It Is Used

• **SheetFormR Cloud Functions (Firebase/Cloud Run):** License verification (checkLicense), AI question generation (generateQuizContent), AI question polishing (polishQuestions), and Stripe checkout session creation (createCheckoutSession). All hosted on Google Cloud infrastructure.

• **Google Forms REST API:** Direct HTTPS calls to forms.googleapis.com for Grid answer key operations (see forms.body scope above).

• **Google Drive image download:** When users provide a Google Drive sharing URL as an image source, SheetFormR converts it to a direct download URL (drive.google.com/uc?export=download) and fetches the image blob for embedding in the Form. SheetFormR does not browse, list, or access any other files in the user's Drive.

• **Equation rendering (Math Mode only):** When the user enables Math Mode in Forge AI, LaTeX expressions are sent to CodeCogs (latex.codecogs.com) or i.upmath.me to generate equation images. Only mathematical notation is transmitted — no personal or student data.

Why This Scope Is Necessary

SheetFormR's licensing, AI features, payment processing, and advanced Forms operations all require outbound HTTPS calls. Every external endpoint is explicitly whitelisted in appsscript.json's urlFetchWhitelist. No requests are made to any domains outside this whitelist.

Source Files

License.js, ForgeAI.js, Polish.js, GridAnswerAPI.js, TextAnswerAPI.js, DriveHelpers.js, Helpers.js, ResultsSheet.js

3.7   Classroom Courses (Read-only)

`https://www.googleapis.com/auth/classroom.courses.readonly`

Sensitivity: Non-sensitive

Purpose

List the teacher's Google Classroom courses so they can select which class(es) to import rosters from or assign quizzes to.

How It Is Used

- • Called only when the teacher explicitly opens the Classroom Roster Import modal or the Create Classroom Assignment feature.
- • Retrieves course names and IDs via Classroom.Courses.list() and Classroom.Courses.get() to populate a dropdown selector.
- • No course content, materials, announcements, or grades are accessed — only the course name and ID.

Why This Scope Is Necessary

Teachers need to select a specific course before importing rosters or assigning quizzes. This scope provides the course list for that selection. It is read-only and never modifies any course settings.

Source Files

ClassroomHelpers.js (line 21), RosterTools.js (lines 47, 126, 184)

3.8   Classroom Rosters (Read-only)

`https://www.googleapis.com/auth/classroom.rosters.readonly`

Sensitivity: Non-sensitive

Purpose

Import student names from selected Google Classroom courses into a roster sheet within the current spreadsheet.

How It Is Used

- • Called only when the teacher explicitly clicks 'Import Roster' after selecting one or more courses.
- • Retrieves student names and profile identifiers via Classroom.Courses.Students.list() for the selected course(s) only.
- • Student data is written directly into a sheet in the teacher's current spreadsheet. It is never transmitted to any external server, API, or third-party service.
- • The roster sheet is used for Grade Sync (matching quiz responses to students) and is entirely under the teacher's control within their own Google Sheets document.

Why This Scope Is Necessary

Teachers use this to build class rosters without manually typing every student's name. The imported roster is then used to track quiz completion and sync grades. This is read-only — SheetFormR never modifies Classroom roster data.

Source Files

RosterTools.js (lines 131, 223)

3.9 Classroom Coursework (Students)

`https://www.googleapis.com/auth/classroom.coursework.students`

Sensitivity: Non-sensitive

Purpose

Create quiz assignments in Google Classroom that link directly to the Google Form the teacher just built.

How It Is Used

- • Called only when the teacher explicitly enables the 'Create Classroom Assignment' toggle and completes a form build.
- • Creates a single CourseWork item in the selected course with the Form URL attached as a link material. The assignment includes the teacher-specified title, description, topic, point value, and optional due date.
- • SheetFormR converts any /edit Form URL to a /viewform URL before attaching, so students receive the respondent view rather than the editor view.
- • This scope does NOT read, modify, or delete any existing coursework, student submissions, or grades. It is used exclusively to create new assignments.

Why This Scope Is Necessary

This is the only scope that allows programmatic creation of Classroom assignments. Without it, teachers would need to manually create an assignment in Google Classroom and paste the Form URL every time they build a quiz — defeating the purpose of an integrated workflow. SheetFormR uses this scope in the most limited way possible: creating a single new assignment with a link to the Form. It never reads student submissions, modifies existing assignments, or accesses grades through this scope.

