TechBay AWS Pricing Assumptions

June 23, 2025

1 Overview

This document outlines the basic assumptions used in the AWS Pricing Calculator estimate for the TechBay project, an e-commerce platform leveraging AWS services. The estimate, dated June 23, 2025, projects a monthly cost of \$79.86 USD with no upfront cost, based on the configurations of AWS Lambda, Amazon DynamoDB, Amazon Simple Storage Service (S3), and Amazon CloudWatch.

2 Assumptions for Cost Calculation

The following assumptions are derived from the configuration summaries provided in the AWS Pricing Calculator estimate.

2.1 AWS Lambda

• Region: US East (N. Virginia).

• Invoke Mode: Buffered.

• Architecture: x86.

• **Concurrency:** 10 concurrent executions.

• **Provisioned Concurrency:** Enabled for 2 hours per month.

• Number of Requests: 20,000 requests per month.

• Provisioned Concurrency Requests: 10 requests per minute.

• **Ephemeral Storage:** 512 MB allocated per function.

• **Cost Impact:** Monthly cost of \$0.13 USD.

2.2 Amazon DynamoDB

• Region: US East (N. Virginia).

• Table Class: Standard.

Average Item Size: 1 KB (all attributes).

- Data Storage Size: 128 GB.
- **DynamoDB Streams:** 10 GetRecord API requests per month.
- **Cost Impact:** Monthly cost not specified in the estimate (assumed negligible or included elsewhere).

2.3 Amazon Simple Storage Service (S3)

- Region: US East (N. Virginia).
- Storage Type: S3 Standard.
- Storage Volume: 10 GB per month.
- Data Scanned by S3 Select: 10 GB per month.
- Data Returned by S3 Select: 10 GB per month.
- Requests:
 - PUT, COPY, POST, LIST requests: 0 per month.
 - GET, SELECT, and other requests: 100,000 per month.

Data Transfer:

- Inbound: 0 TB per month.
- Outbound: 0 TB per month.
- Cost Impact: Monthly cost of \$0.30 USD.

2.4 Amazon CloudWatch

3 Notes

- The total monthly cost of \$79.86 USD includes contributions from AWS Lambda (\$0.13 USD), Amazon S3 (\$0.30 USD), and other services not detailed in the provided OCR content (e.g., Amazon Cognito, API Gateway, SNS, Systems Manager, CloudTrail, CloudFront).
- Amazon Cognito and other services listed with \$0.00 USD costs are assumed to have minimal or no usage in this estimate.
- Costs are estimates and do not include taxes or fees, which may vary based on actual usage.
- The estimate assumes no data transfer costs (inbound/outbound) for S3, which may change with increased traffic.
- Actual costs may differ due to variations in usage patterns, such as increased Lambda requests or DynamoDB read/write capacity.