Your Text, Your Style – Auto-Generate a Presentation

Create a publicly accessible web app that lets anyone turn bulk text, markdown, or prose into a fully formatted PowerPoint presentation that matches their chosen template's look and feel.

Objective

Your app should allow users to:

- Paste a large chunk of text (can be markdown or long-form prose)
- Optionally enter a one-line guidance for the tone, structure, or use case (e.g.: "turn into an investor pitch deck")
- Provide their LLM API key of choice (e.g. OpenAI, Anthropic, Gemini)
- Upload a PowerPoint template or presentation (`.pptx` or `.potx`)

The app then:

- Analyzes and breaks down the input text into slide content and structure
- Infers and applies the style, colors, fonts, and images from the uploaded PowerPoint file to the generated slides
- Reuses images found in the uploaded template/presentation where appropriate
- Generates and outputs a new `.pptx` file for user download—without generating new images using AI

Requirements

Users must be able to:

- Paste or type a large block of text
- Enter their own LLM API key (never stored or logged)
- Upload a PowerPoint template or presentation file (`.pptx`/`.potx`)
- Download the newly generated presentation

App must:

- Map and split the input text intelligently into slide contents (not just "fixed 3 slides")
- Copy the uploaded template's style and layout as much as possible (including images, layouts, colors, fonts)
- Choose a reasonable number of slides, based on the text and optional guidance
- Support any LLM provider, using API calls with user-supplied key
- Be published in a public GitHub repository (with MIT License and full README)

Optional Enhancements (Not Required – For Extra Credit)

- Auto-generate speaker notes for each slide (via LLM)
- Support various tones/stylistic modes (e.g. professional, investor pitch, visual-heavy, technical)
- Provide slide previews before download
- Offer common-use-case guidance templates ("Sales deck", "Research summary", etc.)
- Add robust error handling, file size/upload limits, and API retry logic

Deliverables

1. Public GitHub repository containing:
   - Full front-end (and back-end, if needed) code
   - MIT License
   - README with setup and usage instructions
2. Working hosted link (demo app)
3. Short write-up (200–300 words) explaining:
   - How the input text is parsed and mapped to slides
   - How your app applies the visual style and assets of the template

Evaluation Criteria (3 Marks)

Criteria	Marks
Output functionality	1.5
Code quality & clarity	1.0
UI/UX polish & extras	0.5

Notes

- You may use any programming stack (Python, JS, etc.)
- You may apply reasonable technical limits (e.g., file size)
- Only reuse images from the template file; do not create/generate images via AI
- Inferring precise layout details is NOT required—do the best you can
- Do not store or log any sensitive user input, especially API keys