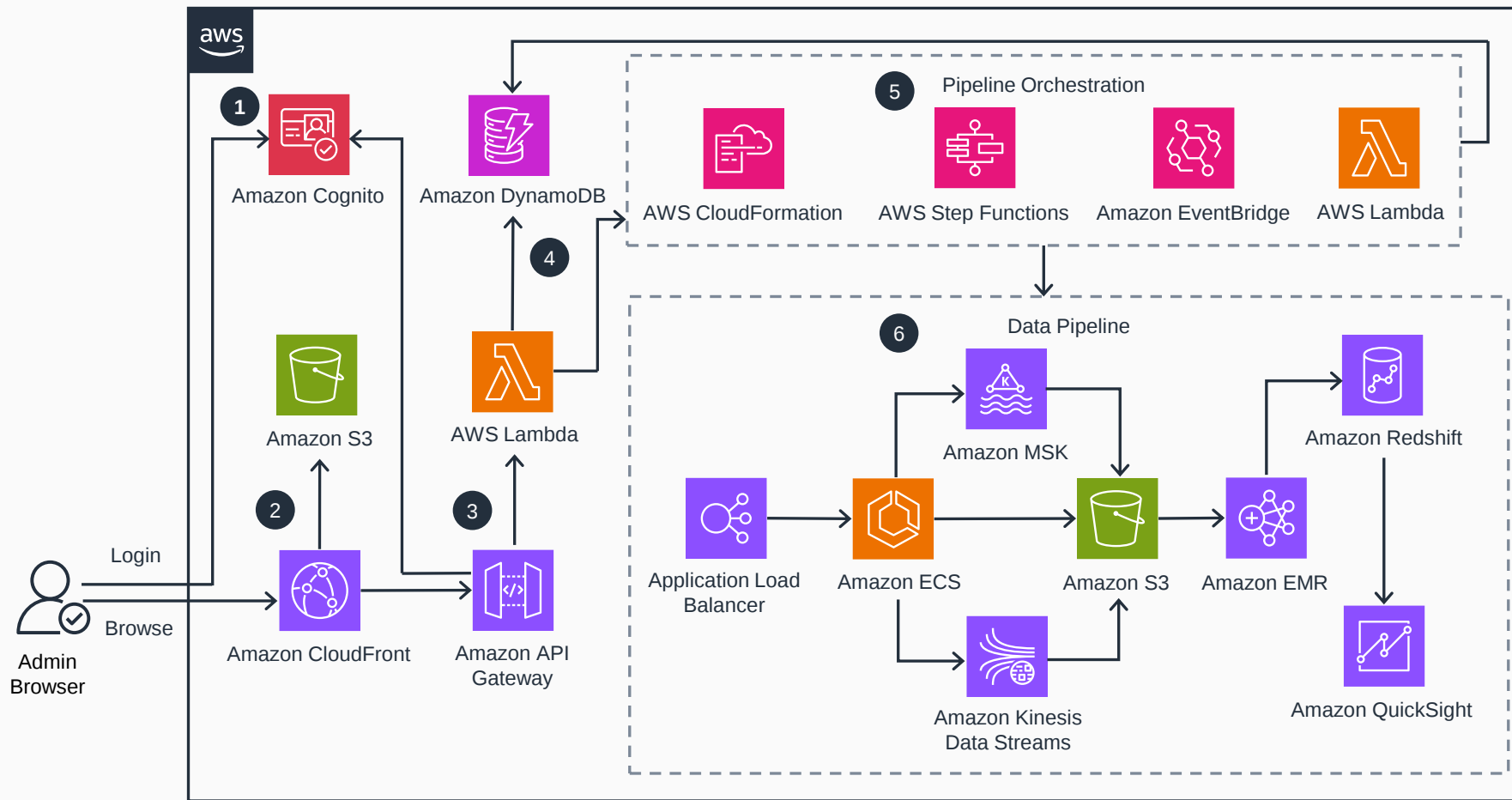


Guidance for Clickstream Analytics on AWS

This architecture diagram illustrates an end-to-end solution to collect, ingest, analyze, and visualize clickstream data inside web and mobile applications.



- 1 An Amazon Cognito user pool or OpenID Connect (OIDC) handles authentication.
- 2 Amazon CloudFront distributes the frontend web UI assets hosted in an Amazon Simple Storage Service (Amazon S3) bucket.
- 3 Amazon API Gateway manages the backend APIs and routes traffic to AWS Lambda.
- 4 Amazon DynamoDB stores persistent data from the web UI console.
- 5 AWS CloudFormation, AWS Step Functions, Amazon EventBridge, and AWS Lambda orchestrate the lifecycle management of data pipelines.
- 6 The data pipeline, consisting of Application Load Balancer, Amazon Elastic Container Service (Amazon ECS), Amazon Managed Streaming for Apache Kafka (Amazon MSK), Amazon Kinesis Data Streams, Amazon S3, Amazon EMR Serverless, Amazon Redshift, and Amazon QuickSight, provides scalable clickstream ingestion through load-balanced processing, buffered storage, ETL, and warehouse analytics.

