AI-Powered Cinematic Video Script Generator

Summary Report (Output Video - [Final Video.mp4](#))

Overview

An advanced AI-powered video script generator created for **Google VEO3 video generation**. Provides a complete, systematic, and reusable framework that transforms any feature description into cinematic, professional-quality explainer videos. Achieves automation and scalability in narrative construction, stakeholder journey mapping, and VEO3-optimized script writing.
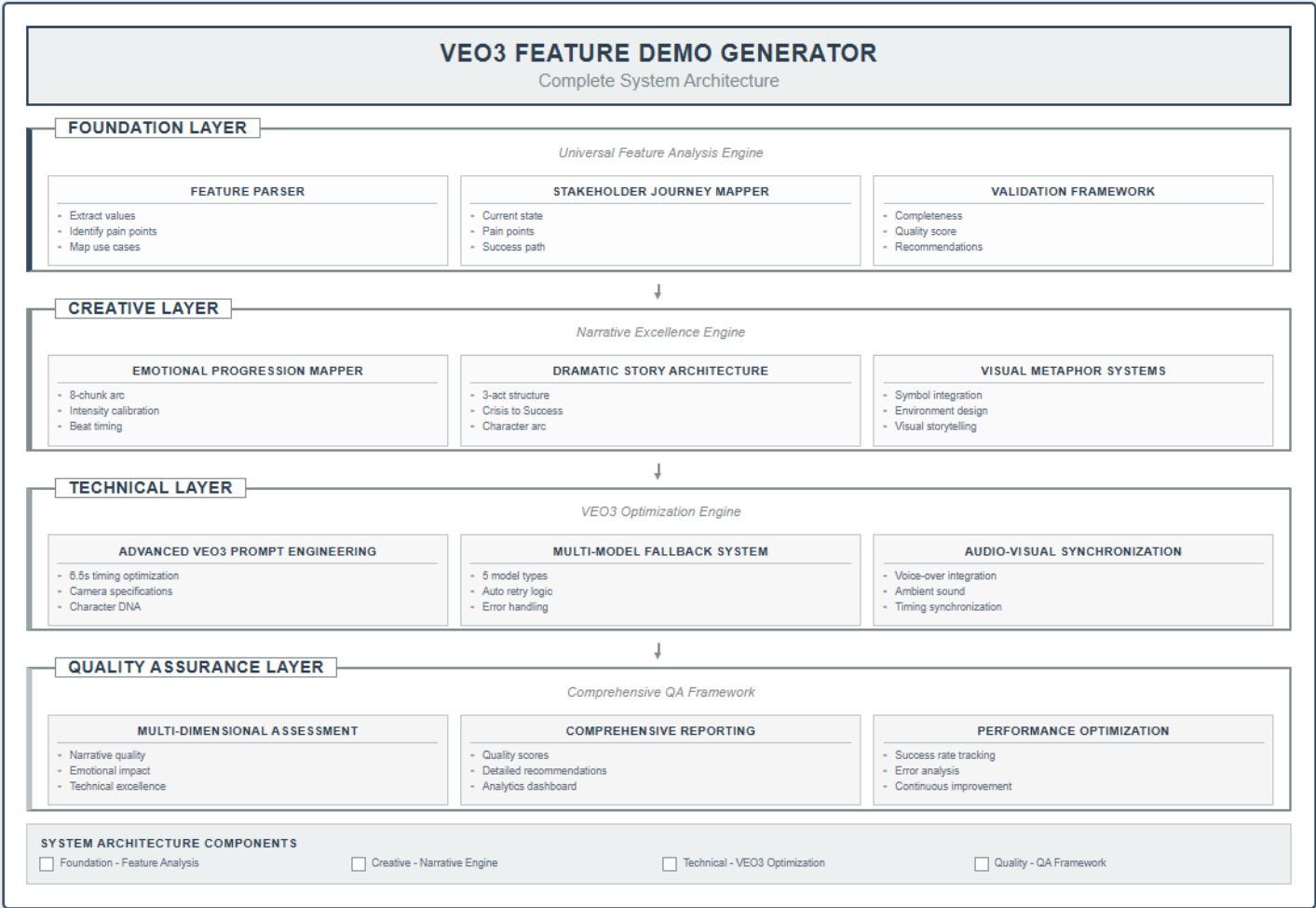
System Architecture

- **Language:** Python 3.11
- **Core UI:** Streamlit
- **Video Assembly:** MoviePy
- **Perplexity AI (Free for all Airtel Users):** Advanced feature analysis and structured information extraction.
- **Google GenAI (VEO 3) Models:**

  - veo-3.0-fast-generate-001 (primary)
  - veo-3.0-generate-001 (secondary high-quality)
  - veo-3.0-fast-generate-preview (quick preview)
  - veo-3.0-generate-preview (standard preview)
  - veo-2.0-generate-001 (fallback)
- **JSON & OS Modules:** For data management and operational controls. **Link -** [Raw Generated Output](#)
- **Quality Assurance:** Integrated QA framework ensures output consistency and reliability. **Link** - [QA Report](#)
- **Logging/Timing:** Uses built-in modules to track processes for traceability. (**Link –** [Logs](#), [ChunkScripts](#) , [Master Prompt](#))

  Key Components:

  1) **Enhanced Feature Analysis Engine:** Universal engine for processing features across industries and types.
  2) **Feature Description Parser:** Uses advanced AI prompting to parse and extract structured data (capabilities, user journeys) from unstructured feature descriptions.

3) **Stakeholder Journey Mapping:** Visual/algorithmic mapping of how features impact different user groups.
4) **Script Generator:** Produces narrative scripts optimized for VEO3 ingestion and cinematic quality.

Design Choices

- **Python 3.11**: Modern features and extensive AI libraries vs. older versions or others.
- **Streamlit**: Rapid UI development vs. complex frameworks like Flask/Django.
- **MoviePy**: Python-native video editing vs. heavy multimedia APIs like Adobe.
- **Dual AI (Perplexity + GenAI)**: Combined analysis + generation strengths vs. single-model limitations.

Conclusion

This system sets a new standard for **AI-driven video script generation**, combining cutting-edge AI models, robust architecture, and industry-leading automation to deliver high-quality cinematic explainer videos at scale.