Source Files

ResultsSheet.js (line 1542)

3.10 Classroom Student Email Addresses

`https://www.googleapis.com/auth/classroom.profile.emails`

Sensitivity: Sensitive

Purpose

Retrieve student email addresses during roster import for use as a unique matching key in Grade Sync.

How It Is Used

> • Called only during roster import when the teacher explicitly requests it.

> • Student email addresses are retrieved via Classroom.UserProfiles.get() and written into the roster sheet in the teacher's spreadsheet.

> • Email addresses serve as the stable unique identifier for matching roster entries to Google Forms quiz responses. Google Forms collects respondent emails when 'Collect email addresses' is enabled — SheetFormR matches these against the imported roster to track which students have submitted and to sync their scores.

> • Student emails are never transmitted to any external service (not to AI APIs, not to SheetFormR servers, not to any third party). They exist only in the teacher's own spreadsheet.

> • Student emails are never used for marketing, communication, analytics, profiling, or any purpose beyond the roster-to-response matching within the teacher's spreadsheet.

Why This Scope Is Necessary

Google Forms identifies respondents by email address. To match 'which student submitted which response,' the teacher needs both the roster email and the response email in the same spreadsheet. Without this scope, teachers would need to manually type every student's email address into their roster — error-prone and time-consuming for large classes. This is a read-only scope that retrieves only the email field from student profiles.

Source Files

RosterTools.js (line 146)

3.11 Locale

`https://www.googleapis.com/auth/script.locale`

Sensitivity: Non-sensitive

Purpose

View the user's country, language, and timezone for proper locale handling.

How It Is Used

> • This scope is automatically added by the Google Apps Script runtime. SheetFormR does not explicitly request or use this scope in its code.

> • It enables the Apps Script environment to detect the user's locale settings, which may affect date/time formatting in generated Forms.

Why This Scope Is Necessary

This scope is auto-included by Google Apps Script for all bound script projects. It cannot be removed from the manifest. It provides no access to sensitive user data.

Source Files

N/A — auto-included by Apps Script runtime

4. External Endpoints (urlFetchWhitelist)

All outbound HTTP requests are restricted to the domains listed in appsscript.json's urlFetchWhitelist. SheetFormR makes no requests to any domains outside this list.

Domain	Function	Data Transmitted
us-central1-sheetformr-37abf.cloudfunctions.net	checkLicense	License verification — sends user email, receives subscription status.
generatequizcontent-sp6hesnkla-uc.a.run.app	generateQuizContent	Forge AI — sends teacher's prompt + email (for license check), receives generated questions. No student data transmitted.
polishquestions-166801458761.us-central1.run.app	polishQuestions	Polish — sends question text + email (for license check), receives improved question text. No student data transmitted.
createcheckoutsession-sp6hesnkla-uc.a.run.app	createCheckoutSession	Stripe checkout — sends user email, receives a Stripe checkout URL.
latex.codecogs.com	Equation rendering	Math Mode — sends LaTeX notation only, receives PNG image URL. No personal data transmitted.
i.upmath.me	Equation rendering (backup)	Math Mode fallback — sends LaTeX notation only, receives PNG image URL. No personal data transmitted.
forms.googleapis.com	Google Forms REST API	Grid/Text answer keys and form structure reading. Authenticated via the user's OAuth token.
drive.google.com	Drive image download	Fetches user-provided Drive image URLs for Form embedding. Does not browse, list, or access any other Drive files.

5. Data Handling Commitments

• SheetFormR accesses only the currently open spreadsheet. It never reads, writes, or lists other spreadsheets in the user's account.

• Student data from Google Classroom (names, emails) is written only into the teacher's spreadsheet. It is never transmitted to SheetFormR servers, AI APIs, or any third party.

• AI features (Forge AI, Polish) transmit only the teacher's prompt text and account email (for license verification). No spreadsheet content, student data, or Classroom data is included in AI requests.

• The user's email address is used solely for license verification and Stripe checkout. It is never used for marketing, analytics, profiling, or advertising.

• All external requests are restricted to the whitelisted domains in appsscript.json. No data is sent to any other domain.

• Classroom features are entirely opt-in. Classroom scopes are only exercised when the teacher explicitly initiates a Classroom action (roster import or assignment creation).

• SheetFormR does not store user data on its own servers beyond license records (email + subscription status) in Firebase Firestore.

• SheetFormR complies with the Google API Services User Data Policy, including the Limited Use requirements.

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6. Contact Information

Developer: SheetFormR
Email: sheetformr@gmail.com
Website: https://www.sheetformr.com
Privacy Policy: https://www.sheetformr.com/privacy
Terms of Service: https://www.sheetformr.com/terms