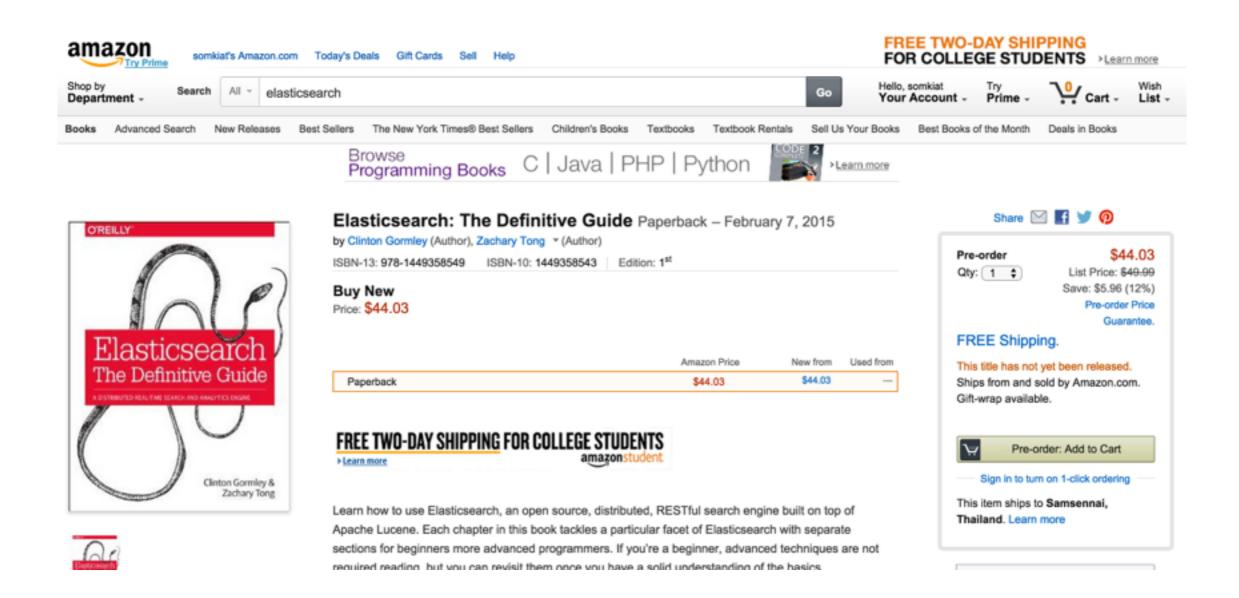
# Elasticsearch

My book 101

book\_01.txt

### Requirement



### Requirement

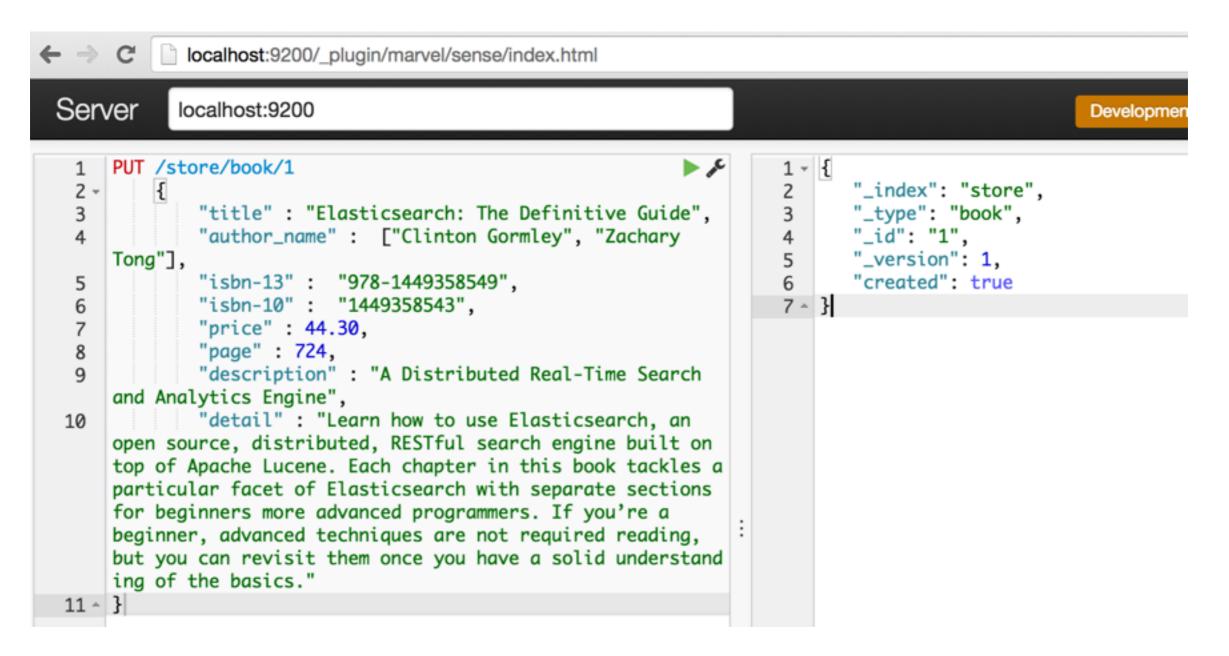
- เก็บข้อมูลหนังสือ ต้องมี tags ด้วย
- ดึงข้อมูลหนังสือ
- ค้นหาข้อมูลหนังสือด้วย field ต่างๆ
- ค้นหาข้อมูลหนังสือตามประโยคที่ต้องการ
- ค้นหาข้อมูลหนังสือที่มีจำนวนหน้ามากกว่า 500 หน้า
- ทำการ highlight ผลการค้นหา
- ทำการสรุปข้อมูลต่างๆ เช่น จำนวนหนังสือในแต่ละ tag

# My Book

Name	Туре	Value
Id	Number	1
Title	String	Elasticsearch
Author_Name	String	["A", "B"]
Tag	String	["A", "B"]
Isbn_13	String	978-1449358549
Isbn_10	String	1449358543
Price	Double	44.30
Page	Number	724
Description	String	
Detail	String	

### Create my book

book\_01.txt



### Index Mapping

GET /store/\_mappings

```
"store": {
   "mappings": {
      "book": {
         "properties": {
            "author_name": {
               "type": "string"
            "description": {
               "type": "string"
            },
            "detail": {
               "type": "string"
            },
            "isbn-10": {
               "type": "string"
            },
            "isbn-13": {
               "type": "string"
            "page": {
               "type": "long"
            "price": {
               "type": "double"
            },
            "title": {
               "type": "string"
```

#### Retrive data

#### GET /store/book/1

```
"_index": "store",
   "_type": "book",
   "_id": "1",
   "_version": 1,
   "found": true.
   "_source": {
      "title": "Elasticsearch: The Definitive Guide",
      "author_name": [
         "Clinton Gormley",
         "Zachary Tong"
      "isbn-13": "978-1449358549",
      "isbn-10": "1449358543",
      "price": 44.3.
      "page": 724.
      "description": "A Distributed Real-Time Search and Analytics Engine",
      "detail": "Learn how to use Elasticsearch, an open source, distributed, RESTful
search engine built on top of Apache Lucene. Each chapter in this book tackles a particula
r facet of Elasticsearch with separate sections for beginners more advanced programmers.
If you're a beginner, advanced techniques are not required reading, but you can revisit
them once you have a solid understanding of the basics."
}
```

