# Elastic Meetup:

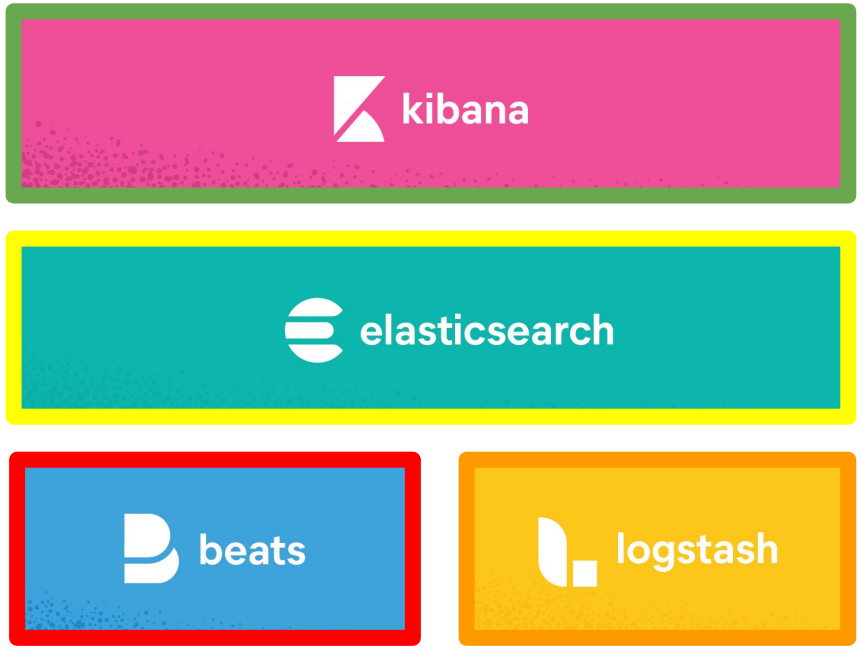
## Beginner's Crash Course to Elastic Stack Series

Part 4: Running Aggregations with Elasticsearch and Kibana

Lisa Jung
Developer Advocate @Elastic

# The Elastic Stack

Reliably and securely take data from any source, in any format, then search, analyze, and visualize it in real time.



# Elasticsearch

Store | Search | Analyze

# Beginner’s crash course to Elastic Stack Series

- Part 1: Intro to Elasticsearch and Kibana
- Part 2: Understanding the relevance of your search with Elasticsearch and Kibana
- Part 3: Running full text queries and complex queries with Elasticsearch and Kibana

# Part 4: Aggregations

# Beginner’s crash course to Elastic Stack Series

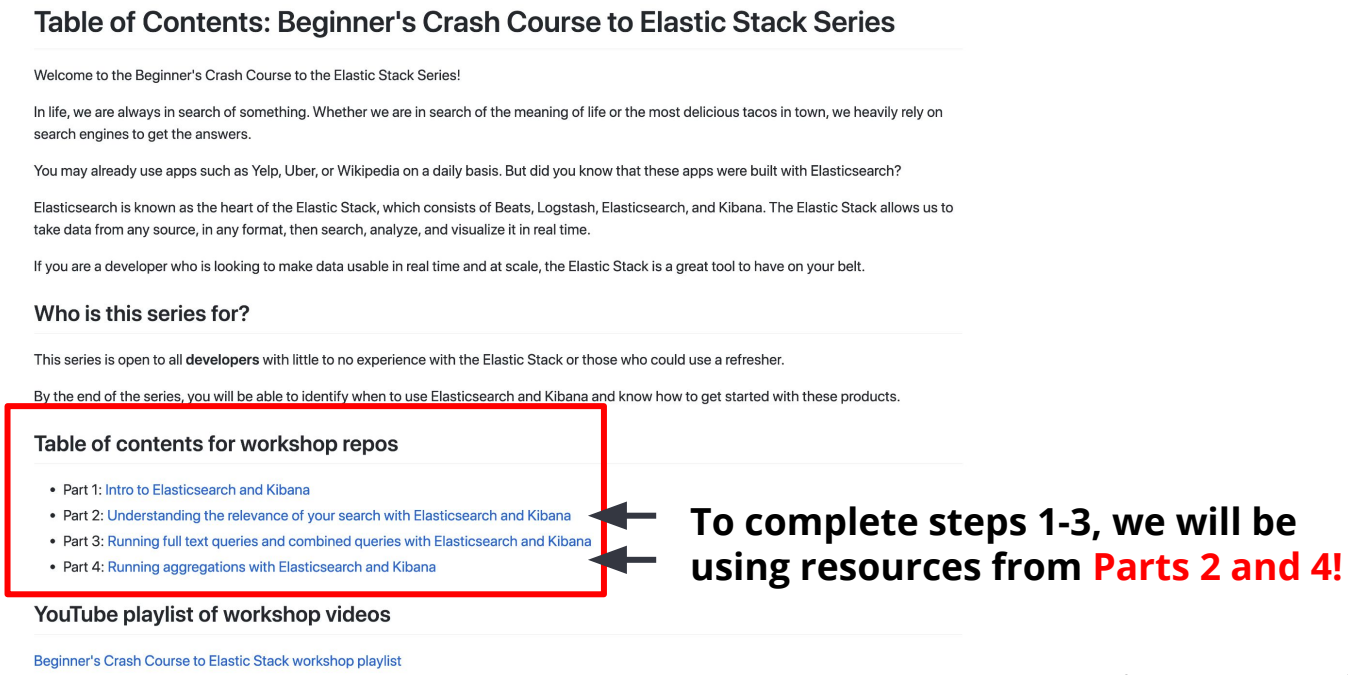
- **Part 4: Running Aggregations with Elasticsearch and Kibana**

