

FILTER OPERATIONS

1 Find Unexpected Audience Hits

(Poor critic ratings but high audience scores)

```
db.movies.find({
  $and: [
    { "metacritic": { $lt: 50 } },
    { "imdb.rating": { $gt: 7.5 } }
  ]
})
```

```
> db.movies.find({ $and: [{ "cast": { $exists: true } }, { $expr: { $gt: [{ $size: "$genres" }, 2] } }, { "imdb.rating": { $gt: 7.5 } } ] })
< {
  _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.',
  genres: [
    'Drama',
    'Romance',
    'War'
  ],
  runtime: 150,
  rated: 'PASSED',
  cast: [
    'Pomeroy Cannon',
    'Josef Swickard',
    'Bridgetta Clark',
    'Rudolph Valentino'
  ],
  num_mflix_comments: 1,
  poster: 'https://m.media-amazon.com/images/M/MV5B0TU1ODQyYTctODhkNy00YWVmLWE2YzYtMTQ5ZjA3OTNiN2QyXkE5XkFqcGdeQXVyMzE0MjY5ODAA@._V1_SY1000
  title: 'The Four Horsemen of the Apocalypse',
  fullplot: 'Julio Madariaga is the Argentine patriarch of a wealthy family. He has two daughters, the elder wed to a Frenchman and the ot
  countries: [
    'USA'
```



```

],
type: 'movie',
tomatoes: {
  viewer: {
    rating: 3.6,
    numReviews: 659,
    meter: 70
  },
dvd: 2004-02-03T00:00:00.000Z,
critic: {
  rating: 8.4,
  numReviews: 8,
  meter: 100
},
lastUpdated: 2015-07-14T18:21:21.000Z,
rotten: 0,
fresh: 8
}
}
{
  _id: ObjectId('573a1391f29313caabcd7b98'),
  plot: 'A bitter clown endeavors to rescue the young woman he loves from the lecherous count who once betrayed him.',
  genres: [
    'Drama',
    'Romance',

```

```

fullplot: "Amid big-budget medieval pageantry, King Richard goes on the Crusades leaving his brother Prince John as regent, who promptly
languages: [
  'English'
],
released: 1922-10-18T00:00:00.000Z,
directors: [
  'Allan Dwan'
],
writers: [
  'Douglas Fairbanks (story)'
],
awards: {
  wins: 1,
  nominations: 0,
  text: '1 win.'
},
lastupdated: '2015-08-11 00:29:16.047000000',
year: 1922,
imdb: {
  rating: 7.7,
  votes: 1460,
  id: 13556
},
countries: [
  'USA'

```

```

    },
    poster: 'https://m.media-amazon.com/images/H/MV5BMTU0NzY0MTY5OF5BML5BanBnXkFtZTcwODY3MDEwMg@@._V1_SY1000_SX677_AL_.jpg',
    num_mflix_comments: 0,
    released: 2008-12-19T00:00:00.000Z,
    awards: {
      wins: 5,
      nominations: 6,
      text: '5 wins & 6 nominations.'
    },
  },
  countries: [
    'USA'
  ],
  cast: [
    'Will Smith',
    'Rosario Dawson',
    'Woody Harrelson',
    'Michael Ealy'
  ],
  directors: [
    'Gabriele Muccino'
  ],
  runtime: 123
}

```

2 Find Potentially Undervalued International Content

(High-rated but low-vote non-USA films)

```

db.movies.find({
  $and: [
    { "countries": { $ne: "USA" } },
    { "imdb.rating": { $gt: 7.5 } },
    { "imdb.votes": { $lt: 25000 } }
  ]
})

