



**elasticsearch is magic**

elasticsearch is a...

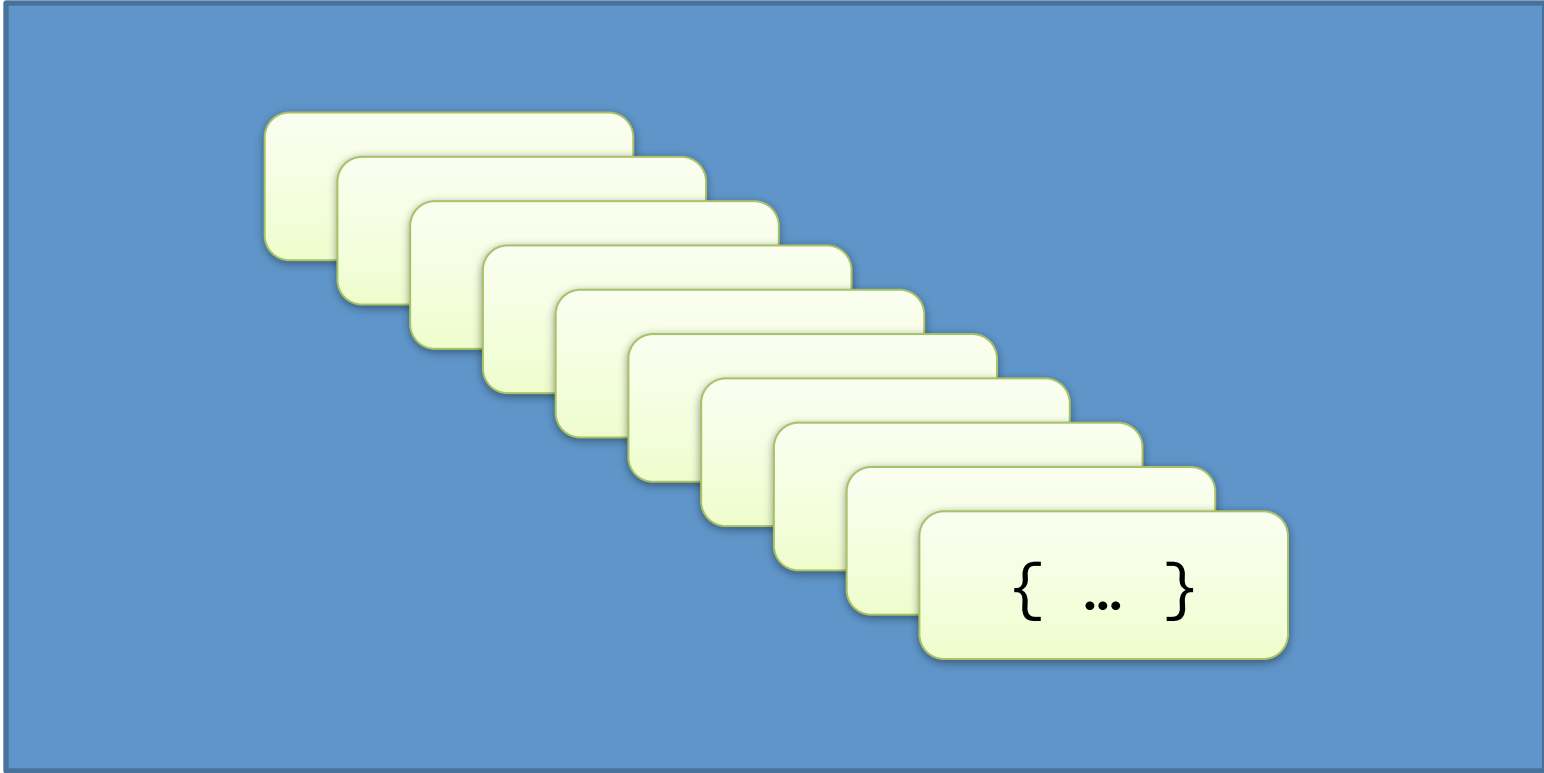
distributed, RESTful, schemaless,  
open-source, search engine,  
built in Java on Apache Lucene.

elasticsearch is a...

