

Layer	Checklist
LLM Layer	☐ Define model purpose ☐ Choose between API vs. self-hosted models ☐ Decide fine-tuning vs prompt engineering ☐ Test reasoning & latency
Tool Integration Layer	☐ List required APIs/microservices ☐ Secure connections ☐ Apply rate limiting ☐ Validate workflow triggers
Memory Layer	☐ Choose session vs long-term memory ☐ Set up embeddings storage ☐ Confirm RAG retrieval speed ☐ Test context consistency
Orchestration Layer	☐ Define multi-agent routing ☐ Integrate workflow engine ☐ Ensure event-driven triggers ☐ Validate task conflict resolution
Infrastructure Layer	☐ Select deployment model ☐ Plan autoscaling ☐ Optimize GPU usage ☐ Check high availability
Security & Compliance Layer	☐ Enable data encryption ☐ Apply zero-trust access ☐ Monitor for prompt injections ☐ Confirm regulatory compliance (GDPR/SOC2)
Observability & Monitoring Layer	☐ Set up logging & tracing ☐ Track latency/throughput ☐ Detect model drift ☐ Validate prompt/tool outputs