

## Description

*Build a Serverless, Location-Aware, Search & Recommendations–Enabled Application* provides an opportunity for you to build a real-time analytics and geospatial search application using Amazon Elasticsearch Service (ES), Amazon DynamoDB, DynamoDB Streams, Amazon API Gateway, AWS Lambda, and Amazon Simple Storage Service. In this bootcamp, you walk through a real-world location-aware social application that displays information generated from a model created with Amazon Machine Learning. The application also allows users to search within a geographic boundary and update the map with real-time information. In addition, the course covers best practices for processing and analyzing data, such as the lambda data processing pattern and automating development process, using Swagger, Grunt, and the AWS SDK.

## Course Objectives

This course teaches you how to:

- Store and read data using Amazon DynamoDB.
- Analyze and index data using DynamoDB Streams.
- Perform location-based queries using Amazon Elasticsearch.
- Build REST API's with API Gateway and AWS Lambda.
- Train and invoke a model for real-time recommendations using Amazon Machine Learning.

## Intended Audience

This course is intended for:

- Solutions architects
- Data scientists
- Developers

## Prerequisites

We recommend that attendees of this course have the following prerequisites:

- Strong working knowledge of AWS core services and features
- Some experience with a programming language
- Proficiency with the Linux operating system

## Delivery Method

This course is delivered through a mix of:

- Instructor-Led Training (ILT)
- Hands-on Labs

## Duration

One day

## Course Outline

This course covers the following concepts:

- Geospatial indexing and querying using Amazon Elasticsearch

- Store and process data using DynamoDB and DynamoDB Streams
- Process datasets used to build Machine learning models
- Real-time recommendation using trained Amazon Machine Learning models
- Visualization of location-based data
- Develop REST API's for use in web and mobile applications