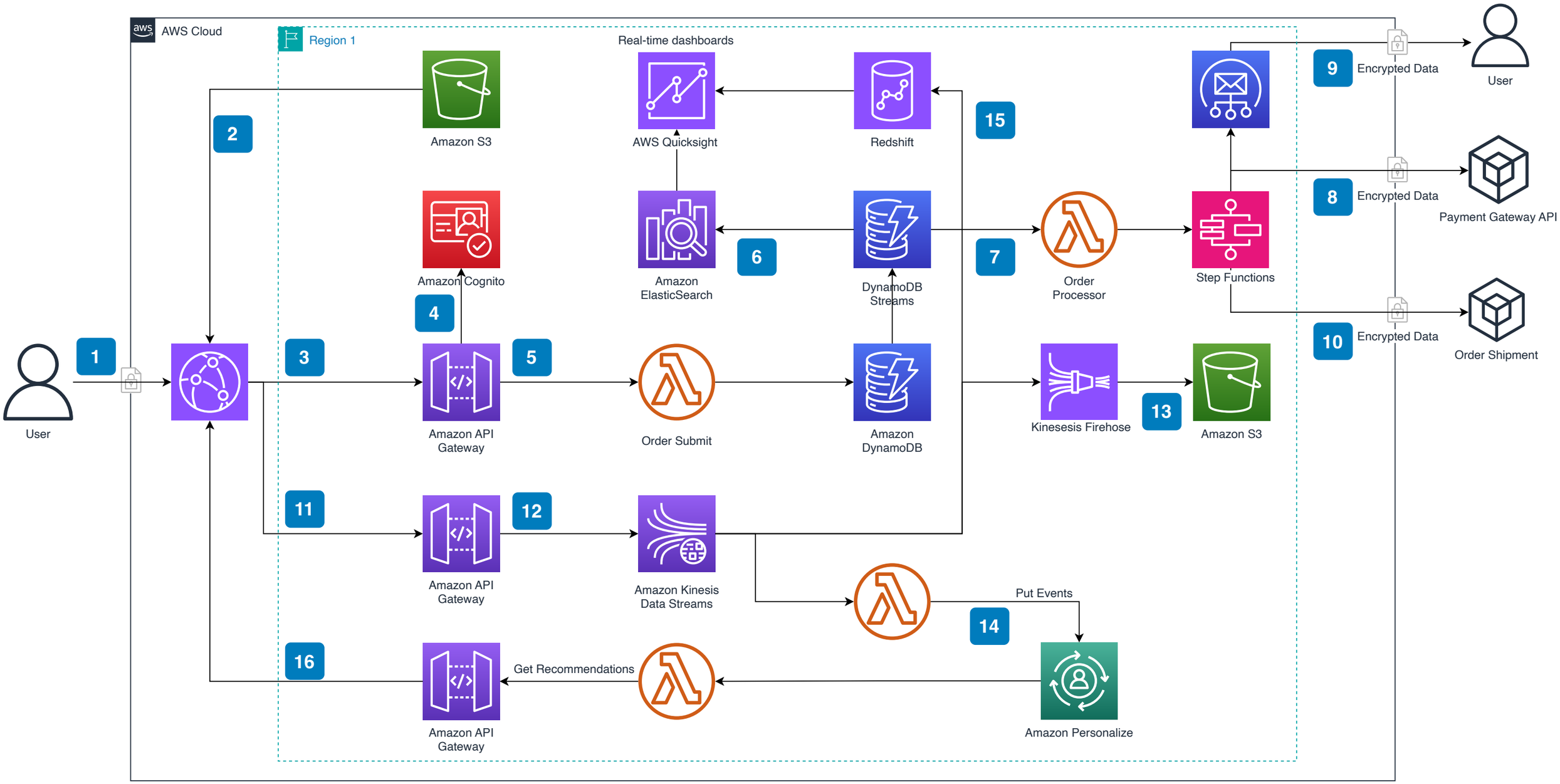
e-Commerce website with real-time recommendations and analytics



1. Customer request via Cloudfront CDN
2. Static content load from S3
3. User connection to dynamic content through API
4. User authentication with Cognito
5. Synchronous order submission through Lambda and order data store in DynamoDB.
6. Search engine (Elasticsearch integration with DynamoDB streams. Dashboards in Quicksight.
7. Asynchronous order processing via Step Functions.
8. Payment processing through external service.
9. Notification to user via AWS Simple Email Service.
10. Order shipment data sent.
11. Clickstream though API.
12. Clickstream data ingestion through Kineses data streams.
13. Clickstream data stroge through Firehose to S3.
14. Clickstream Put Events to AWS Personalize.
15. Clickstream data submission to Redshift for real-time analytics and dashboard on Quicksight.
15. Real-time recommendations to user from Amazone Personalize through API Gateway.