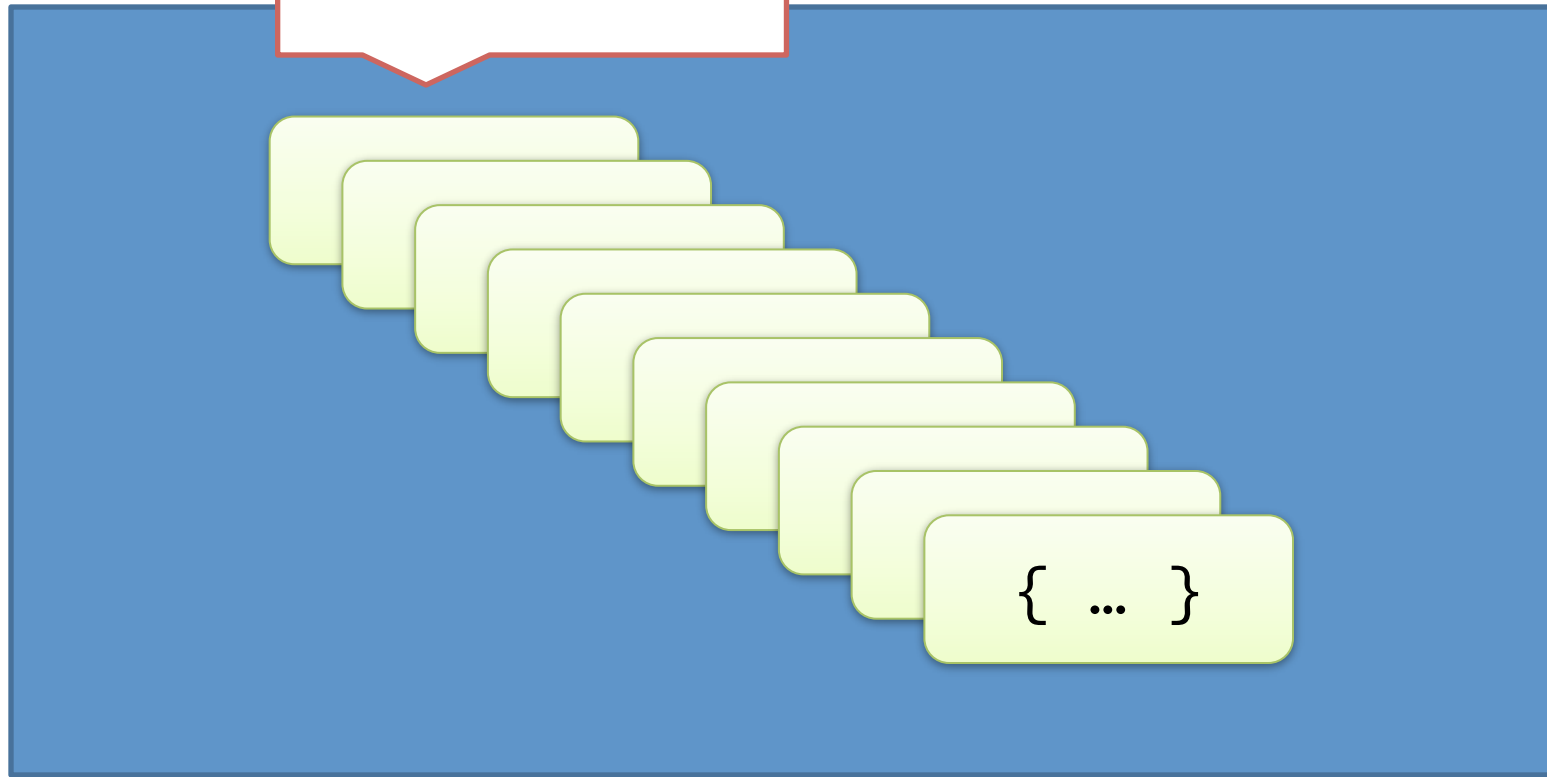
NoSQL

elasticsearch is a...

bag of holding



questions



`/stack/questions`

questions

id: 1

```
{  
  "question": "...",  
  "user_id": 123,  
  "tags": ["jquery", ...]  
}
```

