ScriptPulse

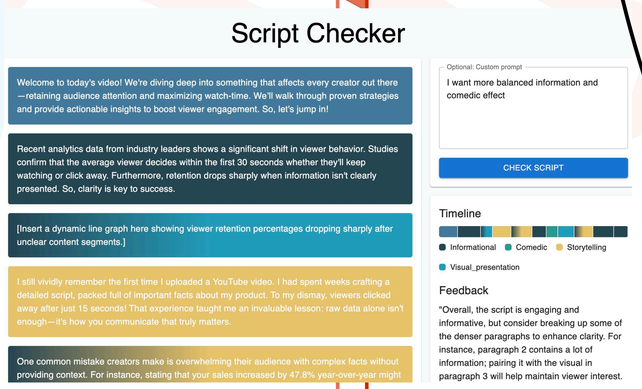
A system designed for content creators' script planning

Ruichen Zheng, Weihan Qu, Zihan Jiang

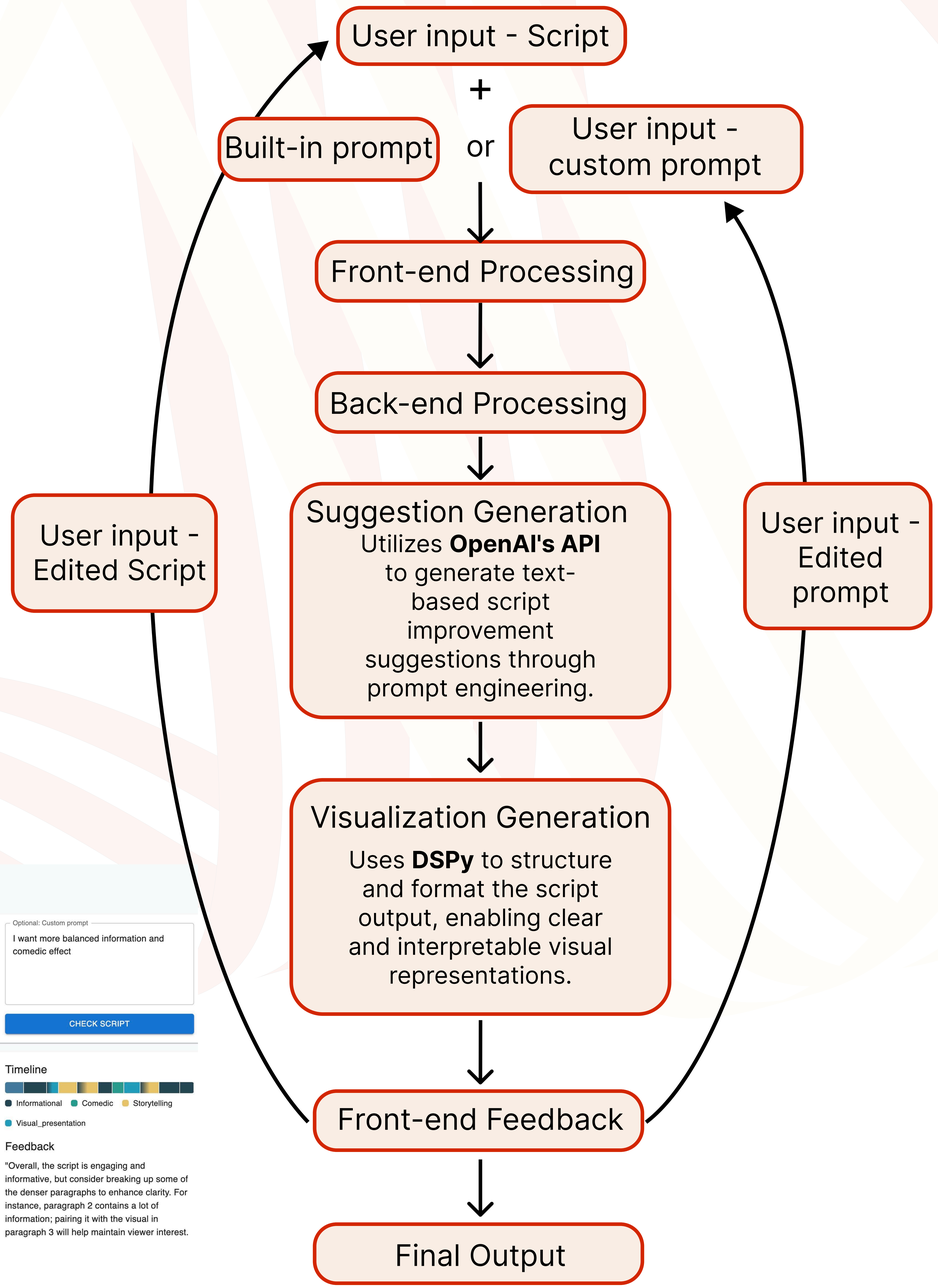
Problem Statement

Content creators struggle to optimize videos for audience engagement and retention, as reading through scripts alone makes it hard to assess structure, key points, and flow. Existing tools offer **basic analytics** but lack actionable insights on how script structure impacts engagement. There is a need for a tool that **visually** maps script structure while providing **actionable feedback**, helping creators refine their content efficiently **before production**.

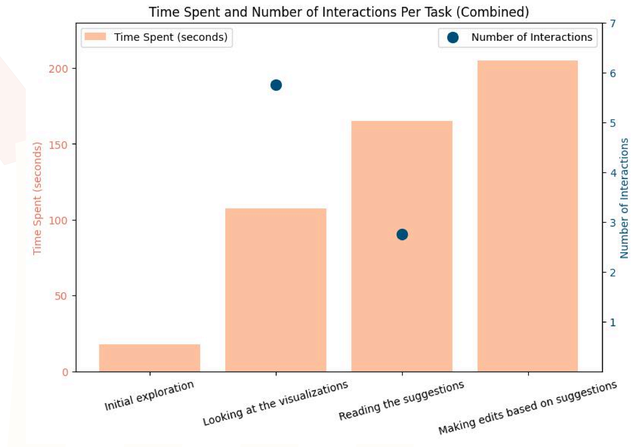
Lily is a long video creator who writes detailed scripts for each video. Just reading her script doesn't help her see structure issues or missing points, making editing difficult. She needs a quick way to review and improve the script's flow, key ideas, and how it connects with the audiences.



System Overview



Evaluations



- Users found that **visualizing** their script structure helped them improve flow.
- Users found the suggestions **actionable** and saw noticeable improvements in structure after edits, making the revision process **more satisfying**.
- This tool is **not limited** to content creation - it can also be used as a speech script checker for refining clarity and structure.

Future Works

- **A/B tests** for Effectiveness
  - Compare video analytics between original scripts vs. scripts refined using our system to measure actual impact.
- **Multimodal Analysis** (Text + Voice + Video)
  - Incorporating speech analysis and video framing guidance to enhance delivery.
- **Integration** with **Video Editing Tools**
  - Connect with tools like Final Cut, or Descript to streamline script-to-video workflow, allowing automatic content structuring.