



AI Tools For Media Servers

By Cillian Jennings

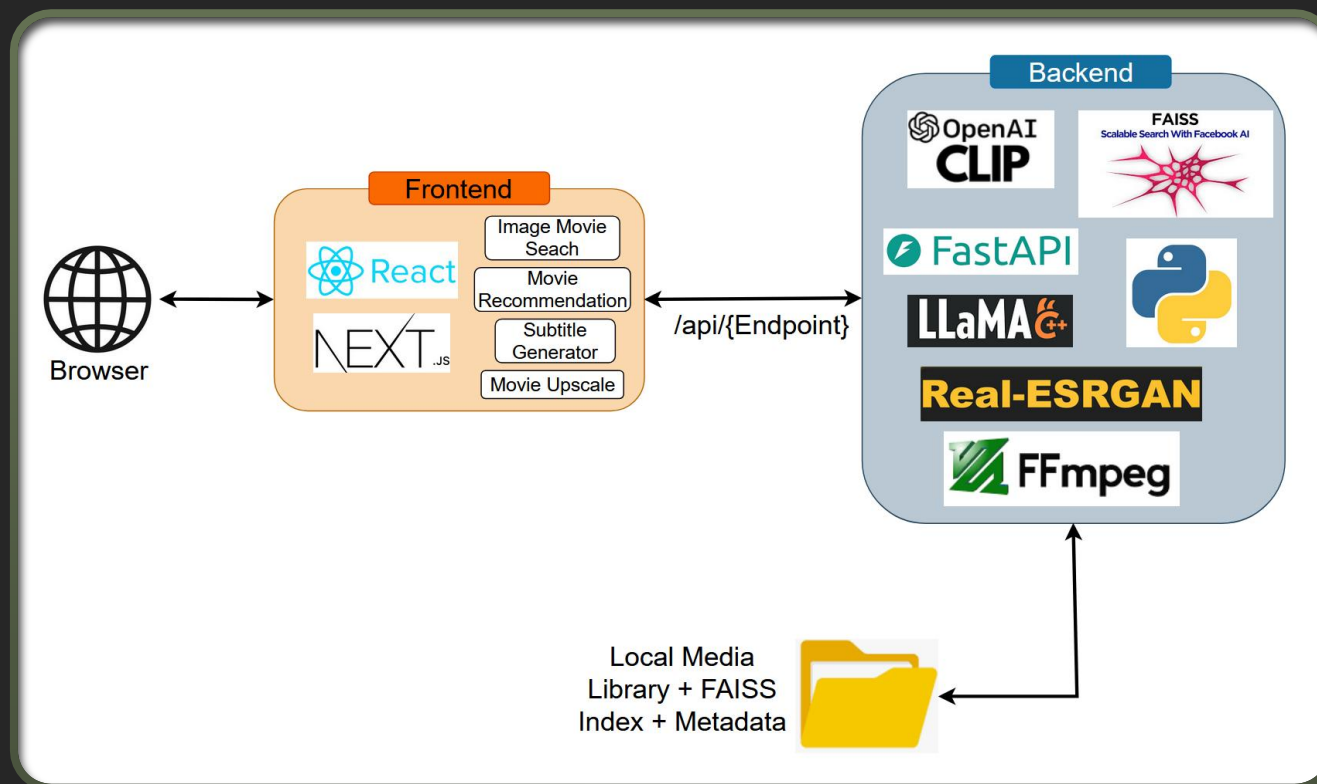


Overview

- A website with four tools for media management
- Media Recommendation
- Subtitle Generation
- Image Movie Search
- Video Upscaling

