

Projections

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By default, queries in MongoDB return all fields in matching documents. To limit the amount of data that MongoDB sends to applications, you can include a projection [↗](#) document in the query operation.

Projection Document

The projection document limits the fields to return for all matching documents. The projection document can specify the inclusion of fields or the exclusion of field and has the following form:

```
{ 'projection': { field1: <value>, field2: <value> ... } }
```

<value> may be 0 (or false) to exclude the field, or 1 (or true) to include it. With the exception of the `_id` field, you may not have both inclusions and exclusions in the same projection document.

Examples

The following code example uses the `restaurants` sample dataset.

To return only the `name`, `cuisine` and `_id` fields for documents that match the query filter, explicitly include the `name` and `cuisine` fields in the projection document. The `_id` field is included automatically unless specifically excluded.

```
client = Mongo::Client.new([ '127.0.0.1:27017' ], :database => 'test')
collection = client[:restaurants]

collection.find({}, { 'projection' =>
  { 'name' => 1, 'cuisine' => 1 } }).limit(5).each do |doc|
  p doc
end
```

To return name and cuisine but exclude all other fields, including `_id`, use the following projection document:

```
{ 'projection' => { 'name' => 1, 'cuisine' => 1, '_id' => 0 } }
```

To return all fields *except* the address field, use the following:

```
{ 'projection' => { 'address' => 0 } }
```