#### Search data

#### GET /store/book/\_search

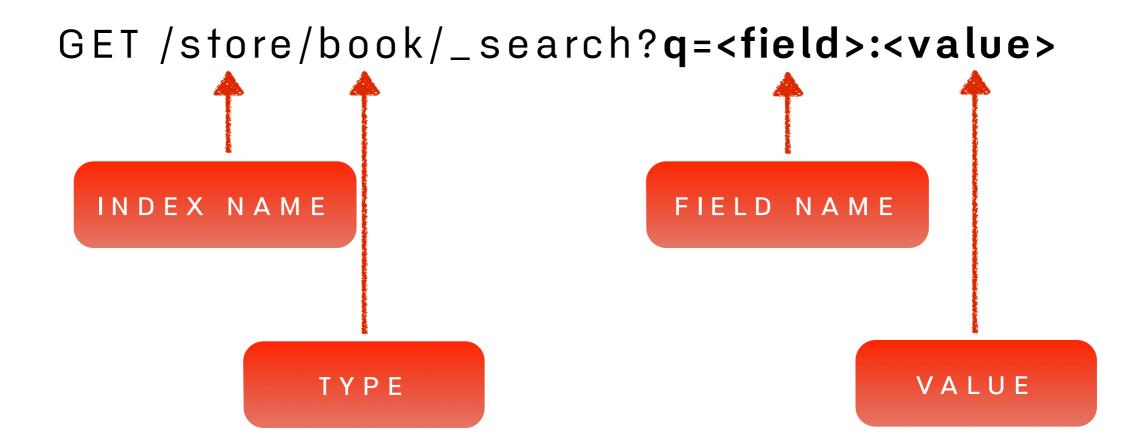
```
"took": 83,
"timed_out": false,
"_shards": {
  "total": 5,
  "successful": 5,
  "failed": 0
hits": {
                       # of document
   "total": 2,
   "max_score": 1,
   "hits":
           index": "store",
                                               detail
          type": "book",
          _score": 1.
          _source": {
           "title": "Elasticsearch: The Definitive Guide",
           "author_name": [
              "Clinton Gormley",
              "Zachary Tong"
           "isbn-13": "978-1449358549",
           "isbn-10": "1449358543",
           "price": 44.3,
           "page": 724,
            "description": "A Distributed Real-Time Search and Analytics Engine",
```

#### Search with title

GET /store/book/\_search?q=title:Elasticsearch

```
"took": 2,
"timed_out": false,
"_shards": {
  "total": 5,
  "successful": 5,
   "failed": 0
 hits": {
                             # of document
   "total": 1,
   "max_score": 0.15342641
   "hits":[
          index": "store",
                                               detail
          type": "book",
          _score": 0.15342641,
          _source": {
            "title": "Elasticsearch: The Definitive Guide",
           "author_name": [
              "Clinton Gormley",
              "Zachary Tong"
           "isbn-13": "978-1449358549",
           "isbn-10": "1449358543",
           "price": 44.3,
            "page": 724,
            "description": "A Distributed Real-Time Search and Analytics Engine",
            "detail": "Learn how to use Elasticsearch, an open source, distributed,
```

#### Search with other field



### Search with DSL

GET /store/book/\_search

```
{
    "query" : {
        "match" : {
            "title" : "Elasticsearch"
        }
}
```

### Search with DSL

GET /store/book/\_search

### Search with DSL

```
GET /store/book/_search
```

```
"query" : {
         "filtered": {
           "filter" : \{
              "range": {
                "page":{"gt":100}
           "query" : {
              "match" : {
                 "title": "Elasticsearch"
}}}
```

### Phrase search

```
GET /store/book/_search
{
    "query" : {
        "match_phrase" : {
            "_all" : "open source"
        }
}
```

### Highlight search

```
GET /store/book/_search
     "query" : {
        "match_phrase":{
          "_all": "clean"
     }},
     "highlight": {
        "fields": {
          "detail" : {},
          "title" : {}
```

## Analytic [Group by]

```
GET /store/book/_search
 "aggs": {
  "all_tags": {
    "terms": {
     "field": "tag"
```

# Analytic [Group by]

```
"aggregations": {
   "all_tags": {
      "doc_count_error_upper_bound": 0,
      "sum_other_doc_count": 0,
      "buckets": [
            "key": "computer",
            "doc_count": 2
         },
{
            "key": "development",
            "doc_count": 1
            "key": "search",
            "doc_count": 1
```