METRICS

```
PS C:\Users\tejas\OneDrive\Desktop\SkillUp\Banking APP> (Invoke-WebRequest -Uri "http://localhost:3001/api/metric
s" -UseBasicParsing).Content
# HELP process_cpu_user_seconds_total Total user CPU time spent in seconds.
# TYPE process_cpu_user_seconds_total counter
process_cpu_user_seconds_total 1.445614

# HELP process_cpu_system_seconds_total Total system CPU time spent in seconds.
# TYPE process_cpu_system_seconds_total counter
process_cpu_system_seconds_total 0.385104

# HELP process_cpu_seconds_total Total user and system CPU time spent in seconds.
# TYPE process_cpu_seconds_total counter
process_cpu_seconds_total 1.830718

# HELP process_start_time_seconds Start time of the process since unix epoch in seconds.
# TYPE process_start_time_seconds gauge
process_start_time_seconds 1759065327

# HELP process_resident_memory_bytes Resident memory size in bytes.
# TYPE process_resident_memory_bytes gauge
process_resident_memory_bytes 103612416

# HELP process_virtual_memory_bytes Virtual memory size in bytes.
# TYPE process_virtual_memory_bytes gauge
process_virtual_memory_bytes 11116204032

# HELP process_heap_bytes Process heap size in bytes.
# TYPE process_heap_bytes gauge
process_heap_bytes 125198336

# HELP process_open_fds Number of open file descriptors.
# TYPE process_open_fds gauge
process_open_fds 23

# HELP process_max_fds Maximum number of open file descriptors.
# TYPE process_max_fds gauge
process_max_fds 1048576
```

```
# HELP nodejs_eventloop_lag_seconds Lag of event loop in seconds.
# TYPE nodejs_eventloop_lag_seconds gauge
nodejs_eventloop_lag_seconds 0.011311629

# HELP nodejs_eventloop_lag_min_seconds The minimum recorded event loop delay.
# TYPE nodejs_eventloop_lag_min_seconds gauge
nodejs_eventloop_lag_min_seconds 0.00909312

# HELP nodejs_eventloop_lag_max_seconds The maximum recorded event loop delay.
# TYPE nodejs_eventloop_lag_max_seconds gauge
nodejs_eventloop_lag_max_seconds 0.012345343

# HELP nodejs_eventloop_lag_mean_seconds The mean of the recorded event loop delays.
# TYPE nodejs_eventloop_lag_mean_seconds gauge
nodejs_eventloop_lag_mean_seconds 0.010240691502532357

# HELP nodejs_eventloop_lag_stddev_seconds The standard deviation of the recorded event loop delays.
# TYPE nodejs_eventloop_lag_stddev_seconds gauge
nodejs_eventloop_lag_stddev_seconds 0.0001392707234402728

# HELP nodejs_eventloop_lag_p50_seconds The 50th percentile of the recorded event loop delays.
# TYPE nodejs_eventloop_lag_p50_seconds gauge
nodejs_eventloop_lag_p50_seconds 0.010231807

# HELP nodejs_eventloop_lag_p90_seconds The 90th percentile of the recorded event loop delays.
# TYPE nodejs_eventloop_lag_p90_seconds gauge
nodejs_eventloop_lag_p90_seconds 0.010379263

# HELP nodejs_eventloop_lag_p99_seconds The 99th percentile of the recorded event loop delays.
# TYPE nodejs_eventloop_lag_p99_seconds gauge
nodejs_eventloop_lag_p99_seconds 0.010518527

# HELP nodejs_active_resources Number of active resources that are currently keeping the event loop alive, groupe
d by async resource type.
# TYPE nodejs_active_resources gauge
nodejs_active_resources{type="PipeWrap"} 2
nodejs_active_resources{type="TCPSocketWrap"} 4
nodejs_active_resources{type="TCPServerWrap"} 1
nodejs_active_resources{type="Immediate"} 1

# HELP nodejs_active_resources_total Total number of active resources.
# TYPE nodejs_active_resources_total gauge
```

```
# HELP nodejs_active_handles Number of active libuv handles grouped by handle type. Every handle type is C++ clas
s name.
# TYPE nodejs_active_handles gauge
nodejs_active_handles{type="Socket"} 6
nodejs_active_handles{type="Server"} 1

# HELP nodejs_active_handles_total Total number of active handles.
# TYPE nodejs_active_handles_total gauge
nodejs_active_handles_total 7

# HELP nodejs_active_requests Number of active libuv requests grouped by request type. Every request type is C++
class name.
# TYPE nodejs_active_requests gauge

# HELP nodejs_active_requests_total Total number of active requests.
# TYPE nodejs_active_requests_total gauge
nodejs_active_requests_total 0

# HELP nodejs_heap_size_total_bytes Process heap size from Node.js in bytes.
# TYPE nodejs_heap_size_total_bytes gauge
nodejs_heap_size_total_bytes 41132032

# HELP nodejs_heap_size_used_bytes Process heap size used from Node.js in bytes.
# TYPE nodejs_heap_size_used_bytes gauge
nodejs_heap_size_used_bytes 38263360

# HELP nodejs_external_memory_bytes Node.js external memory size in bytes.
# TYPE nodejs_external_memory_bytes gauge
nodejs_external_memory_bytes 3110963

# HELP nodejs_heap_space_size_total_bytes Process heap space size total from Node.js in bytes.
# TYPE nodejs_heap_space_size_total_bytes gauge
nodejs_heap_space_size_total_bytes{space="read_only"} 0
nodejs_heap_space_size_total_bytes{space="old"} 34230272
nodejs_heap_space_size_total_bytes{space="code"} 2306048
nodejs_heap_space_size_total_bytes{space="map"} 2367488
nodejs_heap_space_size_total_bytes{space="large_object"} 1179648
nodejs_heap_space_size_total_bytes{space="code_large_object"} 0
nodejs_heap_space_size_total_bytes{space="new_large_object"} 0
nodejs_heap_space_size_total_bytes{space="new"} 1048576
```

```
# HELP nodejs_heap_space_size_used_bytes Process heap space size used from Node.js in bytes.
# TYPE nodejs_heap_space_size_used_bytes gauge
nodejs_heap_space_size_used_bytes{space="read_only"} 0
nodejs_heap_space_size_used_bytes{space="old"} 32856904
nodejs_heap_space_size_used_bytes{space="code"} 2037888
nodejs_heap_space_size_used_bytes{space="map"} 1249632
nodejs_heap_space_size_used_bytes{space="large_object"} 1150568