/stack/questions/1



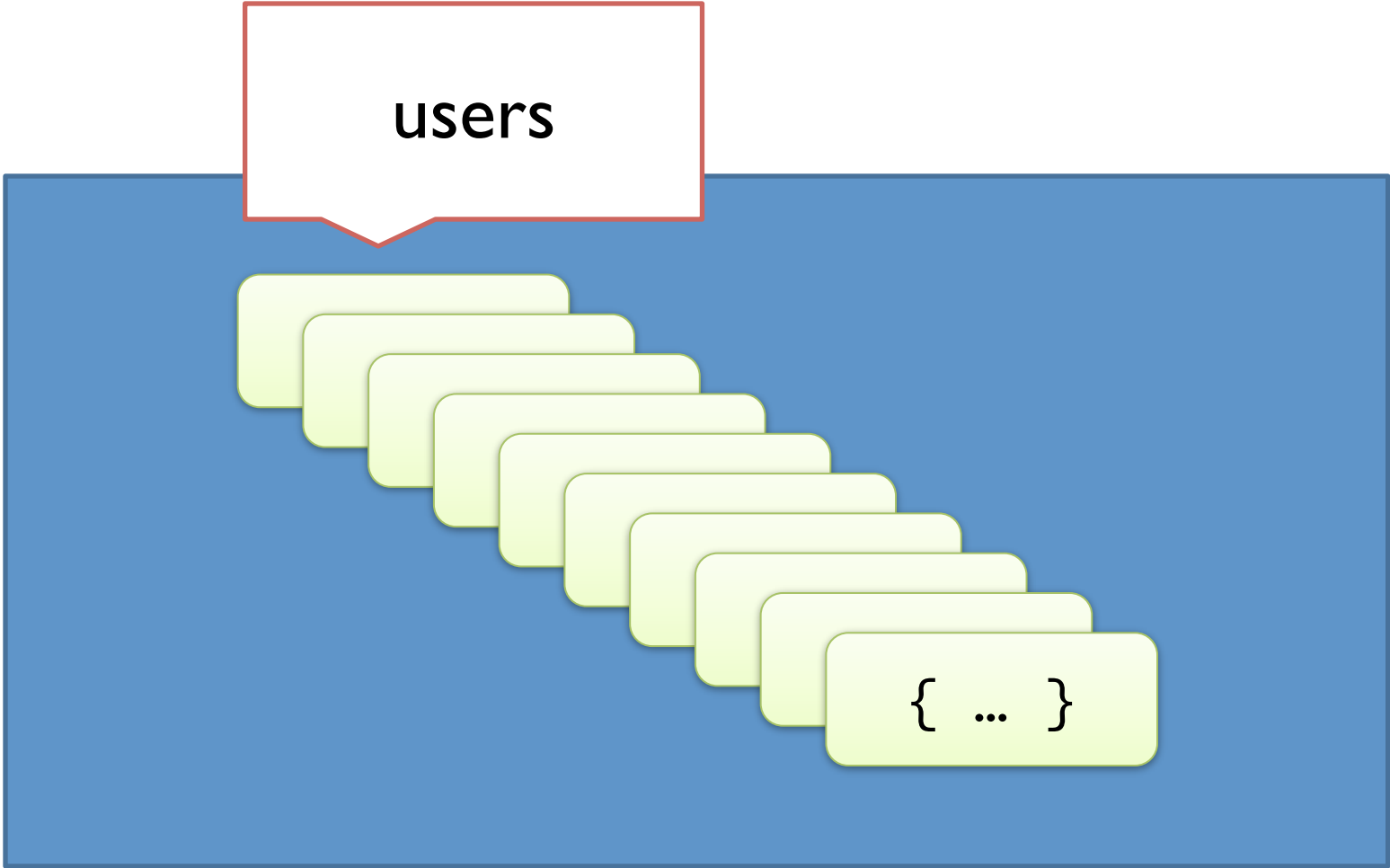
questions

```
"question": string,  
"user_id": integer,  
"tags": array
```

`/stack/questions/_mapping`

questions

```
"question": string,  
  language: english,  
  stopwords: words.txt
```



`/stack/users`

users

```
"user_id": integer,  
"name": string,  
"location": string
```

`/stack/users/_mapping`

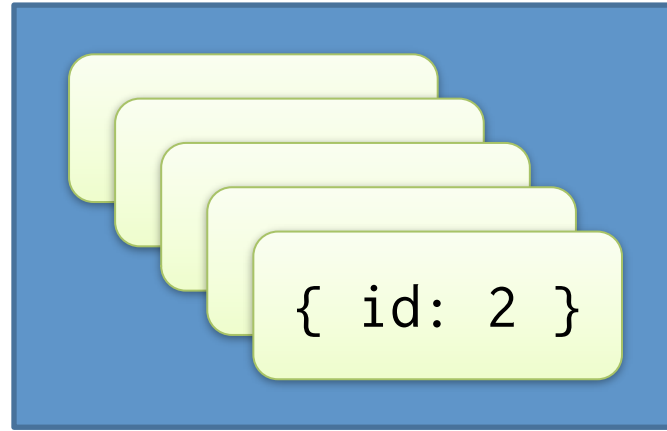
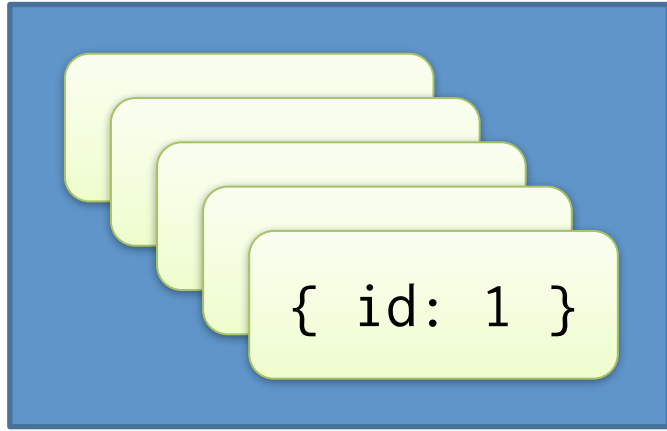
users

```
"user_id": integer,  
"name": string,  
"location": string,  
"geo": geo_point
```

