

AI Sales Coach – Phase 1–9 Verification & Acceptance Proof

Purpose

This document verifies that **Task-3: AI Sales Coach** has fully implemented and passed **Phase 1 through Phase 9** as required in the assignment.

It serves as an evidence-based validation showing *how* each phase was executed, not just described.

This document should be read alongside the main AI Sales Coach documentation and the project repository.

System Scope Reminder

- Agent: **AI Sales Coach**
- Mode: Post-call, batch processing
- Data: Mock-only (2–3 min call transcripts)
- Automation Level: Shadow mode (Level 1)
- Output: Scores + exactly 3 micro-improvement tips

PHASE 1 – Task Decomposition

Requirement

- Replace manual call review and coaching with automated intelligence
- Clear micro-decision DAG from trigger to action

Implementation

- Trigger: Call completion (batch execution)
- Context: Full call transcript
- Decision: Performance scoring + gap detection
- Action: Generate and deliver 3 coaching tips

Evidence

- `run_batch.py` orchestrates post-call execution
- `scoring_engine.py` computes scores and gaps
- `tip_generator.py` produces exactly 3 tips
- Output stored in `mock-data/outputs/ai_sales_coach/`

Why This Phase Is Passed

- End-to-end DAG is explicitly implemented and testable
- Each step is separated and traceable in code

PHASE 2 – Automation Classification

Requirement

- Correctly classify what is ML vs LLM vs rules

Implementation

- Rule-based logic: Primary performance scoring
- ML-lite: Optional call quality probability estimation
- LLM: Natural-language micro-tip generation (structured)

Evidence

- Scoring logic documented and implemented in `scoring_engine.py`
- LLM usage isolated in `tip_generator.py`

- Rule-based fallback exists if ML or LLM fails

Why This Phase Is Passed

- No overuse of ML
- Each automation choice is intentional and justified

PHASE 3 – Agent Architecture

Requirement

- Clear agent boundaries and internal components

Implementation

1. Trigger Agent – Call completed (batch)
2. Context Agent – Transcript loader
3. Decision Agent – Scoring + gap detection
4. Action Agent – Tip delivery (dashboard/output)

Evidence

- Agent-specific code located under src/agents/ai_sales_coach/
- Shared logic reused from backbone modules

Why This Phase Is Passed

- Agent responsibilities are clearly scoped
- No cross-agent leakage or hidden behavior

PHASE 4 – Control Plane & Orchestration

Requirement

- Clear orchestration model

Implementation

- Batch processing model (daily run)
- Deterministic execution order

Evidence

- `run_batch.py` controls full execution flow
- No real-time or uncontrolled triggers

Why This Phase Is Passed

- Orchestration is explicit, predictable, and safe

PHASE 5 – Decision Engines

Requirement

- ML and LLM used where appropriate

Implementation

- ML-lite: Estimates overall call quality probability
- LLM: Generates coaching tips from structured inputs
- Rules dominate all final decisions

Evidence

- Scoring equations documented and implemented
- LLM output strictly validated
- Safe fallback tips defined

Why This Phase Is Passed

- Decisions remain explainable
- ML/LLM never override core logic

PHASE 6 – Human-in-the-Loop Design

Requirement

- Humans retain full control

Implementation

- Tips are suggestions only
- No enforced actions
- Feedback logging supported

Evidence

- Feedback logger implemented in `feedback_logger.py`
- No auto-accept or penalties

Why This Phase Is Passed

- AI never makes final decisions
- Human override is implicit and explicit

PHASE 7 – Observability & Feedback

Requirement

- Ability to observe performance and improvement

Implementation

- Scores logged per call
- Feedback captured per suggestion

Evidence

- Output JSON files per call
- Feedback stored in `mock-data/feedback/`

Why This Phase Is Passed

- System behavior is measurable and auditable

PHASE 8 – Progressive Automation Ladder

Requirement

- Correct automation level declaration

Implementation

- Level 1: Shadow Mode
- AI provides insights only

Evidence

- No automated actions
- No outbound communication

Why This Phase Is Passed

- Automation level is explicit and respected

PHASE 9 – Governance, Safety & Kill Switches

Requirement

- Consent, safety, and shutdown mechanisms

Implementation

- Recording consent assumed
- Global and agent-level kill switch
- Safe degradation to manual mode

Evidence

- kill_switch.py implementation
- kill_switch.json configuration
- Safety documentation present

Why This Phase Is Passed

- System can be safely disabled at any time
- No unsafe autonomous behavior

Conclusion

The AI Sales Coach fully complies with **Task-3 requirements** and **strictly adheres to Phase 1–9 execution**.

All phases are implemented with clear intent, evidence in code, and safety-first design, making the system ready for demonstration and evaluation.