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EX N0:14

MongoDB Queries for Restaurants and Movies Collections

Restaurants Collection Queries

- Find restaurants that don't serve 'American' or 'Chinese' or whose names start with 'Wil':

  db.restaurants.find({

  $or: [

  { cuisine: { $nin: ["American", "Chinese"] } },

  { name: { $regex: /^Wil/, $options: 'i' } }

  ]

  }, { restaurant_id: 1, name: 1, borough: 1, cuisine: 1 });

- Find restaurants with a grade of 'A' and score 11 on '2014-08-11':

  db.restaurants.find({

  "grades": { $elemMatch: { "grade": "A", "score": 11, "date": ISODate("2014-08-11T00:00:00Z") } }

  }, { restaurant_id: 1, name: 1, grades: 1 });

- Find restaurants where the 2nd element of grades contains a grade 'A' and score 9 on '2014-0811':

  db.restaurants.find({

  "grades.1.grade": "A",

  "grades.1.score": 9,

  "grades.1.date": ISODate("2014-08-11T00:00:00Z")

  }, { restaurant_id: 1, name: 1, grades: 1 });

- Find restaurants where the 2nd element of `coord` array contains a value more than 42 and up to 52:

  db.restaurants.find({

    "address.coord.1": { $gt: 42, $lte: 52 }

  }, { restaurant_id: 1, name: 1, address: 1, "address.coord": 1 });

- Arrange restaurant names in ascending order with all columns:

  db.restaurants.find().sort({ name: 1 });

- Arrange restaurant names in descending order with all columns:

  db.restaurants.find().sort({ name: -1 });

- Arrange cuisine in ascending order and borough in descending order:

  db.restaurants.find().sort({ cuisine: 1, borough: -1 });

- Check if all addresses contain the street field:

  db.restaurants.find({ "address.street": { $exists: true } });

- Select all documents where the `coord` field value is of type Double:

  db.restaurants.find({ "address.coord": { $type: "double" } });

- Find restaurants where score is divisible by 7:   db.restaurants.find({

    "grades": { $elemMatch: { "score": { $mod: [7, 0] } } } }

  }, { restaurant_id: 1, name: 1, grades: 1 });

- Find restaurants where name contains 'mon':

  db.restaurants.find({   name: {

$regex: "mon", $options: "i" }

  }, { name: 1, borough: 1, "address.coord": 1, cuisine: 1 });

- Find restaurants where name starts with 'Mad':

  db.restaurants.find({   name: { $regex:

"^Mad", $options: "i" }

  }, { name: 1, borough: 1, "address.coord": 1, cuisine: 1 });

- Find restaurants with at least one grade with a score less than 5:

  db.restaurants.find({

    "grades": { $elemMatch: { "score": { $lt: 5 } } }

  });

- Find restaurants with at least one grade with a score less than 5 and located in Manhattan:

  db.restaurants.find({

    "grades": { $elemMatch: { "score": { $lt: 5 } } },

borough: "Manhattan"

  });

- Find restaurants with at least one grade with a score less than 5 in Manhattan or Brooklyn:

  db.restaurants.find({

    "grades": { $elemMatch: { "score": { $lt: 5 } } },

borough: { $in: ["Manhattan", "Brooklyn"] }

  });

- Find restaurants with at least one grade with a score less than 5 in Manhattan or Brooklyn and
  not American cuisine: db.restaurants.find({

    "grades": { $elemMatch: { "score": { $lt: 5 } } },

borough: { $in: ["Manhattan", "Brooklyn"] }, cuisine: {

$ne: "American" }

  });

- Find restaurants with at least one grade with a score less than 5 in Manhattan or Brooklyn and not American or Chinese cuisine:

  db.restaurants.find({

    "grades": { $elemMatch: { "score": { $lt: 5 } } },

  borough: { $in: ["Manhattan", "Brooklyn"] }, cuisine: {

  $nin: ["American", "Chinese"] }

    });