```

```
> db.movies.find({ $and: [{ "countries": { $ne: "USA" } }, { "imdb.rating": { $gt: 7.5 } }, { "imdb.votes": { $lt: 25000 } } ] })
< {
  _id: ObjectId('573a1391f29313caabcd8de7'),
  plot: "Joe May's sensual drama of life in the Berlin underworld is in many ways the perfect summation of German filmmaking in the silent
  genres: [
    'Drama'
  ],
  runtime: 90,
  cast: [
    'Albert Steinrück',
    'Else Heller',
    'Gustav Fröhlich',
    'Betty Amann'
  ],
  num_mflix_comments: 0,
  poster: 'https://m.media-amazon.com/images/M/MV5BODN1ZjBkNzktMThjYS00NDNjLWFjYTYtN2E3Mzg2NjJhNmE5XkEyXkFqcGdeQXVyMTczMjA2Nzk@._V1_SY1000
  title: 'Asphalt',
  fullplot: "Joe May's sensual drama of life in the Berlin underworld is in many ways the perfect summation of German filmmaking in the si
  languages: [
    'German'
  ],
  released: 1930-05-03T00:00:00.000Z,
```

```
  rating: 7.6,
  votes: 4186,
  id: 31334
},
countries: [
  'UK'
],
type: 'movie',
tomatoes: {
  viewer: {
    rating: 3.6,
    numReviews: 2848,
    meter: 87
  },
  dvd: 2005-04-19T00:00:00.000Z,
  critic: {
    rating: 7.9,
    numReviews: 8,
    meter: 100
  },
  lastUpdated: 2015-09-13T17:57:46.000Z,
  rotten: 0,
  production: 'Criterion Collection',
  fresh: 8
}
}
Type "it" for more
Atlas atlas-h4o7hc-shard-0 [primary] sample_mflix>
```

③ Find Projects with Strong Director-Actor Chemistry

(Frequent collaborations with high ratings)

```

db.movies.find({
  $and: [
    { "directors": "Christopher Nolan" },
    { "cast": "Leonardo DiCaprio" },
    { "imdb.rating": { $gt: 8 } }
  ]
})

```

```

    'French'
  ],
  writers: [
    'Christopher Nolan'
  ],
  type: 'movie',
  tomatoes: {
    website: 'http://inceptionmovie.warnerbros.com/',
    viewer: {
      rating: 4.2,
      numReviews: 561365,
      meter: 91
    },
  },
  dvd: 2010-12-07T00:00:00.000Z,
  critic: {
    rating: 8.1,
    numReviews: 326,
    meter: 86
  },
  boxOffice: '$292.6M',
  consensus: 'Smart, innovative, and thrilling, Inception is that rare summer blockbuster that succeeds viscerally as well as intellectually.',
  rotten: 45,
  production: 'Warner Bros. Pictures',
  lastUpdated: 2015-09-12T17:13:32.000Z,
  fresh: 281

```

```

  },
  poster: 'https://m.media-amazon.com/images/M/MV5BMjAxMzY3NjcxNF5BMl5BanBnXkFtZTcwNTI5OTM0Mw@@._V1_SY1000_SX677_AL_.jpg',
  num_mflix_comments: 1,
  released: 2010-07-16T00:00:00.000Z,
  awards: {
    wins: 162,
    nominations: 172,
    text: 'Won 4 Oscars. Another 158 wins & 172 nominations.'
  },
  countries: [
    'USA',
    'UK'
  ],
  cast: [
    'Leonardo DiCaprio',
    'Joseph Gordon-Levitt',
    'Ellen Page',
    'Tom Hardy'
  ],
  directors: [
    'Christopher Nolan'
  ],
  runtime: 148
}

```

```

    'French'
  ],
  writers: [
    'Christopher Nolan'
  ],
  type: 'movie',
  tomatoes: {
    website: 'http://inceptionmovie.warnerbros.com/',
    viewer: {
      rating: 4.2,
      numReviews: 561365,
      meter: 91
    },
    dvd: 2010-12-07T00:00:00.000Z,
    critic: {
      rating: 8.1,
      numReviews: 326,
      meter: 86
    },
    boxOffice: '$292.6M',
    consensus: 'Smart, innovative, and thrilling, Inception is that rare summer blockbuster that succeeds viscerally as well as intellectually.',
    rotten: 45,
    production: 'Warner Bros. Pictures',
    lastUpdated: 2015-09-12T17:13:32.000Z,
    fresh: 281
  },
  poster: 'https://m.media-amazon.com/images/M/MV5BMjAxMzY3NjcxNF5BMl5BanBnXkFtZTcwNTI5OTM0Mw@@._V1_SV1000_SX677_AL_.jpg',
  num_mflix_comments: 1,
  released: 2010-07-16T00:00:00.000Z,
  awards: {
    wins: 162,
    nominations: 172,
    text: 'Won 4 Oscars. Another 158 wins & 172 nominations.'
  },
  countries: [
    'USA',
    'UK'
  ],
  cast: [
    'Leonardo DiCaprio',
    'Joseph Gordon-Levitt',
    'Ellen Page',
    'Tom Hardy'
  ],
  directors: [
    'Christopher Nolan'
  ],
  runtime: 148
}