# Before we do that...

- **Step 1: Set up and run Elasticsearch and Kibana**
- **Step 2: Add E-commerce dataset to Elasticsearch**
- **Step 3: Set up data within Elasticsearch(mapping & removing irrelevant documents)**

# One stop shop for all the resources from the Beginner's Crash Course to Elastic Stack

- https://ela.st/beginners-table-of-contents



## Table of Contents: Beginner's Crash Course to Elastic Stack Series

Welcome to the Beginner's Crash Course to the Elastic Stack Series!

In life, we are always in search of something. Whether we are in search of the meaning of life or the most delicious tacos in town, we heavily rely on search engines to get the answers.

You may already use apps such as Yelp, Uber, or Wikipedia on a daily basis. But did you know that these apps were built with Elasticsearch?

Elasticsearch is known as the heart of the Elastic Stack, which consists of Beats, Logstash, Elasticsearch, and Kibana. The Elastic Stack allows us to take data from any source, in any format, then search, analyze, and visualize it in real time.

If you are a developer who is looking to make data usable in real time and at scale, the Elastic Stack is a great tool to have on your belt.

### Who is this series for?

This series is open to all **developers** with little to no experience with the Elastic Stack or those who could use a refresher.

By the end of the series, you will be able to identify when to use Elasticsearch and Kibana and know how to get started with these products.

### Table of contents for workshop repos

- Part 1: Intro to Elasticsearch and Kibana
- Part 2: Understanding the relevance of your search with Elasticsearch and Kibana
- Part 3: Running full text queries and combined queries with Elasticsearch and Kibana
- Part 4: Running aggregations with Elasticsearch and Kibana

### YouTube playlist of workshop videos

Beginner's Crash Course to Elastic Stack workshop playlist

**To complete steps 1-3, we will be using resources from Parts 2 and 4!**

# From the table of contents, click on Part 2.

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### YouTube playlist of workshop videos

Beginner's Crash Course to Elastic Stack workshop playlist

# Complete steps 1 and 2 by following the workshop recording.

293 lines (244 sloc) | 7.14 KB Raw Blame

## Beginner's Crash Course to Elastic Stack Series

### Part 2: Understanding the relevance of your search with Elasticsearch and Kibana

Welcome to the Beginner's Crash Course to Elastic Stack!

This repo contains all resources shared during Part 2: Understanding the relevance of your search with Elasticsearch and Kibana.

### Resources

Free Elastic Cloud Trial

Instructions for downloading Elasticsearch and Kibana

Video of the workshop **Time stamp 15:00 - 21:46**

Presentation

Dataset from Kaggle used for tutorial

Elastic America Virtual Chapter Want to attend live workshops? Join the Elastic America Virtual Chapter to get the deets!

# To get the dataset for today's workshop, click on Part 4.

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# E-commerce dataset from Kaggle

## Beginner's Crash Course to Elastic Stack Series

### Part 4: Running Aggregations with Elasticsearch andKibana

Welcome to the Beginner's Crash Course to Elastic Stack!

This repo contains all resources shared during Part 4: Running Aggregations with Elasticsearch and Kibana.

Workshop objectives:

- run metric aggregations
- run buckets aggregations
- combined aggregations

### Resources

Beginner's Crash Course to Elastic Stack Table of Contents This workshop is a part of the Beginner's Crash Course to Elastic Stack series. Check out this table contents to access all the workshops in the series thus far. This table will continue to get updated as more workshops in the series are released!