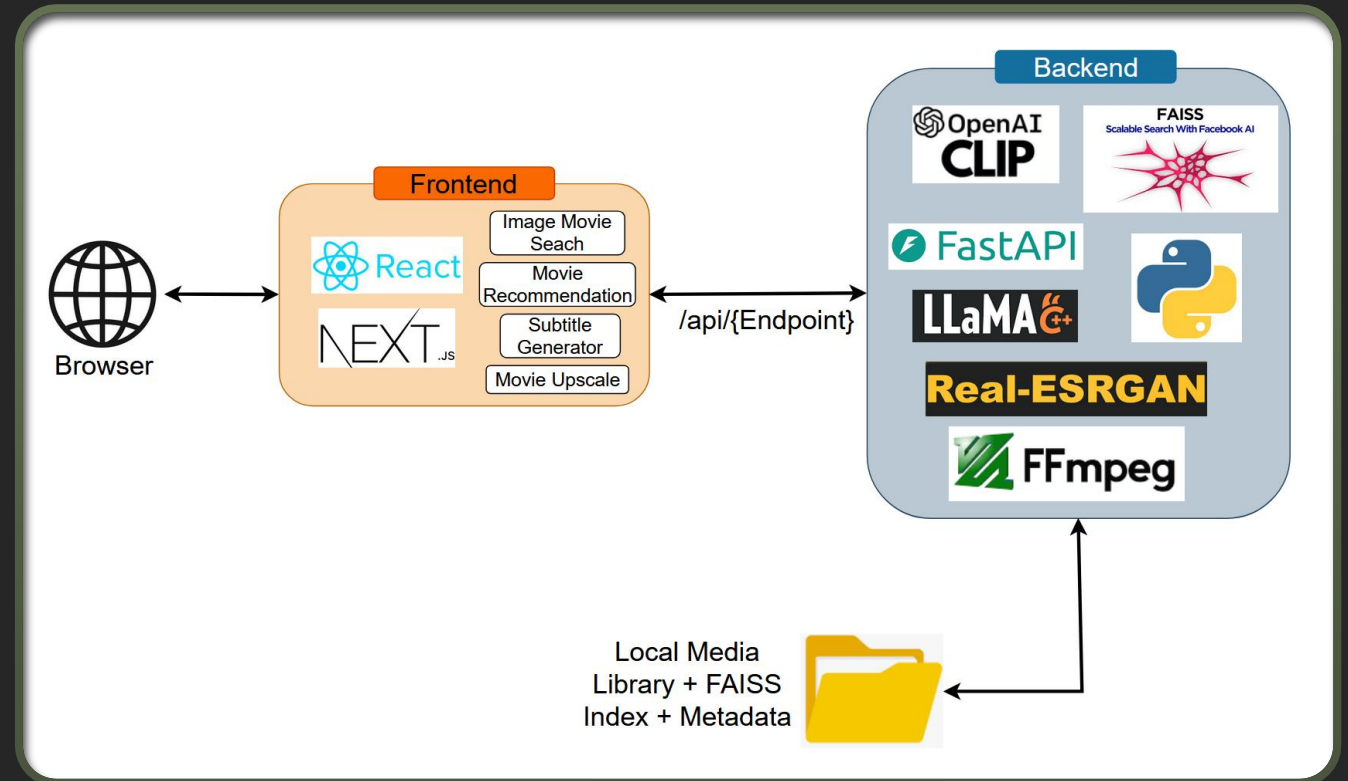
Frontend Technologies

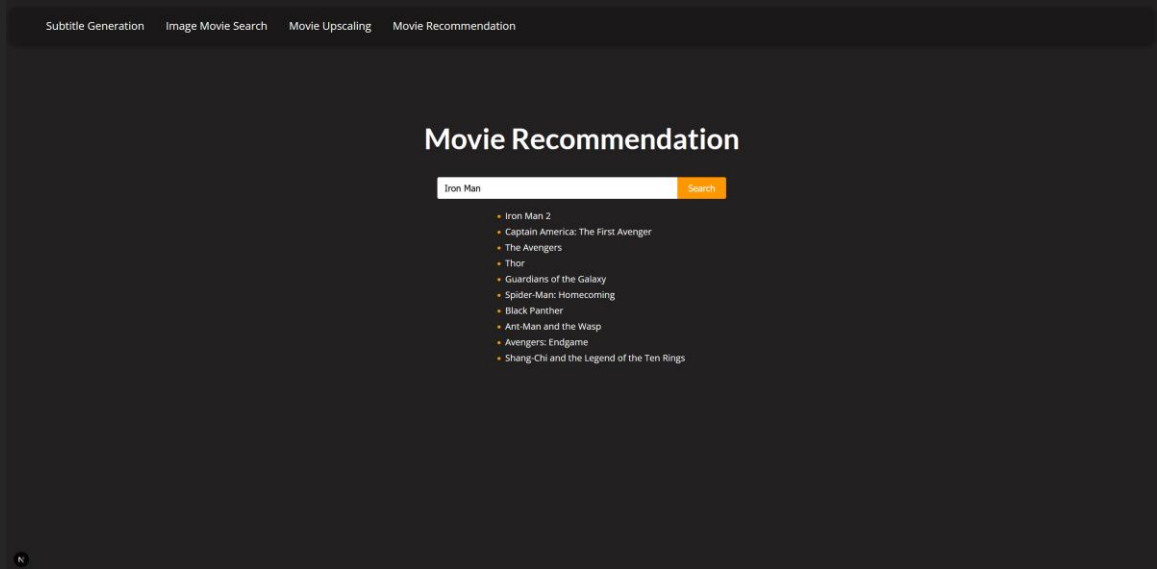
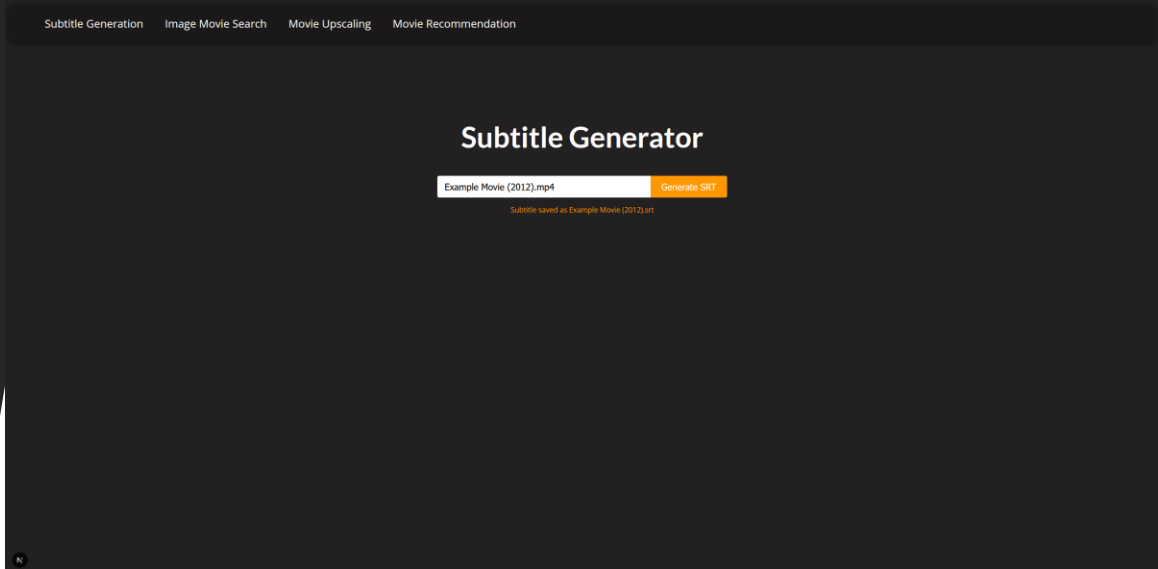
- React – Javascript library for building UIs
- Next.js – React framework for building web applications
- Four pages with navigation bar at the top.



