

Project Documentation: Google Classroom Auto-Announcement System

1. Introduction

This project automates the process of posting class announcements in Google Classroom using **AI-generated content**. It integrates **Google Gemini (PaLM API)** with **Google Classroom and Meet APIs** to create a smart communication workflow that saves time for teachers and ensures timely updates for students.

2. Objective

To design an automated workflow that:

- Creates a new Google Meet link before each class session.
- Generates a customized announcement using Google Gemini.
- Publishes the AI-generated message automatically to Google Classroom.

3. Tools Used

Flowise, Google Gemini (PaLM) API, Google Classroom API, Google Meet API, OAuth 2.0, Basic LLM Chain, HTTP Request Node, Schedule Trigger

4. Resources Used

Google Cloud Console, Classroom Developer Documentation, Gemini API Docs, Meet API Reference, JSON Schema, OAuth Playground

5. Workflow Design

1. **Schedule Trigger** — Starts the workflow automatically at a scheduled time.
2. **HTTP Request (GET)** — Fetches active Google Classroom course details.
3. **HTTP Request (POST)** — Creates a new Google Meet session and retrieves its link.
4. **Basic LLM Chain + Gemini Model** — Generates a human-like class announcement using the Meet link.
5. **HTTP Request (POST)** — Publishes the AI-generated announcement to the Classroom stream.

6. Output

Example announcement automatically generated and posted:

“Hi everyone! We're excited for our next class session; please join us at <https://meet.google.com/ikk-pvgx-fdp>. We look forward to seeing you there!”

7. Results

The workflow successfully:

- Generates dynamic meeting links for every class session.
- Uses AI to craft contextual announcements.
- Publishes updates automatically to Google Classroom without manual effort.

8. Future Enhancements

- Auto-detect upcoming deadlines or assignments to create contextual reminders.
- Integrate attendance tracking and class summaries using Gemini.
- Add student-specific notifications via Gmail or WhatsApp integration.