Default Deliverable — technical due diligence

owner: Team • date: 2025-08-20 • trace: xv4kvga4

1. intent & constraints

- intent: Baseline deliverable generation in CI
- · deliverables: report, web, api
- constraints: team=2, timeline=6w, region=us, pii=false, payments=false

2. requirements

- functional: F-1 core, F-2 auth, F-3 persistence
- non-functional: latency p95 ≤ 250ms; availability ≥ 99.5%; cost ≤ \$200/mo

3. architecture

baseline: Next.js + Node API on Managed Host; db=Lite DB or KV; auth=Email-link

```
flowchart LR
Client-->Edge[Edge/CDN]
Edge-->Svc[API]
Svc-->DB[(DB)]
Svc-->Auth[Auth]
Svc-->Queue[(Queue)]
```

alternatives: Alt1: Monolith; Alt2: Modular services rationale: team=2, exp=advanced, pii=false, payments=false, region=us

4. security & privacy (stride)

 S: OIDC/OAuth, short-lived sessions | T: Parameterized queries, signed requests | R: Append-only audit log | I: Private buckets, signed URLs, DLP on PII | D: Rate limiting + backpressure | E: RBAC + least privilege data classification: Low-risk data • residency: US

auto-inclusions: Small Team: Prefer managed services to reduce operational load. Tight Timeline: Defer non-essentials to Phase 2; focus on core ACs.

5. tests & enforcement

coverage: now 80% \rightarrow rc 90%; mutation modules: auth performance SLOs and failure budgets defined.

6. delivery plan

P1 (3w): Auth + Core CRUD + Basic tests • P2 (3w): Analytics + Polishing + Docs risks: scope creep; under-specified NFRs → mitigations: explicit ACs; phased delivery; guardrails in CI