

## CL-2005: Database Systems

### Lab # 13: MongoDB-II

#### Scenario

RancidPineapple (RP) is a company that wants to launch a new web site focusing on movie reviews. They plan to use MongoDB to store and serve data about movies. In particular, they are focusing on a single document containing all the movie information, plus reviews as linked documents. These documents should have the following format:

#### Movie data

\_id, Name of movie, PineappleMetric (a number between 0 and 100), release year, rating, runtime, director [*assume, for sake of simplicity, that each movie has a single director*], a list of writers, production company (embedded, containing the name of the production company and its location), budget, a list of weekly box offices (most recent last).

First, get the idea from the data provided at the end of the document. Second, execute all the mentioned queries.

#### Questions:

1. Retrieve all documents in the movies collection.
2. Retrieve all movies released in specific year i.e., 2018.
3. Retrieve all movies with a Pineapple Metric lower than 50.
4. Retrieve all movies whose production company is located in the specific location i.e., "UK".
5. Retrieve the name and opening week box office (ONLY these "columns") from all movies.
6. Retrieve all movies produced by "Rinse Wash Repeat"
7. Retrieve all reviews written in 2018 (notice the format of that field as you develop your answer).

## APPENDIX - COLLECTIONS

\*\*\* MOVIE DOCUMENTS - "MOVIE"  
COLLECTION \*\*\*

```
{
  "_id": self generate,
  "movieId": "1",
  "name": "Mission Impossible 14 - The
AARP Threat",
  "pineappleMetric": "88",
  "releaseYear": "2018",
  "rating": "PG-13",
  "runtime": 136,
  "director": "Robert Silva",
  "writer": [
    "Mary Silva",
    "Mario Silva"
  ],
  "productionCompany": {
    "prodCompanyName": "Rinse Wash
Repeat",
    "prodCompanyLocation": "USA"
  },
  "budget": 127000000,
  "boxOffice": [
    32000000,
    15000000
  ]
}
{
  "_id": self generate,
  "movieId": "2",
  "name": "Die Hard - Resurrection",
```

```
"pineappleMetric": "58",
"releaseYear": "2019",
"rating": "R",
"runtime": 117,
"director": "Joan Smith",
"writer": [
  "Terry Smith",
  "Francine Smith"
],
"productionCompany": {
  "prodCompanyName": "Yippee-Ki-
Yay",
  "prodCompanyLocation": "Australia"
},
"budget": 63000000,
"boxOffice": [
  19000000,
  7000000,
  5300000
]
}
{
  "_id": self generate,
  "movieId": "3",
  "name": "Fifty Shades Greener",
  "pineappleMetric": "35",
  "releaseYear": "2018",
  "rating": "PG",
  "runtime": 98,
  "director": "Cookie Muster",
  "writer": [
```

```

    "Elmo Jones",
    "Sue Bird"
  ],
  "productionCompany": {
    "prodCompanyName": "Sesame
Muppets",
    "prodCompanyLocation": "UK"
  },
  "budget": 17000000,
  "boxOffice": [
    58000000,
    43000000,
    27000000,
    13000000
  ]
}

```

### \*\*\* REVIEW DOCUMENTS - "REVIEW" COLLECTION \*\*\*

```

{
  "_id": self generate,
  "reviewId": "1",
  "reviewAuthor": "Timmy Twopence",
  "reviewDate": "2019-07-23",
  "reviewText": "It is an unexpected
pleasure to have John McClane back as a
zombie pursuing the nefarious masterminds
behind a plan to dominate the world by
transforming most of the population into
undead slaves",
  "movieID": "2"
}

```

```

    "reviewId": "2",
    "reviewAuthor": "Sylvia Sterling",
    "reviewDate": "2018-06-12",
    "reviewText": "In this exciting movie,
Ethan Hunt battles his worst enemy ever: a
nefarious organization that advocates the
retirement of actors when they are too old to
play leads in action movies",
    "movieID": "1"
  }
{
  "_id": self generate,
  "reviewId": "3",
  "reviewAuthor": "Francis Pounder",
  "reviewDate": "2018-12-04",
  "reviewText": "Kermit the Frog against a
nefarious industrialist trying to pollute the
world is a fun premise but the use of
powerpoint slides during the movie is very
distracting",
  "movieID": "3"
}

```

```
}
```

```
{
```

```
  "_id": self.generate,
```