

Part 1

All data in the songs collection

The screenshot shows the MongoDB Atlas web interface. The top navigation bar includes the Atlas logo, user profile (Jonathan's ...), Access Manager, and Billing. The main header shows 'Project 0' and 'Data Services' tabs. The left sidebar contains navigation links for Deployment, Database, Data Lake, Services, and Security. The main content area is titled 'Cluster0' and shows the 'songList' database with a 'songs' collection. The collection details include storage size (4KB), logical data size (0B), total documents (0), and index size (4KB). A search bar is present with a filter icon. Below the search bar, a query result is displayed for the 'songs' collection, showing three documents:

```
{ "_id": "648bcb17d986723e52458232", "title": "Bohemian Rhapsody", "artist": "Queen", "year": 1975, "genre": "rock", "tags": "progressive rock" }, { "_id": "648bcb17d986723e52458233", "title": "Shape of You", "artist": "Ed Sheeran", "year": 2017, "genre": "pop", "tags": "pop" }, { "_id": "648bcb17d986723e52458234", "title": "Billie Jean", "artist": "Michael Jackson", "year": 1982, "genre": "pop", "tags": "dance" }
```

CS120: Web Programming

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Unit 3 PS2 NoSQL

The screenshot shows the MongoDB Atlas interface for a ClusterO instance. The left sidebar contains navigation links for Deployment, Services, and Security. The main panel displays the 'songList.songs' collection with a table of documents. The documents are as follows:

_id	title	artist	year	genre
ObjectId("64b651c5d86723e52458228e")	"Hey Jude"	"The Beatles"	1968	Array
ObjectId("64b651c5d86723e52458228f")	"No Woman, No Cry"	"Bob Marley"	1974	Array
ObjectId("64b651c5d86723e524582290")	"Take on Me"	"a-ha"	1984	Array

The screenshot shows the MongoDB Atlas interface for a ClusterO instance, displaying a different set of documents in the 'songList.songs' collection. The documents are as follows:

_id	title	artist	year	genre
ObjectId("64b651c5d86723e52458228e")	"Volare"	"Topsy Kings"	1989	Array
ObjectId("64b651c5d86723e52458228f")	"Rasture Highway"	"America"	1972	Array
ObjectId("64b651c5d86723e524582290")	"On the Street Where You Live"	"Dean Martin"	1958	Array

2.

Select DB

Show all collections in DB

```
jonathan ~ mongosh mongodb+srv://<credentials>@cluster0.m14mkf5.mongodb.net/ -- <credentials>@cluster0.m14mkf5.mongodb.net PATH=/opt/homebrew/opt/node@16/bin:/opt/homebrew/bl...
Last login: Fri Jul 14 00:08:03 on ttys000
jonathan@Jonathans-MBP ~ % mongosh "mongodb+srv://<credentials>@cluster0.m14mkf5.mongodb.net/" --apiVersion 1 --username jkeu
sch
Enter password: *****
Current Mongosh Log ID: 64b0e167d03d0f716285cf00
Connecting to:      mongodb+srv://<credentials>@cluster0.m14mkf5.mongodb.net/?appName=mongosh+1.10.1
Using MongoDB:      6.0.6 (API Version 1)
Using Mongosh:      1.10.1

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

Atlas atlas-i47kex-shard-0 [primary] test> use songList
switched to db songList
Atlas atlas-i47kex-shard-0 [primary] songList> show collections
songs
Atlas atlas-i47kex-shard-0 [primary] songList> █
```

Show all song titles (only) in DB

```
Atlas atlas-i47kex-shard-0 [primary] songList> db.songs.find({},{'title':1,'_id':0})
[
  { title: 'Bohemian Rhapsody' },
  { title: 'Shape of You' },
  { title: 'Billie Jean' },
  { title: 'Hotel California' },
  { title: 'Rolling in the Deep' },
  { title: 'Sweet Child of Mine' },
  { title: 'Hey Jude' },
  { title: 'No Woman, No Cry' },
  { title: 'Take on Me' },
  { title: 'Volare' },
  { title: 'Ventura Highway' },
  { title: 'On the Street Where You Live' }
]
Atlas atlas-i47kex-shard-0 [primary] songList> █
```

Show all titles, artists, genres

```
Atlas atlas-i47kex-shard-0 [primary] songList> db.songs.find({},{'title':1,'artist':1,'genre':1,'_id':0})
[
  {
    title: 'Bohemian Rhapsody',
    artist: 'Queen',
    genre: [ 'rock', 'progressive rock' ]
  },
  {
    title: 'Shape of You',
    artist: 'Ed Sheeran',
    genre: [ 'pop', 'R&B' ]
  },
  {
    title: 'Billie Jean',
    artist: 'Michael Jackson',
    genre: [ 'pop', 'dance', 'funk' ]
  },
  {
    title: 'Hotel California',
    artist: 'Eagles',
    genre: [ 'rock', 'soft rock' ]
  },
  {
    title: 'Rolling in the Deep',
    artist: 'Adele',
    genre: [ 'pop', 'soul', 'R&B' ]
  },
  {
    title: 'Sweet Child of Mine',
    artist: 'Guns N Roses',
    genre: [ 'hard rock', 'heavy metal' ]
  },
  {
    title: 'Hey Jude',
    artist: 'The Beatles',
    genre: [ 'rock', 'pop' ]
  },
  {
    title: 'No Woman, No Cry',
    artist: 'Bob Marley',
    genre: [ 'reggae', 'ska' ]
  },
  {
    title: 'Take on Me',
    artist: 'a-Ha',
    genre: [ 'synthpop', 'new wave' ]
  },
  {
    title: 'Volare',
    artist: 'Gypsy Kings',
    genre: [ 'pop', 'latin pop' ]
  },
  {
    title: 'Ventura Highway',
    artist: 'America',
    genre: [ 'soft rock', 'folk rock', 'rock' ]
  },
  {
    title: 'On the Street Where You Live',
    artist: 'Dean Martin',
    genre: [ 'musical theater' ]
  }
]
Atlas atlas-i47kex-shard-0 [primary] songList> 
```

Show all titles of a particular genre:

```
Atlas atlas-i47kex-shard-0 [primary] songList> db.songs.find({genre:'rock'},{title:1,_id:0});
[
  { title: 'Bohemian Rhapsody' },
  { title: 'Hotel California' },
  { title: 'Hey Jude' },
  { title: 'Ventura Highway' }
]
Atlas atlas-i47kex-shard-0 [primary] songList> db.songs.find({genre:'pop'},{title:1,_id:0});
[
  { title: 'Shape of You' },
  { title: 'Billie Jean' },
  { title: 'Rolling in the Deep' },
  { title: 'Hey Jude' },
  { title: 'Volare' }
]
Atlas atlas-i47kex-shard-0 [primary] songList> db.songs.find({genre:'R&B'},{title:1,_id:0});
[ { title: 'Shape of You' }, { title: 'Rolling in the Deep' } ]
Atlas atlas-i47kex-shard-0 [primary] songList> █
```