Elasticsearch

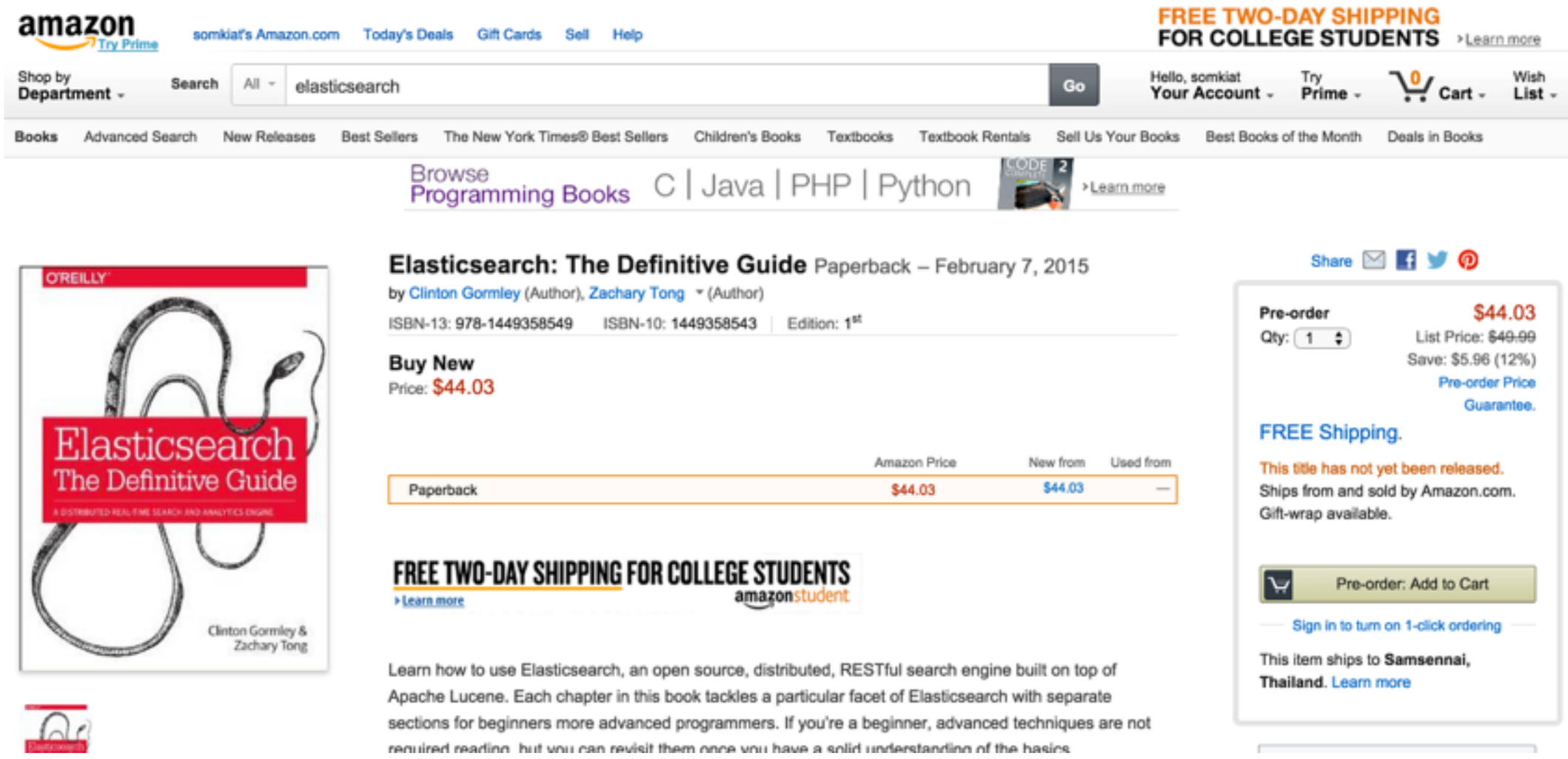
My book 101

book_01.txt

SPRINT3R

Siam Chamnankit Co., Ltd., Odd-e (Thailand) Co., Ltd. and Alliance

Requirement



Requirement

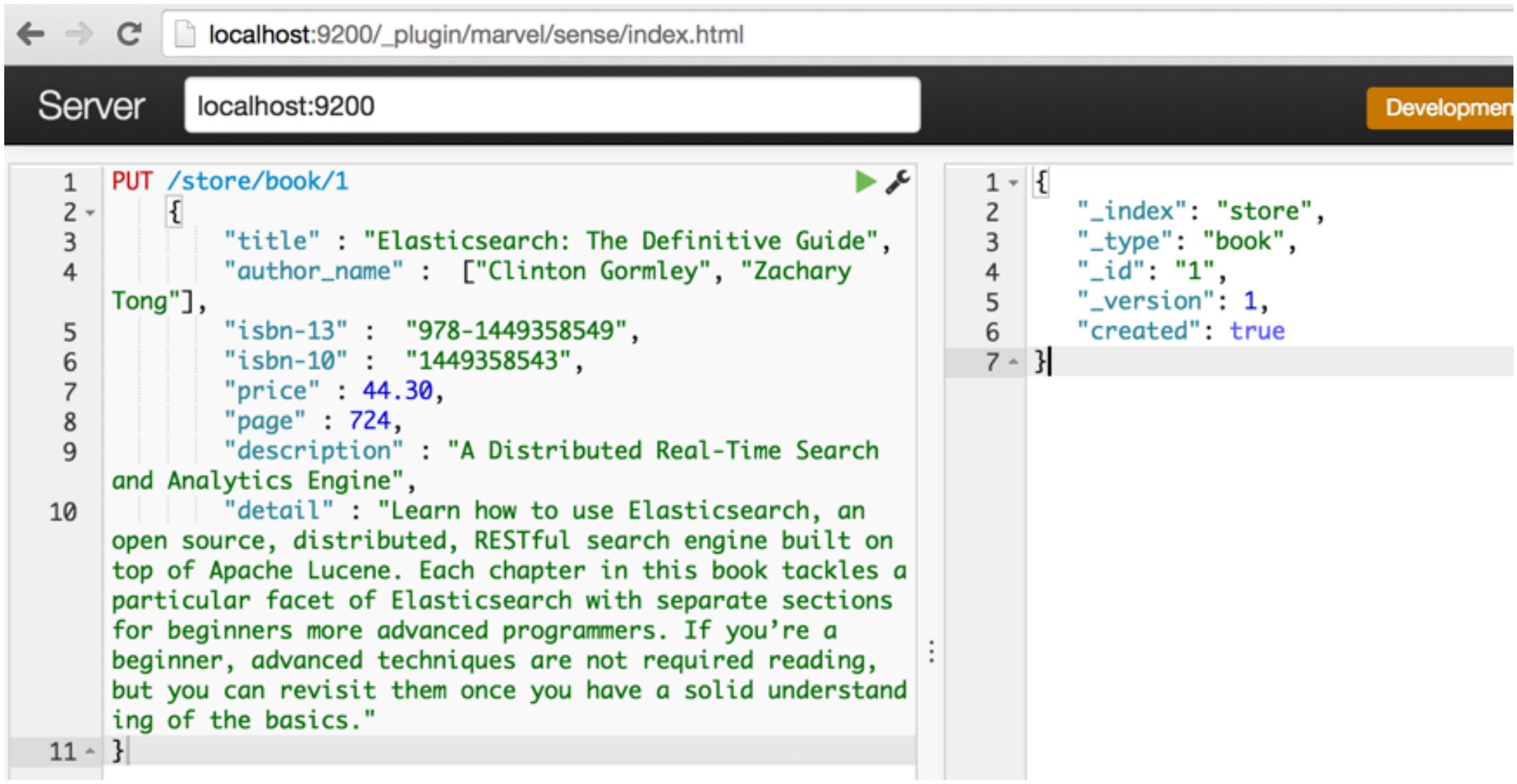
- เก็บข้อมูลหนังสือ ต้องมี tags ด้วย
- ดึงข้อมูลหนังสือ
- ค้นหาข้อมูลหนังสือด้วย field ต่างๆ
- ค้นหาข้อมูลหนังสือตามประโยคที่ต้องการ
- ค้นหาข้อมูลหนังสือที่มีจำนวนหน้ามากกว่า 500 หน้า
- ทำการ highlight ผลการค้นหา
- ทำการสรุปข้อมูลต่างๆ เช่น จำนวนหนังสือในแต่ละ tag