nodejs_heap_space_size_used_bytes{space="code_large_object"} 0
nodejs_heap_space_size_used_bytes{space="new_large_object"} 0
nodejs_heap_space_size_used_bytes{space="new"} 973480

# HELP nodejs_heap_space_size_available_bytes Process heap space size available from Node.js in bytes.
# TYPE nodejs_heap_space_size_available_bytes gauge
nodejs_heap_space_size_available_bytes{space="read_only"} 0
nodejs_heap_space_size_available_bytes{space="old"} 710824
nodejs_heap_space_size_available_bytes{space="code"} 120704
nodejs_heap_space_size_available_bytes{space="map"} 712552
nodejs_heap_space_size_available_bytes{space="large_object"} 0
nodejs_heap_space_size_available_bytes{space="code_large_object"} 0
nodejs_heap_space_size_available_bytes{space="new_large_object"} 1030976
nodejs_heap_space_size_available_bytes{space="new"} 57496

# HELP nodejs_version_info Node.js version info.
# TYPE nodejs_version_info gauge
nodejs_version_info{version="v18.20.8",major="18",minor="20",patch="8"} 1

# HELP nodejs_gc_duration_seconds Garbage collection duration by kind, one of major, minor, incremental or weakcb
.
# TYPE nodejs_gc_duration_seconds histogram
nodejs_gc_duration_seconds_bucket{le="0.001",kind="minor"} 0
nodejs_gc_duration_seconds_bucket{le="0.01",kind="minor"} 0
nodejs_gc_duration_seconds_bucket{le="0.1",kind="minor"} 1
nodejs_gc_duration_seconds_bucket{le="1",kind="minor"} 1
nodejs_gc_duration_seconds_bucket{le="2",kind="minor"} 1
nodejs_gc_duration_seconds_bucket{le="5",kind="minor"} 1
nodejs_gc_duration_seconds_bucket{le="+Inf",kind="minor"} 1
nodejs_gc_duration_seconds_sum{kind="minor"} 0.0121532760001719
nodejs_gc_duration_seconds_count{kind="minor"} 1
nodejs_gc_duration_seconds_bucket{le="0.001",kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="0.01",kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="0.1",kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="1",kind="incremental"} 5
```

```
nodejs_gc_duration_seconds_bucket{le="0.001",kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="0.01",kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="0.1",kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="1",kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="2",kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="5",kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="+Inf",kind="incremental"} 5
nodejs_gc_duration_seconds_sum{kind="incremental"} 0.0012528389990329742
nodejs_gc_duration_seconds_count{kind="incremental"} 5
nodejs_gc_duration_seconds_bucket{le="0.001",kind="major"} 0
nodejs_gc_duration_seconds_bucket{le="0.01",kind="major"} 1
nodejs_gc_duration_seconds_bucket{le="0.1",kind="major"} 2
nodejs_gc_duration_seconds_bucket{le="1",kind="major"} 2
nodejs_gc_duration_seconds_bucket{le="2",kind="major"} 2
nodejs_gc_duration_seconds_bucket{le="5",kind="major"} 2
nodejs_gc_duration_seconds_bucket{le="+Inf",kind="major"} 2
nodejs_gc_duration_seconds_sum{kind="major"} 0.034128913000226024
nodejs_gc_duration_seconds_count{kind="major"} 2

# HELP agent_latency_ms Agent execution latency in milliseconds
# TYPE agent_latency_ms histogram

# HELP tool_call_total Total number of tool calls
# TYPE tool_call_total counter

# HELP agent_fallback_total Total number of agent fallbacks
# TYPE agent_fallback_total counter

# HELP rate_limit_block_total Total number of rate limit blocks
# TYPE rate_limit_block_total counter

# HELP action_blocked_total Total number of blocked actions
# TYPE action_blocked_total counter
```

```
PS C:\Users\tejas\OneDrive\Desktop\SkillUp\Banking APP> docker logs bankingapp-backend --tail=20
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/evals/metrics, GET} route +1ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RoutesResolver] TracesController {/api/traces}: +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/traces/:sessionId, GET} route +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/traces/:sessionId/download, GET} route
+0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RoutesResolver] DashboardController {/api/dashboard}: +1ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/dashboard/kpis, GET} route +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/dashboard/fraud-triage, GET} route +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RoutesResolver] ObjectStoreController {/api/artifacts}: +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/artifacts/save, POST} route +1ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/artifacts/:id, GET} route +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/artifacts/:id, DELETE} route +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/artifacts, GET} route +1ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/artifacts/trace, POST} route +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/artifacts/report, POST} route +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/artifacts/export, POST} route +0ms
[Nest] 18  - 09/28/2025, 1:15:31 PM        LOG [RouterExplorer] Mapped {/api/artifacts/stats/overview, GET} route +1
ms
info: Redis connection established {"masked":true,"service":"aegis-support-api","timestamp":"2025-09-28T13:15:31.
989Z"}
[Nest] 18  - 09/28/2025, 1:15:32 PM        LOG [NestApplication] Nest application successfully started +80ms
info: 🚀 Aegis Backend API running on port 3001 {"masked":true,"service":"aegis-support-api","timestamp":"2025-09
-28T13:15:32.026Z"}
info: 📚 API Documentation available at http://localhost:3001/api/docs {"masked":true,"service":"aegis-support-ap
i","timestamp":"2025-09-28T13:15:32.029Z"}
PS C:\Users\tejas\OneDrive\Desktop\SkillUp\Banking APP>
```