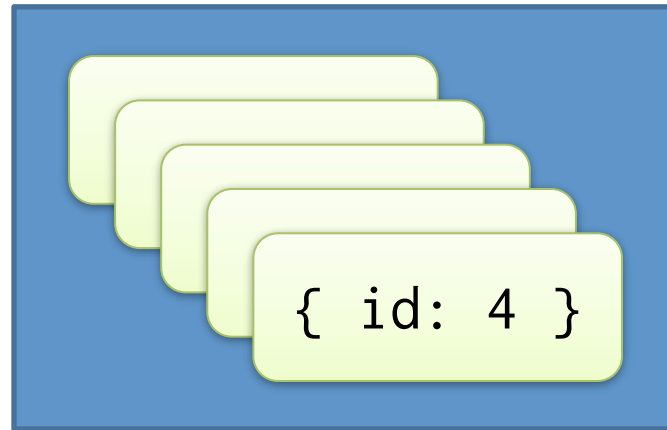
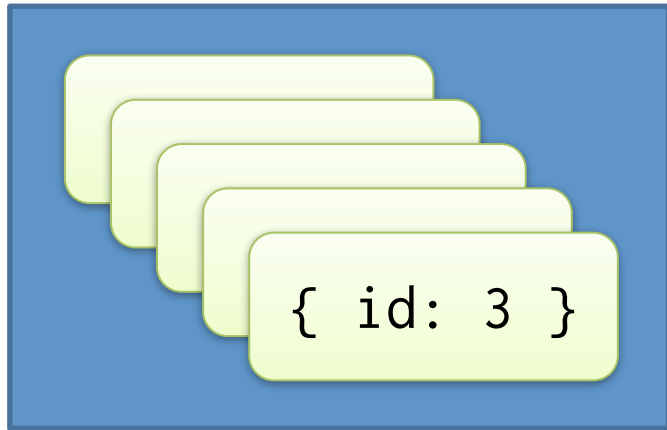
`/stack/users/_mapping`

`/stack/questions/_search`

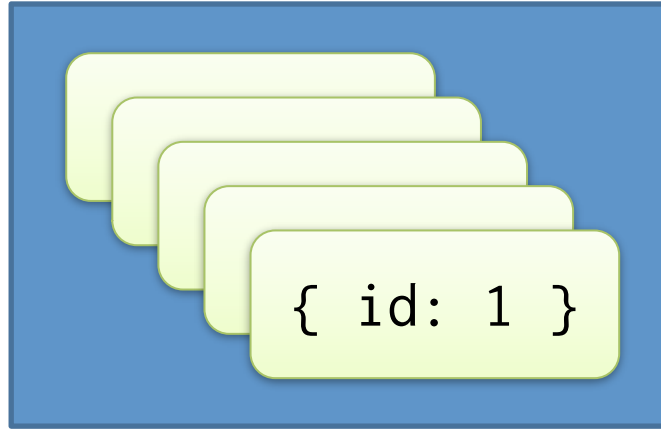
```
{ "query":
  { "bool":
    { "must":
      [
        { "term": { "site": "photo" } },
        { "text": { "question": "outdoors" } }
      ],
      "should":
      [
        { "term": { "tag": "lighting" } },
        { "term": { "tag": "flash" } }
      ]
    }
  },
  "size": 10
}
```



