# AI Assistant Rollout Plan

## Phase 1: Discovery & Setup (Week 1)

Goals: Lock in requirements, prep local environment.

Deliverables:

* - Finalized feature spec (memory, RAG, voice, triggers, UI)
* - Environment ready: Python 3.10, Conda, quantization toolchain installed
* - Base LLM checkpoint downloaded & quantized (e.g. Llama 2 7B → 4-bit)

## Phase 2: Memory & Retrieval (Week 2)

Goals: Stand up encrypted vector DB and RAG pipeline.

Deliverables:

* - Chroma/FAISS collection created with AES-256 encryption
* - Embedding script ingesting transcripts, comments, docs into memory store
* - Retrieval module returning top k context snippets for any query

## Phase 3: Prompt Orchestration & Narrative Engine (Week 3)

Goals: Build the logic that stitches the assistant’s script dynamically.

Deliverables:

* - YAML/JSON library of narrative chunks (intro, lore, teasers)
* - Orchestrator that, given triggers (time, keywords, new comments), assembles a full prompt
* - CLI demo: input trigger → assembled text output

## Phase 4: Feedback Loop & Fine-Tuning (Week 4)

Goals: Enable user ratings and lightweight adaptation.

Deliverables:

* - Thumbs up/down feedback captured in `feedback.jsonl`
* - LoRA fine-tuning script that runs on accumulated feedback to produce adapter weights
* - Automated schedule suggestion (e.g. “run tune script weekly”)

## Phase 5: Interface & TTS Integration (Week 5)

Goals: Wrap it all in a simple UI and hook up TTS.

Deliverables:

* - Basic CLI with commands: chat (text I/O + memory), play (synthesize latest response to WAV), upload (add docs to memory)
* - Electron or Flask desktop UI skeleton (chat window, play button, timeline view)
* - TTS pipeline connected (you supply voice sample; model fine-tuned)

## Phase 6: Testing, Packaging & Hand-Off (Week 6)

Goals: QA, bundle, and deliver installer.

Deliverables:

* - End-to-end tests: memory retrieval, narrative branching, feedback loop, TTS output
* - Bundled installers (Windows/macOS/Linux) via PyInstaller or Electron-builder
* - User guide & quick-start doc

## What I’ll need from you up front:

* - Final list of narrative “chunks” (intro segments, teasers, story parts).
* - Sample voice recording (1–2 min) for TTS fine-tuning.
* - Any branding assets (logo, colors) for the UI.