Final Submission Report

Noah O'Connor, Y-Nhu Ngo, Evan Jones, Austin Carpenter

Capstone Project Spring 2021
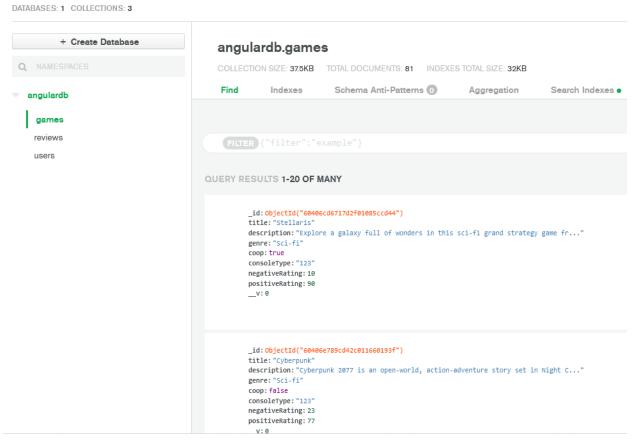
The University of West Florida

4/30/2021
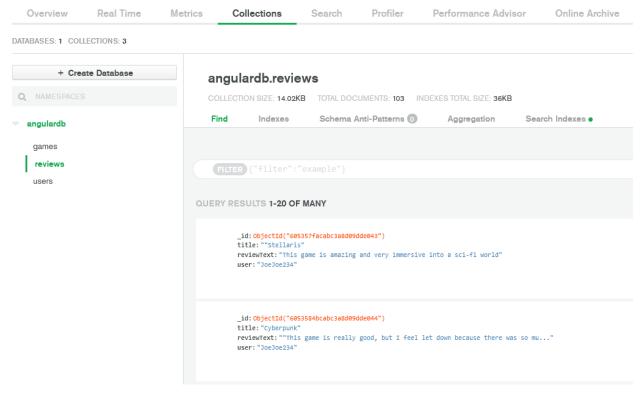
CIS4592 Capstone Project

Dr. Bernd OK

Game cluster

+ Create Database

Q NAMESPACES

▼ angulardb

| games

    reviews

    users

angulardb.games

COLLECTION SIZE: 37.5KB   TOTAL DOCUMENTS: 81   INDEXES TOTAL SIZE: 32KB

Find   Indexes   Schema Anti-Patterns ⓿   Aggregation   Search Indexes ●

FILTER {"filter":"example"}

QUERY RESULTS **1-20 OF MANY**

```
_id: ObjectId("60406cd6717d2f01085ccd44")
title: "Stellaris"
description: "Explore a galaxy full of wonders in this sci-fi grand strategy game fr..."
genre: "Sci-fi"
coop: true
consoleType: "123"
negativeRating: 10
positiveRating: 90
__v: 0
```

```
_id: ObjectId("60406e789cd42c011660193f")
title: "Cyberpunk"
description: "Cyberpunk 2077 is an open-world, action-adventure story set in Night C..."
genre: "Sci-fi"
coop: false
consoleType: "123"
negativeRating: 23
positiveRating: 77
  v: 0
```

1. The game cluster holds all the information about the games

Reviews cluster

Cluster0

DATABASES: **1** COLLECTIONS: **3**

+ Create Database

Q NAMESPACES

▼ **angulardb**

    games

    reviews

    users

angulardb.reviews

COLLECTION SIZE: **14.02KB**   TOTAL DOCUMENTS: **103**   INDEXES TOTAL SIZE: **36KB**

Find   Indexes   Schema Anti-Patterns ⓪   Aggregation   Search Indexes ●

FILTER {"filter":"example"}

QUERY RESULTS **1-20 OF MANY**

```
_id: ObjectId("605357facabc3a8d09dde043")
title: ""Stellaris"
reviewText: "This game is amazing and very immersive into a sci-fi world"
user: "JoeJoe234"
```

```
_id: ObjectId("6053584bcabc3a8d09dde044")
title: "Cyberpunk"
reviewText: ""This game is really good, but I feel let down because there was so mu..."
user: "JoeJoe234"
```

1. The review cluster holds all the information about the reviews

Users cluster

⋏ Cluster0

| Overview | Real Time | Metrics | **Collections** | Search | Profiler | Performance Advisor | Online Archive |

DATABASES: **1** COLLECTIONS: **3**

+ Create Database

🔍 NAMESPACES

▼ angulardb

    games

    reviews

    users

angulardb.users

COLLECTION SIZE: **3.27KB**   TOTAL DOCUMENTS: **15**   INDEXES TOTAL SIZE: **108KB**

Find   Indexes   Schema Anti-Patterns ⓘ   Aggregation   Search Indexes ●

FILTER {"filter":"example"}

QUERY RESULTS **1-15 OF 15**

```
_id: ObjectId("60669671fa58cd341d820f6a")
username: "EpicGamer"
private: false
email: "NoahOconnor@gmail.com"
password: "$2a$10$8i8Loi1FY9QzY24xmP5/eOrMk9f0MiyECIiJL4c2S6H7mSeiDsuXW"
__v: 0
```

```
_id: ObjectId("606696c5fa58cd341d820f6b")
username: "NoahTesting"
private: true
email: "NoahTesting@gmail.com"
password: "$2a$10$.ztXLVln9czHWybroLkp8.V0JpeGxjLLIpJABrkMOEsx.LlG.rnJW"
__v: 0
```

1. The users cluster holds all the information about the users

Database users

Database Access

Database Users   Custom Roles

User Name ⇕	Authentication Method ▲	MongoDB Roles
⋏ r3c0n_Admin	SCRAM	**atlasAdmin**@admin
⋏ UserLoggedIn	SCRAM	**read**@angulardb.games **readWrite**@angulardb.reviews **readWrite**@angulardb.users
⋏ UserNotLoggedIn	SCRAM	**read**@angulardb.games **read**@angulardb.reviews **readWrite**@angulardb.users

1. Used to assign access roles to the database

Recon-Client Structure
1. Models: models containing variables for objects used within the front end client
2. Modules: modules to assist with repetitive HTML elements to display arrays of objects
3. Pages: pages containing the different HTML views along with variables bound to typescript variables to communicate with HTTP route calls to the database
4. Services: handling of any route calls between the front end client and back end database

API-Gateway Structure
1. API-Service: proxy handling access from front end to back end
2. Game-Service: service handling any references to the game database
3. Reviews-Service: service handling any functions related to the review database
4. Users-Service: service handling any functions related to the users database.
5. Models: store the schemas used for the database cluster objects.
6. Ssl: stores our HTTPS certificate that we use to establish a secure connection.