

W7: MongoDB Activity

Exercise 1: Set Database

```
use sample_mflix
```

For mongosh info see: <https://docs.mongodb.com/mongodb-shell/>

```
Atlas atlas-x1mcm4-shard-0 [primary] test> use sample_mflix
switched to db sample_mflix
Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix>
```

Exercise 2: find()

```
db.theaters.find()
```

```
switched to db sample_m11x
```

```
[Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix> db.theaters.find()
```

```
[
  {
    _id: ObjectId('59a47286cfa9a3a73e51e72c'),
    theaterId: 1000,
    location: {
      address: {
        street1: '340 W Market',
        city: 'Bloomington',
        state: 'MN',
        zipcode: '55425'
      },
      geo: { type: 'Point', coordinates: [ -93.24565, 44.85466 ] }
    }
  },
  {
    _id: ObjectId('59a47286cfa9a3a73e51e72d'),
    theaterId: 1003,
    location: {
      address: {
        street1: '45235 Worth Ave.',
        city: 'California',
        state: 'MD',
        zipcode: '20619'
      },
      geo: { type: 'Point', coordinates: [ -76.512016, 38.29697 ] }
    }
  },
  {

```

Exercise 3: findOne()

```
db.theaters.findOne()
```

```
Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix> db.theaters.findOne()
{
  _id: ObjectId('59a47286cfa9a3a73e51e72c'),
  theaterId: 1000,
  location: {
    address: {
      street1: '340 W Market',
      city: 'Bloomington',
      state: 'MN',
      zipcode: '55425'
    },
    geo: { type: 'Point', coordinates: [ -93.24565, 44.85466 ] }
  }
}
Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix> 
```

Exercise 4: Querying Movies

```
db.movies.find({year: 1921})
Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix> db.movies.find({year: 1921})
[
  {
    _id: ObjectId('573a1391f29313caabcd6f98'),
    plot: 'A romantic rivalry among members of a secret society becomes even tenser when one of the men is assigned to carry out an assination.',
    genres: [ 'Crime', 'Drama', 'Mystery' ],
    runtime: 75,
    rated: 'PASSED',
    cast: [ 'Lon Chaney', 'Leatrice Joy', 'John Bowers', 'Hardee Kirkland' ],
    num_mflix_comments: 1,
    poster: 'https://m.media-amazon.com/images/M/MV5BMTkwOTUyNDk1N15BM15BanBnXkFtZTYwODI3MzI3._V1_SY1000_SX677_AL_.jpg',
    title: 'The Ace of Hearts',
    fullplot: "A secret society holds a meeting to determine what to do about a powerful and dangerous man whom they have been studying closely for the past three months. They all agree that he deserves to die. Two of the members, Farallone and Forrest, are both in love with Lilith, the group's only female member. But Lilith accepts neither of them, preferring to devote herself to the group's cause. When the group meets again and deals cards to all the members, Forrest draws the ace of hearts, meaning that he will be the one to carry out the assassination. Lilith then suddenly agrees to marry him, in order to give him courage. But after their first night together, both of them begin to feel differently about what they have planned.",
    countries: [ 'USA' ],
    released: ISODate('1924-04-04T00:00:00.000Z'),
    directors: [ 'Wallace Worsley' ],
    writers: [ 'Gouverneur Morris (by)', 'Ruth Wightman (scenario)' ],
    awards: { wins: 0, nominations: 2, text: '2 nominations.' },
    lastupdated: '2015-07-20 00:01:29.560000000',
    year: 1921,
    imdb: { rating: 7, votes: 798, id: 11904 },
    type: 'movie',
    tomatoes: {
      viewer: { rating: 3.5, numReviews: 377, meter: 68 },
      lastUpdated: ISODate('2015-04-28T19:29:23.000Z')
    }
  },
]
```

Exercise 5: Query The First Movie

```
db.movies.find({rated: "TV-PG"})
```

```
[Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix> db.movies.find({rated: "TV-PG"})
[
  {
    _id: ObjectId('573a1390f29313caabcd4eaf'),
    plot: 'A woman, with the aid of her police officer sweetheart, endeavors to uncover the prostitution ring that has kidnapped her sister, and the philanthropist who secretly runs it.',
    genres: [ 'Crime', 'Drama' ],
    runtime: 88,
    cast: [ 'Jane Gail', 'Ethel Grandin', 'William H. Turner', 'Matt Moore' ],
    num_mflix_comments: 1,
    poster: 'https://m.media-amazon.com/images/M/MV5BYzk0YWQzMGYtYTM5MC00NmJm2LWE5YzYtMjgyNDVhZDg1N2YzXkEyXkFqcGdeQXVyMzE0MjY5ODA@._V1_SX1000_SX677_AL_.jpg',
    title: 'Traffic in Souls',
    lastupdated: '2015-09-15 02:07:14.247000000',
    languages: [ 'English' ],
    released: ISODate('1913-11-24T00:00:00.000Z'),
    directors: [ 'George Loane Tucker' ],
    rated: 'TV-PG',
    awards: { wins: 1, nominations: 0, text: '1 win.' },
    year: 1913,
    imdb: { rating: 6, votes: 371, id: 3471 },
    countries: [ 'USA' ],
    type: 'movie',
    tomatoes: {
      viewer: { rating: 3, numReviews: 85, meter: 57 },
      dvd: ISODate('2008-08-26T00:00:00.000Z'),
      lastUpdated: ISODate('2015-08-10T18:33:55.000Z')
    }
  },
  {
    _id: ObjectId('573a1391f29313caabcd6f98'),
    plot: 'A romantic rivalry among members of a secret society becomes even tenser when one of the men is assigned to carry out an assassination.',
    rated: 'PASSED',
    title: 'The Ace of Hearts'
  },
  {
    _id: ObjectId('573a1391f29313caabcd70b4'),
    plot: 'An extended family split up in France and Germany find themselves on opposing sides of the battlefield during World War I.',
    rated: 'PASSED',
    title: 'The Four Horsemen of the Apocalypse'
  },
  {
    _id: ObjectId('573a1391f29313caabcd71e3'),
    plot: 'William deMille produced and directed Miss Lulu Bett, a film of extraordinary conviction and insight. It was then often the custom for unmarried women to lodge with family; thus we discover ...',
    title: 'Miss Lulu Bett'
  },
  {
    _id: ObjectId('573a1391f29313caabcd71f5'),
    plot: 'A young man, unaccustomed to children, must accompany a young girl on a train trip.',
    rated: 'PASSED',
    title: 'Now or Never'
  },
  {
    _id: ObjectId('573a1391f29313caabcd72f0'),
    plot: 'When three thuggish men are responsible for the death of his father and the crippling of his brother, young David must choose between supporting his family or risking his life and exacting vengeance.',
    title: 'Tol'able David'
  }
]
```

