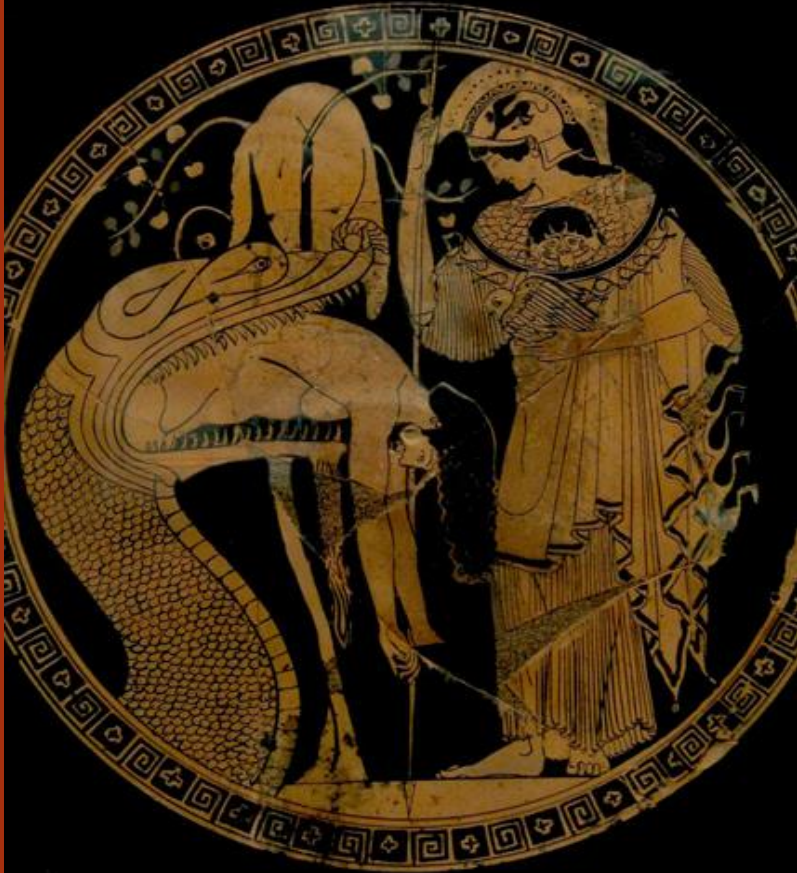


The Argonautica



Apollonius Rhodius

GREEK MYTHOLOGY PROJECT

By Nathan Annoh-Kwafo

Project Aim

Create

Create a NoSQL Mongo Database of Greek mythology characters and which lines their names occur in the Argonautica.



Make

Make use of some tools learnt this semester.



Help

Help Greek mythology fans gain easily access to character content

Bash

Wget

Gunzip

Awk

Sed

Grep

Mongo

Technologies Involved

Obtain the Argonautica zip file from project Gutenberg.

Unzip the zipped file with gunzip.

Using sed, Extract the Story content from the original text into a separate temporary file.

Extract character names using Awk and create respective temporal files using xargs and the touch command.

Obtain the corresponding lines for each character and place it in a prepared Mongo insert statement and pipe it into a characters Javascript file

Run Mongo and insert the character.js file to run all insert commands.

Process

The background is a blurred image of a document. It features a line graph with a solid line and a dotted line. A pen is visible in the upper right corner, appearing to write on the graph. There are some numbers visible on the graph, such as '2.5' and '2.4'.