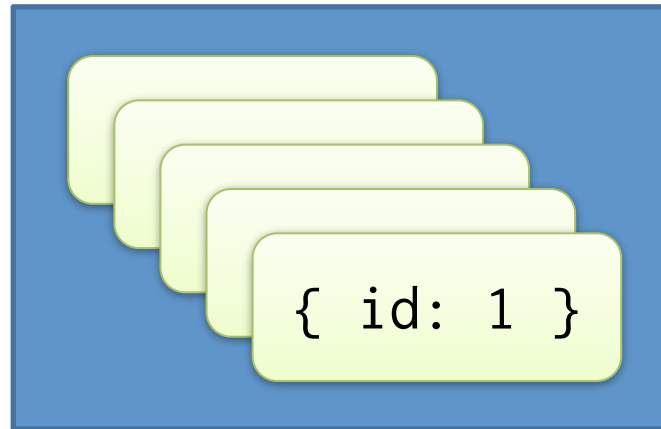
sharding

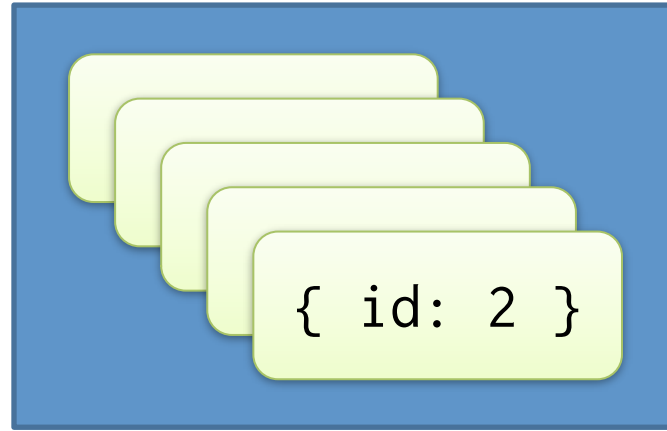
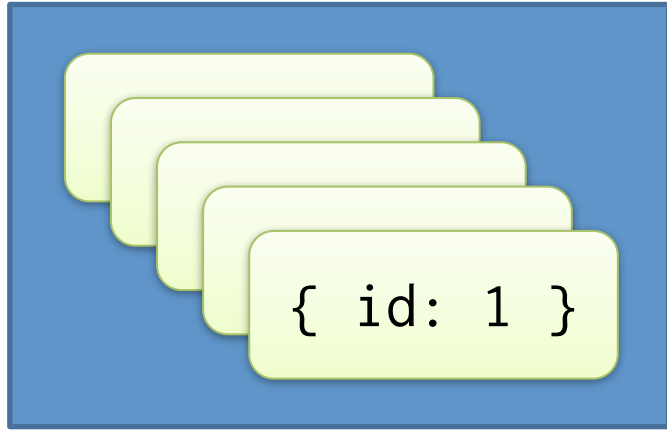




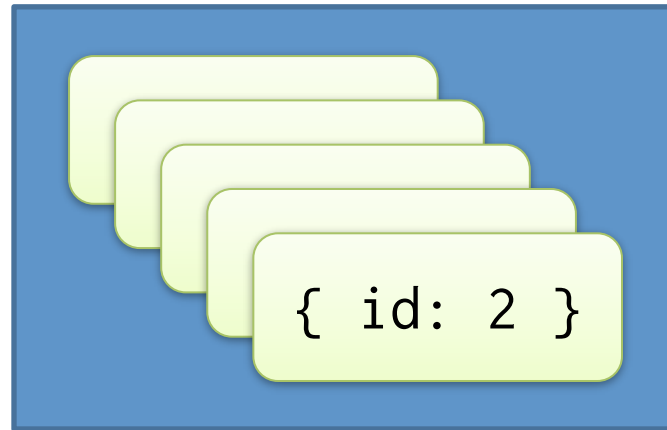
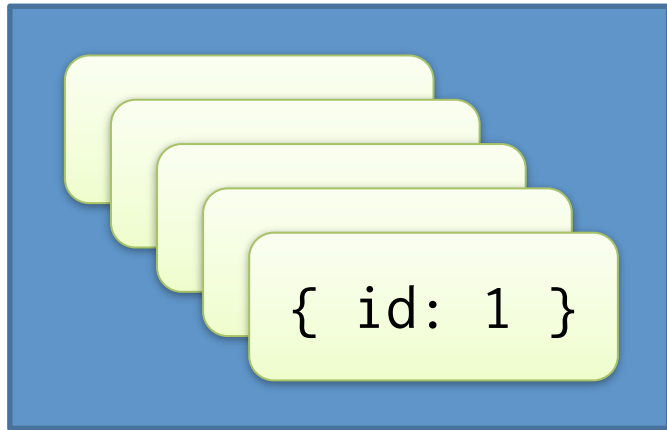


replication





**replication + sharding**



facets

pagination

sorting

scoring

scripts

plugins

hit highlighting

percolate

**elasticsearch is magic**

elasticsearch.org

Kevin Gessner • @kevingessner