Exercise 6: Inclusive Projection

```
db.movies.find({year: 1921}, {title:1,plot:1,rated:1})
```

```
Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix> db.movies.find({year: 1921}, {title:1,plot:1,rated:1})
[
  {
    _id: ObjectId('573a1391f29313caabcd6f98'),
    plot: 'A romantic rivalry among members of a secret society becomes even tenser when one of the men is assigned to carry out an assassination.',
    rated: 'PASSED',
    title: 'The Ace of Hearts'
  },
  {
    _id: ObjectId('573a1391f29313caabcd70b4'),
    plot: 'An extended family split up in France and Germany find themselves on opposing sides of the battlefield during World War I.',
    rated: 'PASSED',
    title: 'The Four Horsemen of the Apocalypse'
  },
  {
    _id: ObjectId('573a1391f29313caabcd71e3'),
    plot: 'William deMille produced and directed Miss Lulu Bett, a film of extraordinary conviction and insight. It was then often the custom for unmarried women to lodge with family; thus we discover ...',
    title: 'Miss Lulu Bett'
  },
  {
    _id: ObjectId('573a1391f29313caabcd71f5'),
    plot: 'A young man, unaccustomed to children, must accompany a young girl on a train trip.',
    rated: 'PASSED',
    title: 'Now or Never'
  },
  {
    _id: ObjectId('573a1391f29313caabcd72f0'),
    plot: 'When three thuggish men are responsible for the death of his father and the crippling of his brother, young David must choose between supporting his family or risking his life and exacting vengeance.',
    title: 'Tol'able David'
  }
]
```

Exercise 7: Exclusive Projection

```
db.movies.find({rated: "TV-PG"}, {_id: 0,num_mflix_comments:0,award:0,tomatoes:0})
```

MongoServerError[Location31254]: Cannot do exclusion on field num_mflix_comments in inclusion projection

```
Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix> db.movies.find({rated: "TV-PG"}, {_id: 0,num_mflix_comments:0,award:0,tomatoes: 0})
[
  {
    plot: 'A woman, with the aid of her police officer sweetheart, endeavors to uncover the prostitution ring that has kidnapped her sister, and the philanthropist who secretly runs it.',
    genres: [ 'Crime', 'Drama' ],
    runtime: 88,
    cast: [ 'Jane Gail', 'Ethel Grandin', 'William H. Turner', 'Matt Moore' ],
    poster: 'https://m.media-amazon.com/images/M/MV5BYzk0YWQzMGYtYTMTM5MC00NjM2LWE5YzYtMjgyNDVhZDg1N2YzXkEyXkFqcGdeQXVyMzE0MjY5ODAA@._V1_SX677_AL_.jpg',
    title: 'Traffic in Souls',
    lastupdated: '2015-09-15 02:07:14.247000000',
    languages: [ 'English' ],
    released: ISODate('1913-11-24T00:00:00.000Z'),
    directors: [ 'George Loane Tucker' ],
    rated: 'TV-PG',
    awards: { wins: 1, nominations: 0, text: '1 win.' },
    year: 1913,
    imdb: { rating: 6, votes: 371, id: 3471 },
    countries: [ 'USA' ],
    type: 'movie'
  },
  {
    plot: 'A kept woman runs into her one-time fiancè and finds herself torn between love and comfort.',
    genres: [ 'Drama', 'Romance' ],
    runtime: 78,
    rated: 'TV-PG',
    cast: [
      'Edna Purviance',
      'Clarence Geldart',
      'Carl Miller',
      'Lydia Knott'
    ],
    poster: 'https://m.media-amazon.com/images/M/MV5BZjJiMTU2NGQtNWRkNi00ZjExLWE5MTU0MmNkNTU0NzRlMTA3XkEyXkFqcGdeQXVyNjUwNzk3NDc0@._V1_SX677_AL_.jpg',
  }
]
```

Exercise 8: the id field

```
db.movies.findOne({rated: "TV-PG"}, {_id:0,title:1,plot:1,rated:1})
```

```
Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix> db.movies.findOne({rated: "TV-PG"},{_id:0,title:1,plot:1,rated:1})
{
  plot: 'A woman, with the aid of her police officer sweetheart, endeavors to uncover the prostitution ring that has kidnapped her sister, and the philanthropist who secretly runs it.',
  title: 'Traffic in Souls',
  rated: 'TV-PG'
}
Atlas atlas-x1mcm4-shard-0 [primary] sample_mflix> █
```