```

4 Identify Content for Specific Streaming Demographics

(Short, high-rated documentaries & biographies)

javascript

CopyEdit

```

db.movies.find({
  $and: [
    { "genres": { $in: ["Documentary", "Biography"] } },
    { "runtime": { $lt: 100 } },

```

```
    { "imdb.rating": { $gt: 7 } }
  ]
})
```

```
],
writers: [
  'Richard Carver (titled by)',
  'Terry Ramsaye (titled by)'
],
awards: {
  wins: 1,
  nominations: 0,
  text: '1 win.'
},
lastupdated: '2015-08-29 00:37:14.843000000',
year: 1925,
imdb: {
  rating: 7.9,
  votes: 677,
  id: 15873
},
type: 'movie',
tomatoes: {
  viewer: {
    rating: 3.7,
    numReviews: 595,
    meter: 90
  },
  dvd: 2000-03-28T00:00:00.000Z,
  critic: {
```

```
    critic: {
      rating: 7.6,
      numReviews: 5,
      meter: 100
    },
    lastUpdated: 2015-07-04T18:53:48.000Z,
    rotten: 0,
    fresh: 5
  },
  num_mflix_comments: 0
}
{
  _id: ObjectId('573a1392f29313caabcda09b'),
  plot: 'Tells how King Henry VIII came to marry five more times after his divorce from his first wife.',
  genres: [
    'Biography',
    'Comedy',
    'Drama'
  ],
  runtime: 97,
  cast: [
    'Charles Laughton',
    'Robert Donat',
    'Franklin Dyall',
    'Miles Mander'
  ],
}
```



```
],
released: 1933-09-21T00:00:00.000Z,
directors: [
  'Alexander Korda'
],
writers: [
  'Lajos Bir  (story)',
  'Arthur Wimperis (story)',
  'Arthur Wimperis (scenario)'
],
awards: {
  wins: 2,
  nominations: 1,
  text: 'Won 1 Oscar. Another 1 win & 1 nomination.'
},
lastupdated: '2015-08-15 00:02:00.380000000',
year: 1933,
imdb: {
  rating: 7.3,
  votes: 2414,
  id: 24473
},
countries: [
  'UK'
],
type: 'movie',
tomatoes: {
  viewer: {
```

```
    rating: 3.5,
    numReviews: 1249,
    meter: 75
  },
  dvd: 2003-01-23T00:00:00.000Z,
  critic: {
    rating: 8,
    numReviews: 13,
    meter: 100
  },
  lastUpdated: 2015-09-02T18:26:12.000Z,
  rotten: 0,
  production: 'Criterion Collection',
  fresh: 13
},
num_mflix_comments: 0
}
{
  _id: ObjectId('573a1392f29313caab0a5'),
  plot: 'Queen Christina of Sweden is a popular monarch who is loyal to her country. However, when she falls in love with a Spanish envoy, she must choose between t',
  genres: [
    'Biography',
    'Drama',
    'History'
  ],
  runtime: 99,
```

```

    rated: 'APPROVED',
    cast: [
      'Greta Garbo',
      'John Gilbert',
      'Ian Keith',
      'Lewis Stone'
    ],
    poster: 'https://m.media-amazon.com/images/M/MV5BMjIyMjg1ODk4OF5BML5Ban8nXkFtZTgwNDA0NzkxMjE@._V1_SY1000_SX677_AL_.jpg',
    title: 'Queen Christina',
    fullplot: 'Queen Christina of Sweden is a dominant European ruler in the 17th century, and has never thought of romance. However, she accidentally and secretly fa
    languages: [
      'English',
      'Spanish'
    ],
    released: 1934-02-09T00:00:00.000Z,
    directors: [
      'Rouben Mamoulian'
    ],
    writers: [
      'H.M. Harwood (screen play)',
      'Salka Viertel (screen play)',
      'Salka Viertel (from the original story by)',
      'Margaret P. Levino (from the original story by)',
      'S.N. Behrman (dialogue)'
    ],
    'Ted Sears (screenplay)'
  ],
  awards: {
    wins: 4,
    nominations: 0,
    text: 'Won 1 Oscar. Another 3 wins.'
  },
  lastupdated: '2015-08-17 00:13:02',
  year: 1954,
  imdb: {
    rating: 7.8,
    votes: 285,
    id: 47642
  },
  countries: [
    'USA'
  ],
  type: 'movie',
  tomatoes: {
    viewer: {
      rating: 3.9,
      numReviews: 68,
      meter: 88
    },
    lastUpdated: 2015-08-15T19:14:22.000Z
  }
}

