

Availability Scenario

Source: Operations engineer

Stimulus: Primary Aiven database node becomes unavailable due to a regional outage or planned maintenance

Artifact: Managed relational database cluster (Aiven)

Environment: Production

Response: Database traffic is automatically redirected to a healthy node in the cluster; write operations resume without manual intervention; all recent updates are preserved through continuous replication and backup mechanisms

Response Measure: Failover completes successfully, the application continues functioning without developer intervention, and no inconsistencies appear in order records, product listings, or refund states

Mapped Tactics/Patterns:

Backup and Restore: Applied by:

- Continuous write-ahead log archiving enabling point-in-time recovery and bounding the data-loss window

Resource Isolation: Applied by:

- Separating compute and storage nodes so a failure in one component does not cascade to others
- Ensuring the database cluster distributes nodes across multiple availability zones, reducing the blast radius of interruptions

Usability

Return/Refund flow with guided feedback

Source: User

Stimulus: User wants to return an item from a completed purchase

Artifact: Return/Refund system

Environment: Runtime

Response: User completes a 3-step return request process with clear visual feedback, sees real-time status updates with color-coded badges and contextual messages, and understands next steps at each stage

Response Measure: User successfully submits a return request within 2 minutes, can track status changes (INSPECTION → APPROVED_AWAITING_SHIPMENT → SHIPPED → COMPLETED), and receives clear guidance on required actions (e.g., “Admin approved, awaiting shipment”) without confusion

Mapped Tactics/Patterns:

Support user initiative, a usability tactic focused on keeping users in control and confident during multi-step tasks. In this scenario it is applied by (1) a 3-step guided modal with numbered steps (Select Purchase → Select Items → Provide Reason) that shows progress, (2) status-specific contextual messages (e.g., “Admin approved, awaiting shipment” with instructions) so users always know what to do next, and (3) color-coded status badges with icons (yellow for INSPECTION, green for APPROVED, red for REJECTED) that enable quick recognition of the current state without reading long text.