**Placeholder & Prompt Reference Guide for AI Lesson Lab**

This document defines the user-facing fields, the expected variable names, and how they flow from the form → to the GPT prompts → to the final .docx / .pptx outputs.

# Section 1: Basics (aka Essentials)

|  |  |  |  |
| --- | --- | --- | --- |
| Label (on form) | Internal Variable Name | Example Value | Notes |
| Title | title | "Exploring the Solar System" | Required |
| Age Group | ageGroup | "Lower Secondary (12–14)" | Required |
| Class Size | classSize | "20" | Required |
| Proficiency Scale | proficiencyScale | "CEFR" | Used to determine `level` options |
| Level | level | "B1" or "B1 (Intermediate)" | Paired with proficiencyScale |
| Duration (Minutes) | duration | "45" | Single select or custom |
| Main Focus | mainFocus | "Reading" | Was previously called Primary Focus |
| Topic | topic | "Food and Nutrition" | Optional |
| Cultural & Linguistic Background | culturalBackground | "All students are native Spanish speakers" | Now a textarea |

# Section 2: Customisation Inputs

|  |  |  |
| --- | --- | --- |
| Label | Variable Name | Example |
| Learning Objectives | learningObjectives | "Students will be able to describe..." |
| Target Vocabulary | targetVocabulary | "planet, orbit, satellite" |
| Learning Support Needs | learningSupport | ["visuals", "sentence starters"] |
| Context | context | "Students are preparing for midterms." |
| Assessment Notes | assessmentNotes | "Focus on oral fluency." |
| Differentiation Strategies | differentiation | "Pair stronger with weaker students." |
| Secondary Focus | secondaryFocus | "Speaking" (optional, currently hidden) |

# System Variable Usage in Prompt Injection

When a GPT prompt (e.g. prompt1.txt) is loaded using loadPrompt('prompt1.txt', userInput), all keys from the user's form are available as injected variables.  
  
That means in your prompt files, you can use template-style variables like:  
Lesson Title: {{title}}  
  
Age Group: {{ageGroup}}   
Class Size: {{classSize}}   
Level: {{proficiencyScale}} {{level}}   
Main Focus: {{mainFocus}}  
  
You can also include optional or conditional ones like:  
If context is provided:  
Class Context: {{context}}

# Template Placeholder Mapping (for .docx)

You will use these same variable names ({{title}}, {{mainFocus}}, etc.) in your .docx files using docxtemplater syntax.  
  
For example:  
{{title}}  
{{ageGroup}}  
{{classSize}} students  
{{proficiencyScale}} {{level}}  
{{mainFocus}} focus  
{{culturalBackground}}  
  
These will be replaced after editing and submission from the Quill editors on the Preview page.

# Prompts & Tags (Admin Panel)

In admin.js, the TAG\_GROUPS define tagging structure, helpful for organising prompt files:  
  
const TAG\_GROUPS = [  
 { label: "Main Focus", options: ["Reading", "Writing", ...] },  
 { label: "Duration (Minutes)", options: ["30", "45", ...] },  
 { label: "Level (CEFR)", options: ["A1", "B2", ...] },  
 ...  
];  
  
You don’t need to update these unless you're adding new tagging filters in the Admin prompt panel.

# Summary: What to Use When

|  |  |
| --- | --- |
| Purpose | What to Use |
| Prompt templates (promptX.txt) | Use {{title}}, {{topic}}, etc. |
| Word doc templates (.docx) | Use {{mainFocus}}, {{level}}, etc. |
| PPT slides (.pptx) | Use {{lessonPlan}}, or inject GPT output directly |
| Frontend form (index.html) | name="fieldName" → becomes key in req.body |
| Preview Quill Editor | Will hold & POST back updated versions of above fields |

You’re ready to:  
- Design clean GPT prompts that directly access structured data   
- Insert easy-to-manage placeholders into Word/PPTX files   
- Add or change UI field labels without breaking backend logic   
- Control what appears in output using tag filters or prompt logic  
  
This is your single source of truth.