Fraud Triage Analysis   ✕

Customer: cust_001 | Transaction: txn_01001
Session: a40fdb44-5b96-433a-9439-884959b60dff

Risk Assessment

(Triage Score: 33)   **Level: HIGH**   (Confidence: 95%)

* Triage analysis provides detailed AI-based risk assessment vs. initial screening

Recommendation: BLOCK

Reasoning:

ⓘ Fallback Risk Assessment: - Risk Level: Low - Risk Signals Count: 1 - Customer: Rajesh Kumar - Assessment: Based on 1 risk signals detected - Recommendation: Low risk - standard monitoring - Confidence: 85% (deterministic fallback)

ⓘ AI-generated risk assessment

ⓘ Enhanced fraud detection analysis

Risk Signals

◔ High transaction velocity: 2 transactions in the last hour (2.0x normal rate)   **low**
velocity - low (1)

Knowledge Base References

Query: "" (4 results)

Card Freeze Process

Knowledge Base References

Query: "" (4 results)

Card Freeze Process

To freeze a card, verify customer identity first Check for recent transactions before freezing Always require OTP verification for security Confirm...

Relevance: 0%   database

Dispute Resolution

For unauthorized transactions, gather transaction details Verify customer identity before opening dispute Use reason code 10.4 for unauthorized tran...

Relevance: 0%   database

Travel Notice

Customers can set travel notices for international transactions Travel notices help prevent false fraud alerts Valid for up to 90 days Can be set v...

Relevance: 0%   database

⊘ Freeze Card   ⚒ Open Dispute   📇 Contact Customer