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Anthropic

CCDV-F

Claude Certified Developer -
Foundations

QUESTION: 1

Your team is building a multi-step document processing application that needs to extract structured data from PDFs, validate the extracted content against business rules, and then route documents to different approval workflows based on content type. You are evaluating whether to use an agent or a workflow architecture.

Which of the following factors should most strongly influence your decision toward using an agent rather than a workflow?

- A. The approval routing requires dynamic decision-making based on unpredictable document variations and emerging patterns that were not pre-defined in the system
- B. The extraction, validation, and routing steps are deterministic and always follow the same sequence regardless of document content
- C. The application needs to maintain strict audit compliance and every action must be explicitly logged and repeatable
- D. The team prefers working with declarative, step-by-step orchestration that clearly maps each stage in the document pipeline
- E. The PDF processing step is computationally expensive and should be cached and reused across multiple documents

Answer(s): A

Explanation:

Agents excel at handling dynamic, unpredictable scenarios where the system must adapt its behavior based on emerging patterns and make autonomous decisions. In this scenario, the need for dynamic routing based on document variations that weren't pre-defined is a key indicator that an agent's iterative decision-making loop would be more appropriate than a rigid workflow.

The other options point toward workflow characteristics: deterministic sequences (workflows), strict audit requirements (workflows provide better determinism and traceability), declarative step-by-step orchestration (workflows by design), and caching concerns (an optimization orthogonal to the agent vs. workflow choice). Agents are more flexible but less predictable and auditable, while workflows provide explicit control and repeatability.

QUESTION: 2

You are implementing a Claude agent using a custom agent loop that needs to call external APIs, process tool outputs, and make decisions about when to stop iterating. Your team wants to ensure that certain high-risk actions—such as deleting records or transferring funds—always require explicit human approval before execution.

Which combination of approaches best implements this safety requirement within a Claude agent architecture?

- A. Use Claude hooks to intercept tool calls and pause execution before high-risk actions, combined with an approval tool that blocks further execution until a human reviews and approves the pending action

- B.** Configure the system prompt to instruct Claude to never call deletion or transfer tools, and rely on the model's instruction-following to prevent these actions
- C.** Remove high-risk tools from the agent's tool set entirely and only expose them through a separate, manually-triggered admin interface
- D.** Log all tool calls and review the logs after the agent completes execution to ensure no dangerous actions were taken
- E.** Use a sub-agent hierarchy where high-risk actions are delegated to a supervisor agent that evaluates requests before passing them to execution agents

Answer(s): A

Explanation:

Claude hooks provide a mechanism to intercept and modify agent behavior at runtime, making them ideal for implementing deterministic safety controls. Combining hooks with an approval tool ensures that high-risk actions are paused, visible to a human, and only proceed with explicit approval. This is a best-practice pattern for guardrails in agentic systems.

Relying on system prompt instructions alone is insufficient because models can be misled or jailbroken. Removing tools entirely eliminates functionality. Post-execution logging is a detective control, not preventive. Sub-agent hierarchies add organizational structure but don't inherently prevent the supervisor from approving dangerous actions without additional approval logic—hooks provide that deterministic enforcement layer.

QUESTION: 3

Your team is optimizing the cost of a Claude application that makes thousands of API calls daily to process customer support tickets. The tickets often reference common company policies and product information that rarely changes. You have identified that about 40% of tokens in each request are spent transmitting this stable reference material.

Which of the following techniques would most effectively reduce costs in this scenario, and what is the primary reason?

- A.** Use prompt caching to store the common policy and product reference material, because the cache will persist across multiple API calls and avoid re-transmitting the same tokens
- B.** Switch from the Sonnet model to the Haiku model, because Haiku has lower per-token costs and will proportionally reduce the cost of transmitting reference material
- C.** Implement batch processing for all ticket requests, because batch API calls are charged at a 50% discount regardless of token content
- D.** Reduce the context window by truncating policy documents to essential summaries, because smaller context windows always cost less per request
- E.** Migrate to a retrieval-augmented generation (RAG) system that fetches policies from a vector database instead of including them in prompts

Answer(s): A

Explanation: