JEDx CAR SAM Template - Quickstart Guide

This quickstart provides a high-level summary of the JEDx CAR Service SAM template. It outlines the main resources, data flow, and key parameters for fast reference.

Key Parameters

Parameter	Purpose
Prefix	Prefix for resource names (e.g., jedx-car-bucket)
CollectorUrl	External collector API endpoint (currently hard-coded in template)

Core Resources:
- S3 Buckets: Input, Main, Error
- Kinesis Stream: Input stream for validation pipeline
- DynamoDB Table: pk+sk schema, on-demand billing
- API Gateway: Exposes /car endpoints with Cognito auth
- Lambda Functions: API handlers, S3→Kinesis, and validation processing

Data Flow:
1. Files uploaded → Input S3 Bucket
2. Triggers S3ToKinesis Lambda → pushes record to Kinesis
3. CarValidation Lambda consumes Kinesis → writes valid data to Main S3/DynamoDB, errors to Error S3
4. API Gateway endpoints (secured by Cognito) invoke API Lambdas for record access and collector forwarding

Suggestions:
- Use CollectorUrl parameter instead of hard-coded URL
- Add retries or DLQ for CarValidation Lambda
- Apply least-privilege IAM policies on S3/DynamoDB