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### **Artificial Intelligence API: Choices for QLab**

The following artificial intelligence APIs are efficient and compatible with QLab for the shadow puppet show project: OpenAI (including DALL·E and ChatGPT), Google Cloud Vision, RunwayML, and Clarifai. These APIs are particularly well-suited for the project because they support real-time image and video processing, Also, AI content generation with an automated media management when integrated with a system like QLab. These tools could be scalable to allow real-time data analysis and creating automated responses based on user input(s).

API	COST	IMPORT FORMATS	EXPORT FORMATS	FEATURES
Open AI (DALL·E/Chat GPT)	Free & w/Payment Plan (ChatGPT \$20/month, DALL·E \$0.02/images(	Text	Text (ChatGPT) Image (DALL·E   PNG JPEG)	Text & Image Generation. No sound but can be paired with a sound system.
Google Cloud Vision	Free (First 1000 units) & Payment (\$1.50 per 1001-5,000,000 units)	JPG/JPEG, PNG, GIF, etc. (Image files to OCR on text for images)	JSON (objects and text but no sound)	Image analysis
RunwayML	Free & Payment (\$12/month)	Images, Video, Text	JPG/JPEG, PNG, MP4, JSON, CSV	Image & Video Generation, AI toolsets. Some

				models support audio processing.
Clarifai	Free & Payment (\$25/month)	JPG/JPEG, PNG, MP4, etc.	JSON	Text analysis, Object analysis. Can process audio files for text-to-speech and event detectors.

Among these options, I believe ChatGPT would be the most accessible and reliable for other students to use. This is because ChatGPT is widely known and has been discussed by other students in my courses. Making it easier for others to familiarize themselves with it. ChatGPT has significant exposure within the tech industry when discussing the AI community. Which can make troubleshooting and collaboration easier since it's popular and commonly used. Its user-friendly interface and versatile capabilities can be a nice fit for the shadow puppet show. This could be combined with another software or extension that can support it in areas it lacks.