Elasticsearch Syntax - Cheat Sheet

Basic ES Boolean Query

```
'query': {
    'bool': {
        'should': [], -> OR over all the clauses included in the list
        'must': [], -> AND over all the clauses included in the list
        'must_not': [], -> Exclude decisions which match all the clauses included in the list
        'filter': [] -> Add user filters here
    }
}
```

Keyword - Word - Exact match single word

```
{
  'span_term': {
    'content.body': Lower case word
  }
}
```

Wildcard (*)

Root Expander (!)

```
{
    'span_multi': {
        'match': {
            'prefix': {
                'content.body': phrase_prefix_no_!
            }
        }
    }
}
```

Proximity Operators

```
{
    'span_near': {
        'clauses': list of span queries (span_term,
        span_multi, span_near),
        'slop': slop - # words that can appear in between,
        'in_order': boolean flag to maintain search order in the
        decision
    }
}
/# use the # for slop, /s is 25, /p is 75
```

Highlighting - Use at the query level

```
'highlight': {
   "pre_tags": [
      "<span class='keyword'>"
   ],
   "post_tags": [
      "</span>"
   ],
   'fields': {
      'content.body': {
```

```
'fragment_size': 500,
    'number_of_fragments': 1000,
}
}
}
```

Sorting

```
'sort': [
    {
      es_field_name: {
         'order': desc/asc
      }
    }
}
```

Full text queries can be done using match_phrase, match_phrase_prefix in the boolean queries, but these can't be used for ordered span.

If ordered proximity operators needn't be supported, we can move to match queries, and explore nesting match query with slop within another match query with slop.

span_term currently needs input to be lower case, so convert words to lowercase before using.

span_term is also a single word/term query, so multiple words for exact match can be supported using span_near with slop set to 0 and in_order set to True.

match_phrase on the other hand can support multiple words in one string, where a default slop is set for those words.