- Find restaurants with grades having a score of 2 and a score of 6:

  db.restaurants.find({

    grades: { $all: [{ $elemMatch: { score: 2 } }, { $elemMatch: { score: 6 } }] }

    });

- Find restaurants with grades having a score of 2 and a score of 6 in Manhattan:

  db.restaurants.find({   grades: { $all: [{ $elemMatch: { score: 2 } }, {

  $elemMatch: { score: 6 } }] },   borough: "Manhattan"

    });

- Find restaurants with grades having a score of 2 and a score of 6 in Manhattan or Brooklyn:

  db.restaurants.find({   grades: { $all: [{ $elemMatch: { score: 2 } }, {

  $elemMatch: { score: 6 } }] },   borough: { $in: ["Manhattan", "Brooklyn"] }

    });

- Find restaurants with grades having a score of 2 and a score of 6 in Manhattan or Brooklyn and not American cuisine: db.restaurants.find({   grades: { $all: [{ $elemMatch: { score: 2 } }, {

  $elemMatch: { score: 6 } }] },   borough: { $in: ["Manhattan", "Brooklyn"] },   cuisine: { $ne: "American" }

    });

- Find restaurants with grades having a score of 2 and a score of 6 in Manhattan or Brooklyn and not American or Chinese cuisine:

  db.restaurants.find({   grades: { $all: [{ $elemMatch: { score: 2 } }, {

  $elemMatch: { score: 6 } }] },   borough: { $in: ["Manhattan", "Brooklyn"]

  },   cuisine: { $nin: ["American", "Chinese"] }

    });

- Find restaurants with a grade of 2 or a grade of 6:

  db.restaurants.find({

    $or: [{ "grades.score": 2 }, { "grades.score": 6 }]

    });

Movies Collection Queries

- Find movies released in 1893:

  db.movies.find({ year:

  1893

    });

- Find movies with runtime greater than 120 minutes:

  db.movies.find({

  runtime: { $gt: 120 }

    });

- Find movies with genre 'Short':

  db.movies.find({

  genres: "Short"

    });

- Find movies directed by 'William K.L. Dickson': db.movies.find({   directors: "William K.L.

  Dickson"

```
});
```

5) **Find movies released in the USA:**

```
db.movies.find({
countries: "USA"
});
```

• Find movies released in the USA:

```
db.movies.find({
  countries: "USA"
});
```

• Find movies rated as 'UNRATED':

```
db.movies.find({
rated: "UNRATED"
});
```

• Find movies with more than 1000 votes on IMDb:

```
db.movies.find({
  "imdb.votes": { $gt: 1000 }
});
```

• Find movies with IMDb rating higher than 7: db.movies.find({
   "imdb.rating": { $gt: 7 }
  });

• Find movies with viewer rating higher than 4 on Tomatoes:

```
db.movies.find({

  "tomatoes.viewer.rating": { $gt: 4 }

});
```

- Find movies that have received an award:

```
db.movies.find({ "awards.wins": {

  $gt: 0 }

});
```

- Find movies with at least one nomination:

```
db.movies.find({ "awards.nominations": {

  $gt: 0 }

}, { title: 1, languages: 1, released: 1, directors: 1, writers: 1, awards: 1, year: 1, genres: 1, runtime: 1, cast: 1, countries: 1 });
```

- Find movies with cast including 'Charles Kayser':   db.movies.find({   cast: "Charles Kayser"

```
}, { title: 1, languages: 1, released: 1, directors: 1, writers: 1, awards: 1, year: 1, genres: 1, runtime: 1, cast: 1, countries: 1 });
```

- Find movies released on May 9, 1893:

```
db.movies.find({      released:

ISODate("1893-05-09T00:00:00Z")

}, { title: 1, languages: 1, released: 1, directors: 1, writers: 1, countries: 1 });
```

- Find movies with 'scene' in the title: db.movies.find({   title: { $regex: "scene", $options: "i"

```
}

}, { title: 1, languages: 1, released: 1, directors: 1, writers: 1, countries: 1 });
```