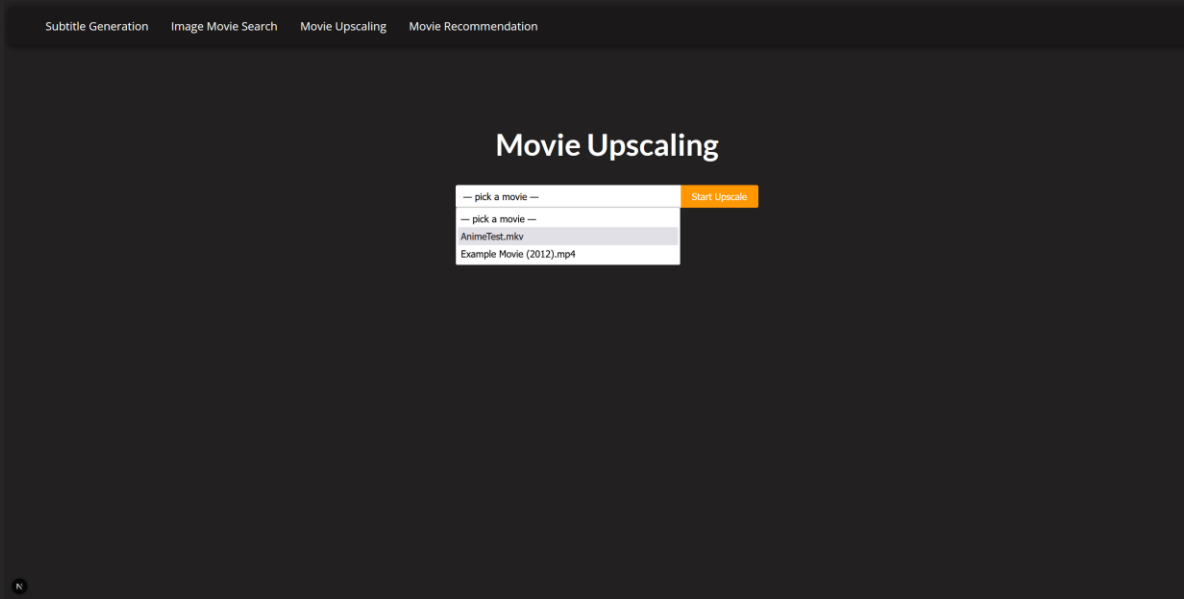
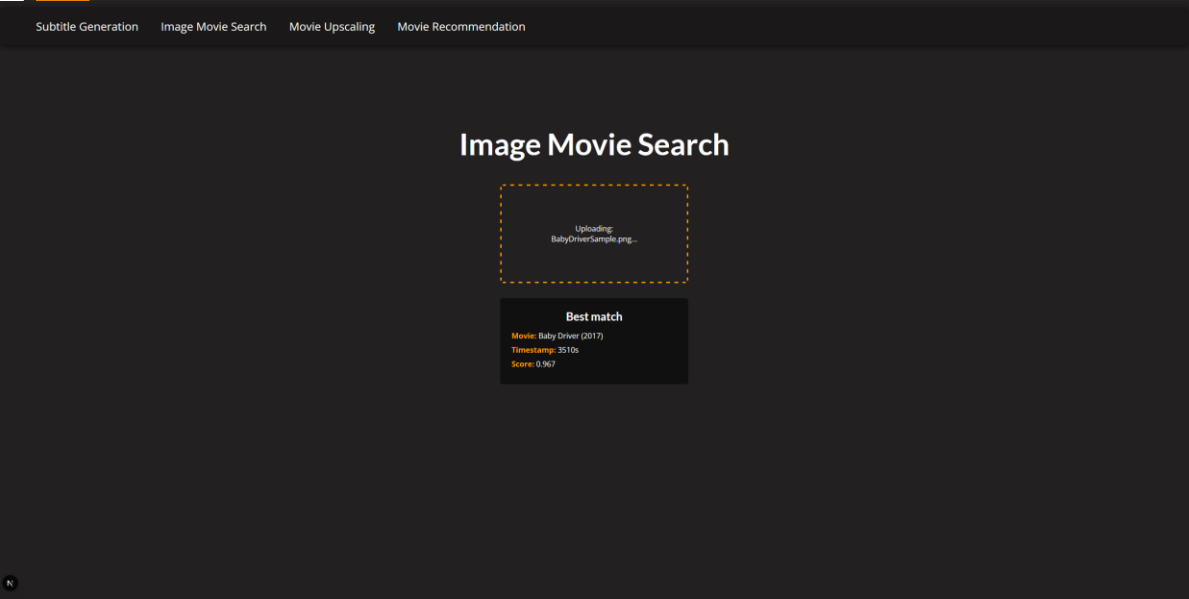
Backend Technologies

