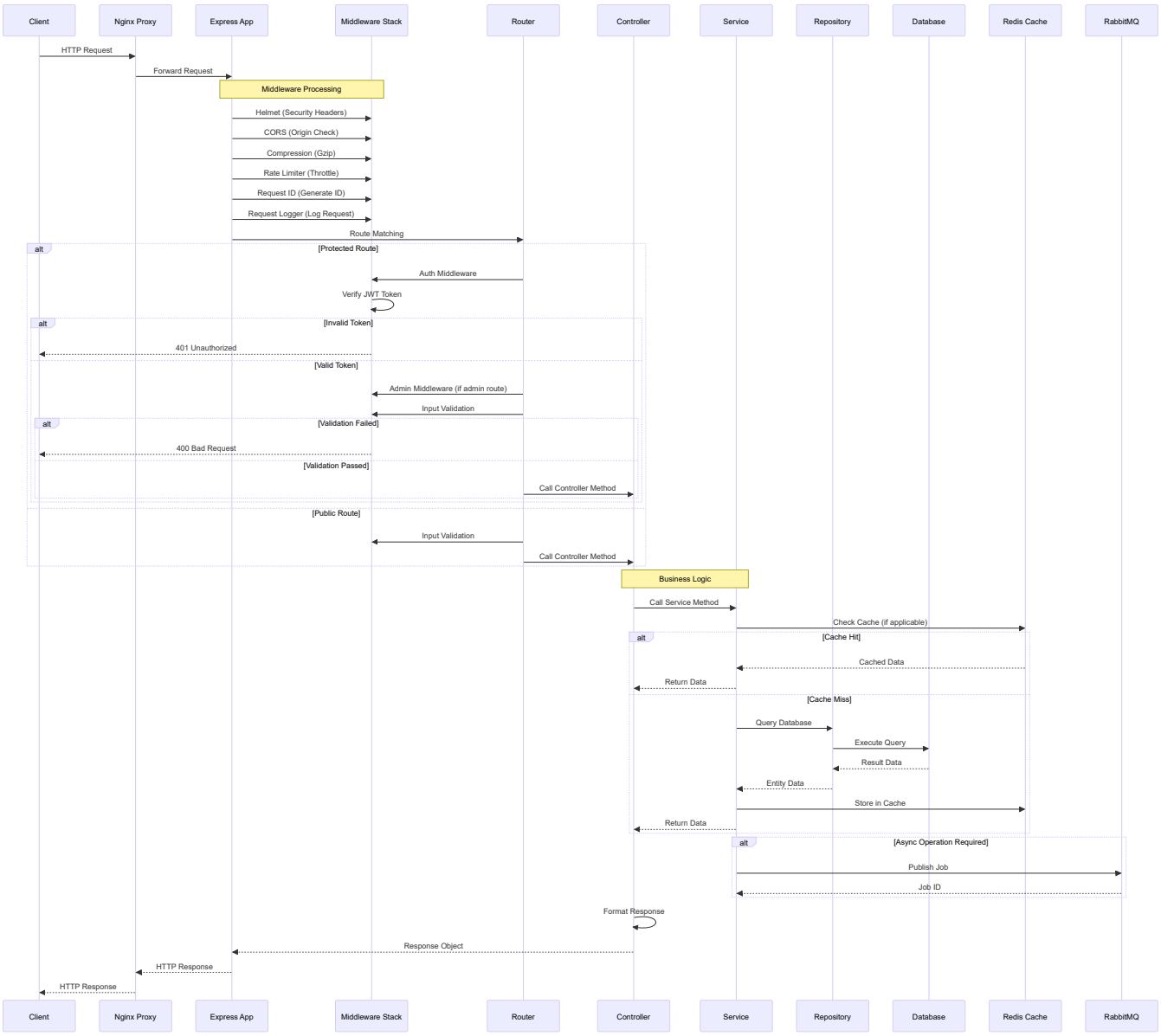
Client
Nginx Proxy
Express App
Middleware Stack
Router
Controller
Service
Repository
Database
Redis Cache
RabbitMQ
HTTP Request
Forward Request
Middleware Processing
Helmet (Security Headers)
CORS (Origin Check)
Compression (Gzip)
Rate Limiter (Throttle)
Request ID (Generate ID)
Request Logger (Log Request)
Route Matching
alt
[Protected Route]
Auth Middleware
Verify JWT Token
alt
[Invalid Token]
401 Unauthorized
[Valid Token]
Admin Middleware (if admin route)
Input Validation
alt
[Validation Failed]
400 Bad Request
[Validation Passed]
Call Controller Method
[Public Route]
Input Validation
Call Controller Method
Business Logic
Call Service Method
Check Cache (if applicable)
alt
[Cache Hit]
Cached Data
Return Data
[Cache Miss]
Query Database
Execute Query
Result Data
Entity Data
Store in Cache
Return Data
alt
[Async Operation Required]
Publish Job
Job ID
Format Response
Response Object
HTTP Response
HTTP Response