

MongoDB CRUD Operations for MovieInfo Collection

1. Create Operation

Insert a single document:

```
db.MovieInfo.insertOne({  
    movieInfoId: "12345",  
    name: "Inception",  
    year: 2010,  
    cast: ["Leonardo DiCaprio", "Joseph Gordon-Levitt"],  
    releaseDate: "2010-07-16"  
});
```

Insert multiple documents:

```
db.MovieInfo.insertMany([  
    { movieInfoId: "12346", name: "Interstellar", year: 2014, cast: ["Matthew McConaughey", "Anne Hathaway"], releaseDate: "2014-11-07" },  
    { movieInfoId: "12347", name: "The Dark Knight", year: 2008, cast: ["Christian Bale", "Heath Ledger"], releaseDate: "2008-07-18" }  
]);
```

2. Read Operation

Find all documents:

```
db.MovieInfo.find();
```

Find with a filter (e.g., by name):

```
db.MovieInfo.find({ name: "Inception" });
```

Find movies released after 2010:

```
db.MovieInfo.find({ year: { $gt: 2010 } });
```

Find specific fields (projection):

```
db.MovieInfo.find({ year: 2010 }, { name: 1, cast: 1, _id: 0 });
```

Find with OR condition:

```
db.MovieInfo.find({ $or: [ { year: 2010 }, { name: "Interstellar" } ] });
```

3. Update Operation

Update a single document:

```
db.MovieInfo.updateOne(  
  { name: "Inception" },  
  { $set: { year: 2011, releaseDate: "2011-07-16" } }  
);
```

Update multiple documents:

```
db.MovieInfo.updateMany(  
  { year: { $lt: 2010 } },  
  { $set: { status: "Classic" } }  
);
```

Upsert (update or insert if not exists):

```
db.MovieInfo.updateOne(  
  { name: "Tenet" },  
  { $set: { year: 2020, releaseDate: "2020-08-26" } },
```

```
{ upsert: true }  
);
```

Rename a field:

```
db.MovieInfo.updateMany(  
  {},  
  { $rename: { "releaseDate": "premiereDate" } }  
);
```

4. Delete Operation

Delete a single document:

```
db.MovieInfo.deleteOne({ name: "Inception" });
```

Delete multiple documents:

```
db.MovieInfo.deleteMany({ year: { $lt: 2000 } });
```

Delete all documents in the collection:

```
db.MovieInfo.deleteMany({});
```