

Security Checklist for AI-Integrated Applications

Infrastructure & Access

- ☐ Use HTTPS/TLS for all AI API traffic.
- ☐ Enforce authentication and rate limits on AI endpoints.
- ☐ Keep AI secrets/API keys in secure vaults (e.g., HashiCorp Vault, AWS Secrets Manager).

Prompt & Response Handling

- ☐ Sanitize user input before forming prompts.
- ☐ Use system prompts (aka AI stored procedures) to limit AI behavior.
- ☐ Validate AI output before using it in your app.
- ☐ Log AI interactions for observability and security review.

Data & Privacy

- ☐ Do not pass personally identifiable information (PII) to AI unless strictly necessary.
- ☐ Mask or redact sensitive content in user input/output.
- ☐ Add warnings or disclaimers for users where AI is used in decision-making.

Testing & Hardening

- ☐ Perform prompt injection tests (simulate malicious prompts).
- ☐ Create a denylist and allowlist of prompt intents.
- ☐ Monitor for AI misuse or unexpected outputs.

Policy

- ☐ Align AI use with your organizations security and data handling policies.
- ☐ Include an AI security review in your SDLC (Software Development Life Cycle).
- ☐ Document your prompt design, system boundaries, and threat model.