My Book

Name	Type	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": {
    "total": 2,
    "max_score": 1,
    "hits": [
      {
        "_index": "store",
        "_type": "book",
        "_id": "1",
        "_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",
```


# of document

detail

Search with title

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

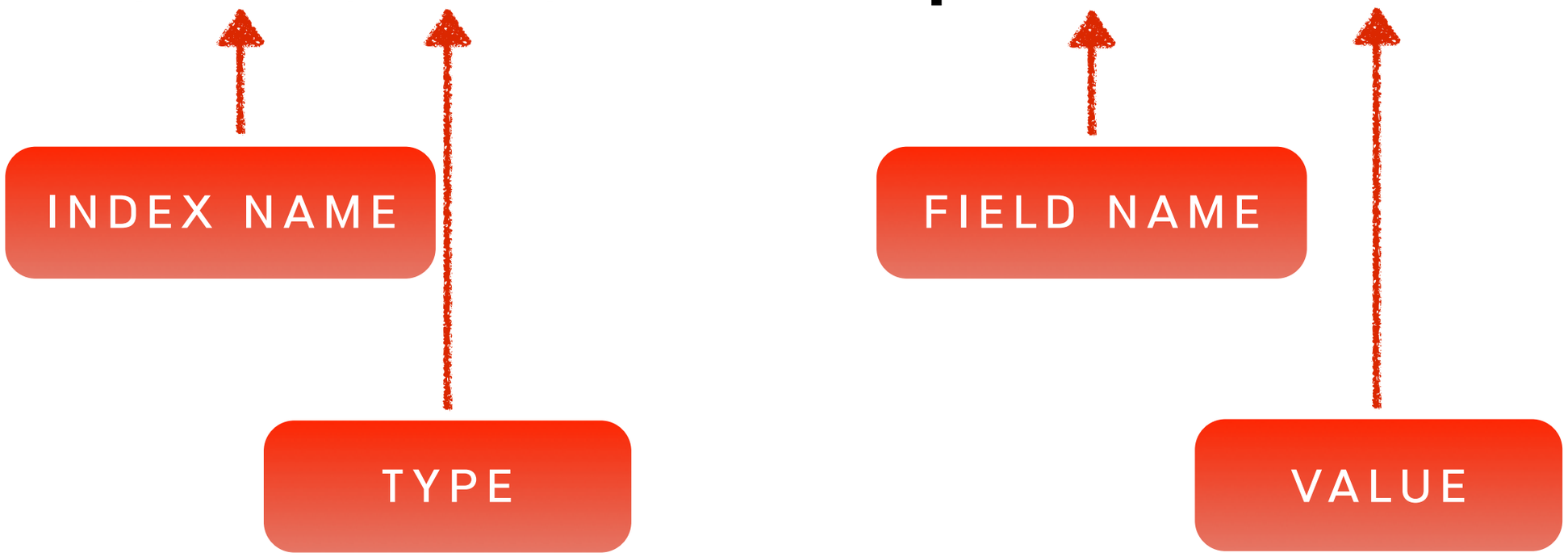

```
{
   "took": 2,
   "timed_out": false,
   "_shards": {
      "total": 5,
      "successful": 5,
      "failed": 0
   },
   "hits": {
      "total": 1,
      "max_score": 0.15342641,
      "hits": [
{
"_index": "store",
"_type": "book",
"_id": "1",
"_score": 0.15342641,
"_source": {
   "title": "Elasticsearch: 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,
```


# of document

detail

Search with other field

GET /store/book/_search?**q=<field>:<value>**



Search with DSL

GET /store/book/_search

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

Search with DSL

GET /store/book/_search

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

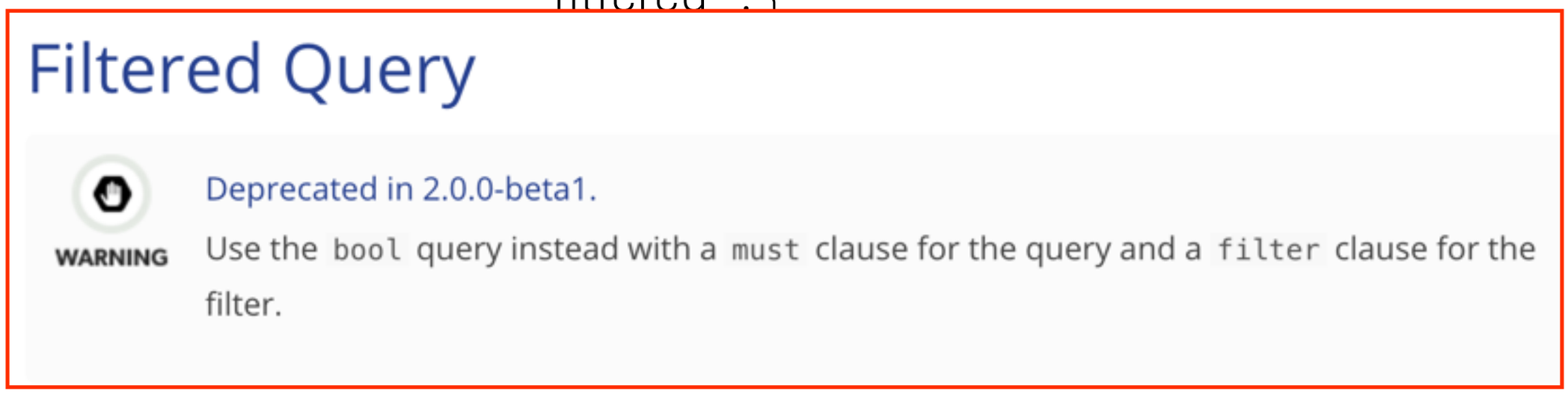
Search with DSL

GET /store/book/_search

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

Search with DSL

```
GET /store/book/_search
{
        "query" : {
            "filtered" : {
```




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

Boolean query

GET /store/book/_search

```
{"query": {
    "bool": {
      "must": [
        {
          "match": {
            "title": "elasticsearch"
          }}
      ],
      "filter": {
        "range": {
          "page": {
            "gt": 100
          }
}}}}}
```

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
            }
        ]
    }
}
```