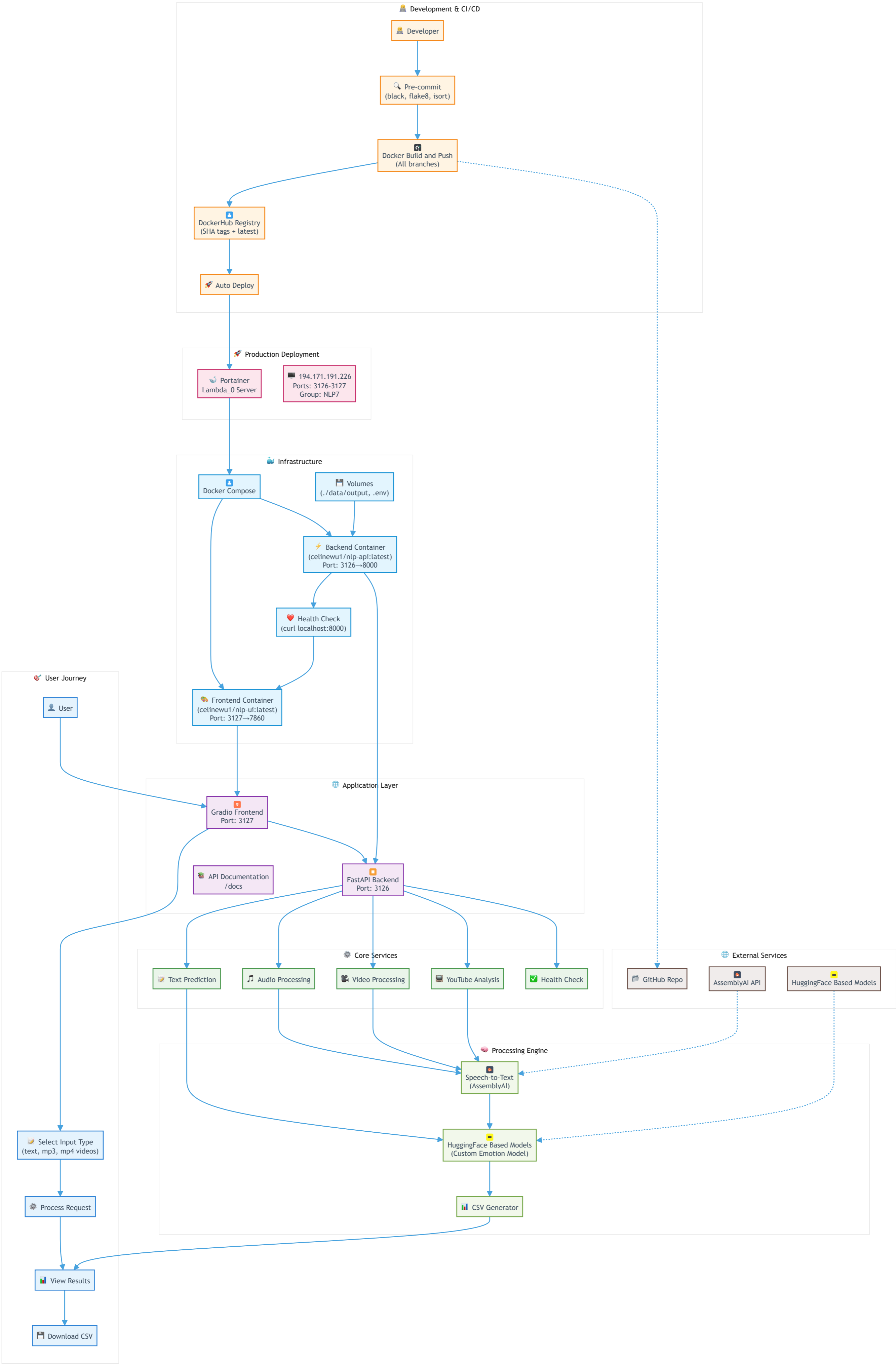




Emotion API Local Deployment

Docker deployment with FastAPI backend + Gradio frontend



How to Read This Diagram

Solid Arrows:	Direct data flow or process execution
Dotted Arrows:	External service dependencies or triggers
Colored Sections:	Different layers of the architecture (Dev, User, App, Services, etc.)
Service Logos:	Actual tools/platforms used with their official logos
Health Check:	Frontend waits for backend health before starting
Containers:	Dockerized services with specific image tags and port mappings

Tools & Technologies

FastAPI	High-performance Python web framework for REST endpoints
Gradio	Python library for building ML web interfaces
Docker	Containerization platform for consistent deployments
AssemblyAI	Speech-to-text API for audio transcription
HuggingFace	ML model hub for transformers and custom emotion models
GitHub Actions	CI/CD automation platform for continuous integration
Portainer	Docker container management UI for production deployment