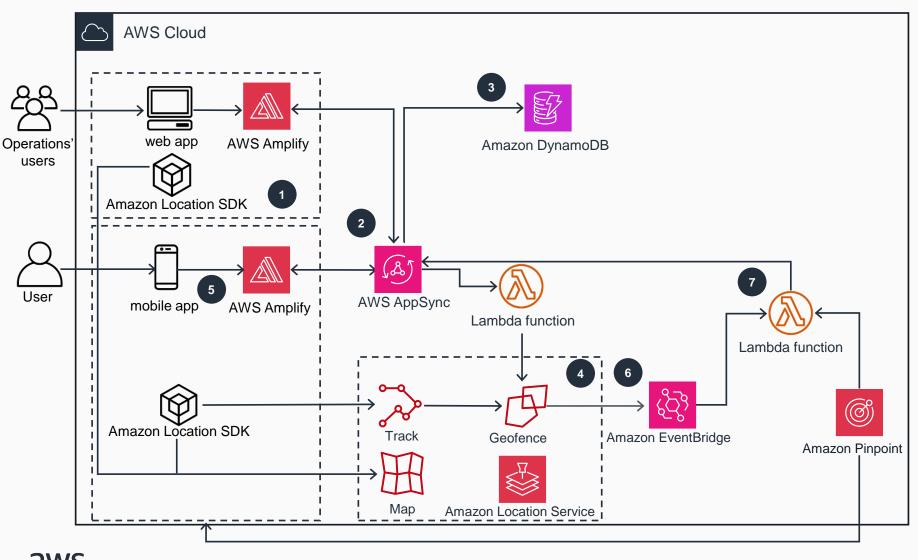
## **Guidance for Location-Based Customer Engagement on AWS**

This architecture diagram shows how to use Amazon Location Service features, including maps, trackers, and geofencing collections, to incorporate location-awareness capabilities into applications.



- The operations and business users utilize AWS Amplify to create messages, define business rules governing engagements, and establish geofences that initiate messages.
- Operations are performed through a GraphQL API provided by AWS AppSync, enabling interaction with a single API and a standardized access layer. The web application uses Amplify libraries to make requests to AWS AppSync.
- Data for messages and rules is stored in **Amazon DynamoDB** tables.
- When creating a rule for engagements, an **AWS Lambda** function also creates a geofence using **Amazon Location Service** on a geofence collection.
- The mobile app uses **Amplify** libraries to make requests to the **AWS AppSync** API. Geolocations are sent to a tracker to follow the device's position.
- The device's position is evaluated against the established geofences. When a device enters or exits a geofence, corresponding events are initiated on the **Amazon EventBridge** service.
- A Lambda function processes events and notifies users either through AWS AppSync or Amazon Pinpoint.