

## Creative Custom Content Generator Project Documentation

### 1. Implementation Architecture

#### Overview:

The Creative Custom Content Generator produces high-quality creative writing outputs using Pollinations AI integrated with Google Forms + Google Sheets + Apps Script (code approach).

#### Architecture Diagram:

Google Form → Google Sheets → Apps Script → Pollinations API → Generated Content + Metrics

#### Components:

- Input Layer: Google Form collects: Topic, Tone, Style, Length.
- Processing Layer: Apps Script builds prompt and calls Pollinations API. Adds error handling, performance tracking, and token estimation as pollinations API does not include this feature automatically.
- Output Layer: Generated content written back to Google Sheets. Logs generation time and estimated token usage.

#### a. API Selection Rationale

- Pollinations AI chosen because: Free, no API key required.
- Supports OpenAI-compatible models.
- Easy integration via simple HTTP requests.

#### b. Prompt Engineering Methodology

- Dynamic Templates: Example: Write a {Length} {Style} about {Product/Topic} in a {Tone} tone.
- Optimization Techniques:
  - Tone control (Romantic, Dark, Humorous).
  - Style control (Haiku, Short Story, Dialogue).

- Length control (Short, Medium, Long).

- Validation: Ensure all fields are filled before API calls.

#### c. Performance Optimization

- Metrics Logged: - Generation time (seconds).  
- Estimated token usage (characters ÷ 3.63).
- Techniques: - Lightweight API calls.

#### d. Limitation Management

- Rate Limits: - Pollinations AI is free but may have occasional latency.
- Error Handling: - Try/catch blocks in Apps Script.  
- Logs errors in the execution log.
- Cost Control: - No cost for Pollinations API.

### 2. 5 high-quality sample outputs:

Haiku Poem, Short Story, Dialogue, World-Building, Backstory.

### 3. Prompt Library and the Comparison Matrix

Prompt library with 5 optimized templates and variations				Comparison Matrix
Prompt Type	Original Prompt	Variation 1 (Tone Change)	Variation 2 (Length Change)	Quality Difference

<b>Short Story</b>	Write a short story (300 words) about [theme], with a hopeful tone.	Write a short story with a dark tone.	Write a long story (800 words) about [theme].	Tone changes mood drastically; length affects detail and pacing.
<b>Haiku Poem</b>	Compose a haiku about [topic].	Compose a free verse poem about [topic].	Compose a sonnet about [topic].	Style variation change's structure and creativity; longer forms allow deeper imagery.
<b>Dialogue</b>	Create a dialogue between two characters discussing [conflict].	Make the dialogue humorous.	Make the dialogue 500 words long.	Humor adds personality; length allows more character development.
<b>World-Building</b>	Describe a fantasy world with floating cities.	Describe a dystopian world with floating cities.	Describe a fantasy world of 1000 words.	Tone shifts theme; length adds richness to world-building.
<b>Backstory</b>	Write a detailed backstory for a detective named [name].	Write a backstory for a warrior named [name].	Write a short backstory (150 words) for a detective named [name]	Role changes narrative style; length affects depth of character motivation