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## LAYER 1: INTERFACE & CONTROL



### Next.js 15

App Router UI. React 19 Server Components for high-performance rendering.



### BullMQ / Redis

Reliable job queue for managing complex video generation pipelines.



### PostgreSQL

Core relational DB + pgvector. Stores World State & Character JSON.



LAYER 2: THE MODEL ZOO (CLOUD APIS)

LOGIC / WRITING



**Claude 3.5 Sonnet**

Provider: Anthropic

IMAGE GEN



**Flux.1 [Dev]**

Provider: Replicate

VIDEO GEN



**Luma Dream Machine**

Provider: Luma Labs

VOICE / SYNC



**ElevenLabs + SyncLabs**

Provider: 11Labs/Sync



LAYER 3: INFRASTRUCTURE & DOCS



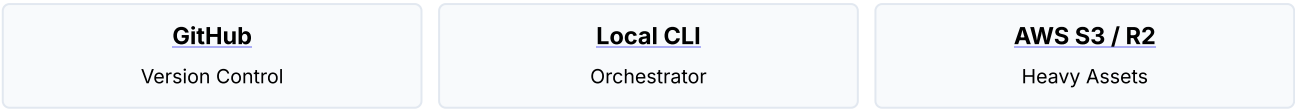
Quarto Executable Scripting

Converts Markdown into Hybrid Documents with embedded metadata.

```
Input: story.md
Process: Agent injects [object JSON] Metadata
Output 1: script.pdf (Human Review)
Output 2: script.json (Video Driver)
```



Cloud-Local Asset Mirror



```
npm run asset:sync
```

■ Frontend (Next.js)

■ Video (Luma)

■ Database (Supabase)

■ Writing (Claude)