- Four python scripts FastAPI routers and one main script.
- FastAPI – web framework for building web applications
- Real-ESRGAN – Image super-resolution model
- Llama.cpp – Run Llama models locally.
- Ffmpeg – commands for handling multimedia
- OpenAI Clip model – create embeddings
- FAISS – library for similarity search over vector collection.
- OpenAI Whisper – Speech recognition model

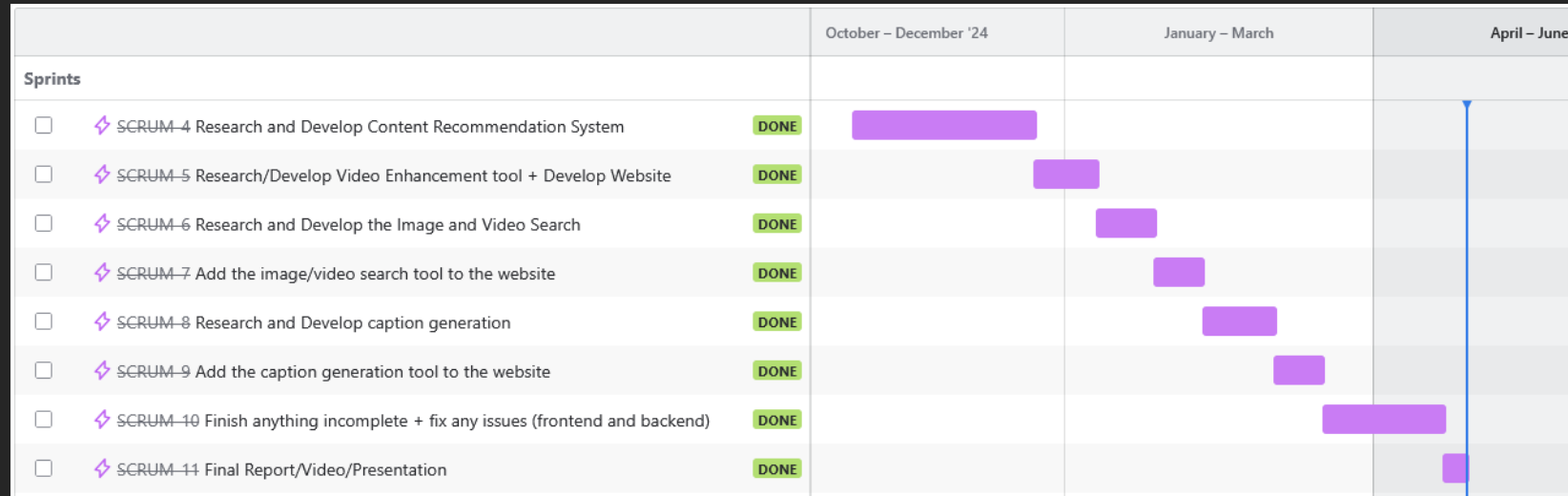




Results



Project Management



- I used Jira as a project management tool
- Created epics for each feature
- Also used Github and OneNote for storing files and notes.