Free Elastic Cloud Trial

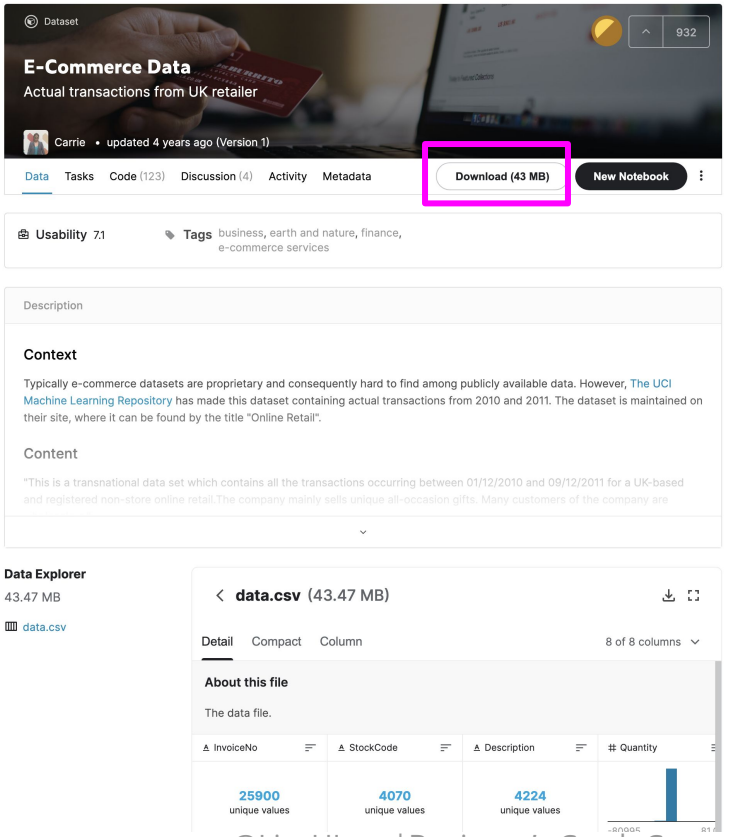
Instructions on how to access Elasticsearch and Kibana on Elastic Cloud

Instructions for downloading Elasticsearch and Kibana

Presentation

E-commerce Dataset from Kaggle

Elastic America Virtual Chapter: Want to attend live workshops? Join the Elastic Americal Virtual Chapter to get the deets!



# Step 3: Set up data within Elasticsearch (Part 4 repo)

## Set up data within Elasticsearch

Often times, the dataset will not be optimal for runningn requests in its original state.

For example, the data type of a field has may not be recognized by Elasticsearch or the dataset may contain a value in a field that do not belong in that field and etc.

Those are exact problems that I ran into while working with this dataset. The following are the requests that I sent to yield the results shared during the workshop.

Copy and paste these requests into the Kibana console(Dev Tools) and run these requests in the order shown below.

**STEP 1: Create a new index(ecommerce_data) with the following mapping.**

```
PUT ecommerce_data
{
  "mappings": {
    "meta": {
      "created_by": "ml-file-data-visualizer"
    },
    "properties": {
      "Country": {
        "type": "keyword"
      },
      "CustomerID": {
        "type": "long"
      },
      "Description": {
        "type": "text"
      },
      "InvoiceDate": {
        "type": "date",
        "format": "M/d/yyyy H:m"
      },
```

# Recap

- **Part 2  Repo**
  - **Watch the video recording ( time stamp 15:00 - 21:46) to complete**
    - **Step 1: Set up and run Elasticsearch and Kibana**
    - **Step 2: Add E-commerce dataset (from Part 4 repo) to Elasticsearch**
- **Part 4 Repo**
  - **Run the requests  under “Set up data within Elasticsearch”  section (using the Kibana console AKA dev tools) to complete**
    - **Step 3: Set up data within Elasticsearch**

# Beginner’s crash course to Elastic Stack Series

- **Part 4: Running Aggregations with Elasticsearch and Kibana**
  - Metric aggregations
  - Bucket aggregations
  - Combined aggregations

# Questions?

# Join us for Part 5 on Wednesday, June 2nd!

- **Part 5: Mapping with Elasticsearch and Kibana**
- **Join Elastic America Virtual chapter to get the deets on my future workshops!**
  - **https://community.elastic.co/amer-virtual/**

# Lisa Jung

Developer Advocate @Elastic

Discussion forum: https://discuss.elastic.co/

Blog: https://dev.to/lisahjung

Twitter: @LisaHJung