

SlideDeck AI

Barun Saha

Introduction

Many of us spend a significant time creating presentation slide decks

AI can help with content generation but:

- Requires third-party **tools integration** to actually generate the slides
- Or execution of **third-party scripts** locally
- And possibly many other **privileges**

SlideDeck AI solves these problems by:

- Generating the outline/contents of the slides
- Converting them into structured output
- Actually creating a PowerPoint slide deck

Large and diverse target audience

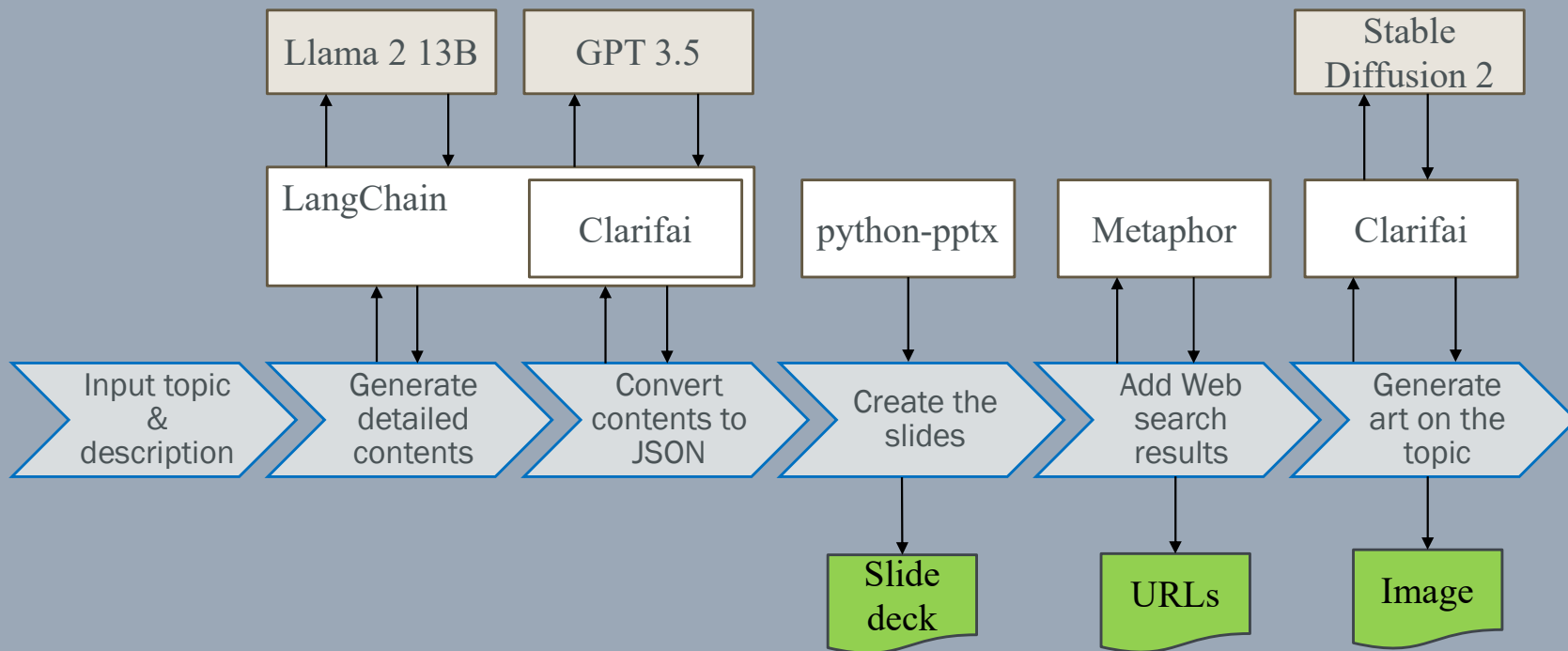
A premium subscription may offer advanced features and customizations beyond the basic functionality

Co-creation with SlideDeck AI allows users to be in control of their content and software

Key Differences

SlideDeck AI significantly improves upon its previous iteration, [Slides Wizard](#), built in the previous hackathon

- Uses Llama 2, rather than Falcon, to generate contents
- Uses GPT-3.5 to convert the contents into structured output
- Allows users to choose from a set of PowerPoint templates
- Provides links to relevant Web pages relevant to the topic
- Generates concept art on the presentation topic using Stable Diffusion 2



- LangChain + Clarifai, with two prompts for generating contents & JSON
- Metaphor for finding relevant Web resources based on the slides headers
- python-pptx library used for creating the slides

Challenges & Future Directions

Handling natural language text is challenging!

- Consider more test cases
- Limit on the number of output tokens might affect structured data conversion

Support multimodal contents, such as images and tables

Support multi-cell layouts, such as two columns layout

Support editing of the generated content as well as the addition of specific inputs

Demonstration

<https://huggingface.co/spaces/barunsaha/slide-deck-ai>

Thank you!