# Elasticsearch Essential Training

| Day - 1 | Day - 2 |
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**Day - 1**

- **Introducing Elasticsearch**

  - Pre-requisites and Course Overview
  - A Brief History of Search
  - How Does Search Work?
  - The Inverted Index
  - Lucene, an Open Source Search Library
  - Introducing Elasticsearch
  - Installing and Setting up Elasticsearch
  - Basic Concepts in Elasticsearch
  - Monitoring the Health of the Cluster

- **Executing CRUD Operations Using the Elasticsearch APIs**

  - Introducing the cURL Command Line Utility
  - Creating Indices
  - Adding Documents to an Index
  - Retrieving Whole and Partial Documents
  - Updating Whole and Partial Documents
  - Deleting Documents and Indices
  - Performing Bulk Operations on Documents
  - Bulk Indexing of Documents from a JSON File

**Day - 2**

- **Executing Search Requests Using Elasticsearch Query DSL**

  - Recap: How Search Works
  - The Query and Filter Context
  - Setting up Fake Data for Queries
  - Search Using Query Params
  - Search Using the Request Body
  - Source Filtering Document Contents
  - Full Text Searches
  - The TF/IDF Algorithm for Relevance
  - Queries with Common Terms
  - Boolean Compund Queries
  - Term Queries and the Boost Parameter
  - Search Using the Filter Context

- **Executing Analytical Queries Through Aggregations**

  - Types of Aggregation
  - Implementing Metric Aggregations
  - The Cardinality Aggregation
  - Implementing Bucketing Aggregations
  - Multi-level Nested Aggregations
  - The Filter and Filters Bucketing Aggregations