```

5 Find Genre-Blending Innovations with Audience Appeal

(Movies with 3+ genres and strong ratings)

```

db.movies.find({
  $and: [
    { $expr: { $gte: [{ $size: "$genres" }, 3] } },
    { "imdb.rating": { $gt: 7.5 } }
  ]
}

```

```
})
```

```
awards: {
  wins: 5,
  nominations: 1,
  text: '5 wins & 1 nomination.'
},
lastupdated: '2015-08-26 01:14:49.383000000',
year: 1935,
imdb: {
  rating: 7.6,
  votes: 831,
  id: 26564
},
countries: [
  'France',
  'Germany'
],
type: 'movie',
tomatoes: {
  viewer: {
    rating: 4,
    numReviews: 191,
    meter: 88
  },
  production: 'Criterion Collection',
  lastUpdated: 2015-07-04T19:21:41.000Z
}
}
Type "it" for more
```

6 Find Potential Licensing Targets for Game Adaptations

(Action, Fantasy, Sci-Fi films without existing games)

```
db.movies.find({
  $and: [
    { "genres": { $in: ["Action", "Fantasy", "Sci-Fi"] } },
    { "imdb.rating": { $gt: 7 } },
    { "video_game": { $exists: false } }
  ]
})
```

```

imdb: {
  rating: 7.7,
  votes: 4079,
  id: 33712
},
countries: [
  'USA'
],
type: 'movie',
tomatoes: {
  viewer: {
    rating: 3.9,
    numReviews: 1037,
    meter: 83
  },
  dvd: 2007-02-06T00:00:00.000Z,
  critic: {
    rating: 7.4,
    numReviews: 15,
    meter: 100
  },
  lastUpdated: 2015-09-10T19:10:19.000Z,
  rotten: 0,
  production: 'Sony Pictures Entertainment',
  fresh: 15
}
}
Type "it" for more

```

7 Find Potential Documentary Series Expansions

(Highly rated, long documentaries)

```

db.movies.find({
  $and: [
    { "genres": "Documentary" },
    { "imdb.rating": { $gt: 8 } },
    { "runtime": { $gt: 100 } }
  ]
})

```

```

released: 1995-01-05T00:00:00.000Z,
awards: {
  wins: 3,
  nominations: 3,
  text: 'Won 1 Primetime Emmy. Another 2 wins & 3 nominations.'
},
lastupdated: '2015-09-06 00:40:33.587000000',
year: '1995',
imdb: {
  rating: 9,
  votes: 1693,
  id: 123360
},
countries: [
  'UK'
],
type: 'series',
tomatoes: {
  viewer: {
    rating: 3.8,
    numReviews: 144,
    meter: 74
  },
  dvd: 2006-07-25T00:00:00.000Z,
  lastUpdated: 2015-07-31T19:04:50.000Z
}
}
Type "it" for more

```

8 Identify Unique Audience Segments via Niche Content

(Highly rated family-friendly animated musicals)

```

db.movies.find({
  $and: [
    { "genres": { $in: ["Animation", "Musical"] } },
    { "rated": { $in: ["G", "PG"] } },
    { "imdb.rating": { $gt: 7.5 } }
  ]
})

```

```
    ],
    released: 1986-08-02T00:00:00.000Z,
    directors: [
      'Hayao Miyazaki'
    ],
    writers: [
      'Hayao Miyazaki'
    ],
    awards: {
      wins: 1,
      nominations: 0,
      text: '1 win.'
    },
    lastupdated: '2015-08-18 00:30:23.687000000',
    year: 1986,
    imdb: {
      rating: 8.1,
      votes: 84503,
      id: 92067
    },
    countries: [
      'Japan'
    ],
    type: 'movie'
  }
}
Type "it" for more
Atlas: a1ac34a7be-ebad-0 [redacted] sample.sfdic
```