**Mappings: Elasticsearch**

Mapping is defining before indexing what are we going to index. We can tell ES which fields are going to be text fields and which are going to be dates, geo-locations etc.

A mapping type contains Fields(the general fields) and Meta-fields(\_index,\_id,\_source etc).

Fields have different data types like string, date, long, double, bool, ip, geo\_point, geo\_shape etc.

**Dynamic Mapping:**

Dynamic mapping is creating the mapping for new terms as you go.

Remember that you cannot modify an existing mapping, you can only add new ones

For example in index students, in doctype date\_of\_birth, if there is a field called name, you can’t change the mapping of that field, but you can add new field say birth\_day and add a new mapping for it.

So, It is not necessary to define mapping before creation of index, but it is necessary to define mapping before first indexing a term.

Also, remember that fields with same name in same index should have same mapping

**Getting mapping:**

GET index\_name/doc\_type/\_mapping - to get mappings in doctype

GET index\_name/\_mapping - to see all the mappings in index

PUT index/\_mapping/doc\_type

{

"properties": {

"birth\_day": { - to add a mapping for term birth\_day

"type": "date"

}

}

}

**Mapping types:**

string

long, integer, short, byte, double, float

date

boolean

binary

geo\_point, geo\_shape

ip

completion - to provide auto-complete suggestions ( [Example](https://www.elastic.co/guide/en/elasticsearch/reference/current/search-suggesters-completion.html) )

etc...