SAMPLE DATA AND QUERIES

```
ntron@ntron: ~/Documents/DataManagement_Greek_Mythology_Project
Resolving www.gutenberg.org (www.gutenberg.org)... 2610:28:3090:3000:0:bad:cafe:47, 152.19.134.47
Connecting to www.gutenberg.org (www.gutenberg.org)|2610:28:3090:3000:0:bad:cafe:47|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 139493 (136K) [text/plain]
Saving to: 'story.txt.gz'

story.txt.gz                               100%[=====>] 136.22K  591KB/s   in 0.2s

2021-12-02 23:26:05 (591 KB/s) - 'story.txt.gz' saved [139493/139493]

Text download completed in output file story.txt
Extracting story from Story.txt.
Setting up Mongo insert characters file => characters.js
Cleaning up the directories.
MongoDB shell version v3.6.8
connecting to: mongoddb://127.0.0.1:27017/GreekCharacters
Implicit session: session { "id" : UUID("5ea496a2-2a93-452b-9c2d-aa94469bf9c5") }
MongoDB server version: 3.6.8
Server has startup warnings:
2021-12-02T23:21:32.945-0400 I STORAGE [initandlisten]
2021-12-02T23:21:32.945-0400 I STORAGE [initandlisten] ** WARNING: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine
2021-12-02T23:21:32.945-0400 I STORAGE [initandlisten] ** See http://dochub.mongodb.org/core/prodnotes-filesystem
2021-12-02T23:21:45.173-0400 I CONTROL [initandlisten]
2021-12-02T23:21:45.173-0400 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2021-12-02T23:21:45.173-0400 I CONTROL [initandlisten] ** Read and write access to data and configuration is unrestricted.
2021-12-02T23:21:45.173-0400 I CONTROL [initandlisten]
> show collections
GreekCharacters
> db.GreekCharacters.find()
{ "_id" : ObjectId("61a5403b83aa5d9771a8c56a"), "name" : "Abarnis", "lines" : [ "1123", "9999" ] }
{ "_id" : ObjectId("61a5403e83aa5d9771a8c56b"), "name" : "Abas", "lines" : [ "305", "367", "2234", "2240", "2271", "9999" ] }
{ "_id" : ObjectId("61a5403e83aa5d9771a8c56c"), "name" : "Acastus", "lines" : [ "451", "1216", "1248", "9999" ] }
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{ "_id" : ObjectId("61a5403e83aa5d9771a8c56f"), "name" : "Actius", "lines" : [ "624", "9999" ] }
{ "_id" : ObjectId("61a5403e83aa5d9771a8c570"), "name" : "Aeaeae", "lines" : [ "3636", "3653", "3690", "4145", "4428", "4679", "9999" ] }
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{ "_id" : ObjectId("61a5403e83aa5d9771a8c574"), "name" : "Aegina", "lines" : [ "318", "5489", "5499", "9999" ] }
{ "_id" : ObjectId("61a5403e83aa5d9771a8c575"), "name" : "Aenete", "lines" : [ "1137", "9999" ] }
{ "_id" : ObjectId("61a5403e83aa5d9771a8c576"), "name" : "Aeolid", "lines" : [ "346", "369", "2263", "2524", "3208", "4038", "9999" ] }
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{ "_id" : ObjectId("61a5403e83aa5d9771a8c578"), "name" : "Aesepus", "lines" : [ "1131", "1277", "9999" ] }
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{ "_id" : ObjectId("61a5403e83aa5d9771a8c57b"), "name" : "Alas", "lines" : [ "515", "3403", "9999" ] }
{ "_id" : ObjectId("61a5403e83aa5d9771a8c57c"), "name" : "Alcimedee", "lines" : [ "272", "458", "480", "486", "502", "9999" ] }
{ "_id" : ObjectId("61a5403e83aa5d9771a8c57d"), "name" : "Aloeus", "lines" : [ "699", "708", "9999" ] }
Type "it" for more
>
```



```
connecting to www.gutenberg.org (www.gutenberg.org)|2610:28:3090:3000:0:bad:cafe:47|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 139493 (136K) [text/plain]
Saving to: 'story.txt.gz'

story.txt.gz                100%[=====>] 136.22K   591KB/s   in 0.2s

2021-12-02 23:33:45 (591 KB/s) - 'story.txt.gz' saved [139493/139493]

Text download completed in output file story.txt
Extracting story from Story.txt.
Setting up Mongo insert characters file => characters.js
Cleaning up the directories.
MongoDB shell version v3.6.8
connecting to: mongodb://127.0.0.1:27017/GreekCharacters
Implicit session: session { "id" : UUID("19c99dc9-0c1b-4279-b055-4d52b24f1360") }
MongoDB server version: 3.6.8
Server has startup warnings:
2021-12-02T23:21:32.945-0400 I STORAGE [initandlisten]
2021-12-02T23:21:32.945-0400 I STORAGE [initandlisten] ** WARNING: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine
2021-12-02T23:21:32.945-0400 I STORAGE [initandlisten] ** See http://dochub.mongodb.org/core/prodnotes-filesystem
2021-12-02T23:21:45.173-0400 I CONTROL [initandlisten]
2021-12-02T23:21:45.173-0400 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2021-12-02T23:21:45.173-0400 I CONTROL [initandlisten] ** Read and write access to data and configuration is unrestricted.
> db.GreekCharacters.count({"lines":"375"})
7
> db.GreekCharacters.find({"name":"Zeus"})
{ "_id" : ObjectId("61a5403f83aa5d9771a8c63c"), "name" : "Zeus", "lines" : [ "375", "469", "684", "725", "728", "734", "931", "1179", "1238", "1263", "1339", "1456", "1486", "1547", "1549", "1644", "1651", "1669", "1680", "1697", "1753", "1766", "1791", "1846", "1925", "1957", "1977", "1978", "1979", "1999", "2318", "2355", "2393", "2409", "2485", "2503", "2507", "2513", "2514", "2528", "2560", "2572", "2589", "2613", "2675", "2678", "2706", "2775", "2776", "2790", "2816", "2846", "2963", "2972", "2992", "3210", "3504", "3506", "3561", "3913", "3927", "4016", "4018", "4039", "4093", "4130", "4169", "4224", "4248", "4394", "4426", "4442", "4448", "4502", "4505", "4546", "4553", "4558", "4596", "4632", "4774", "4781", "4898", "4930", "4943", "5002", "5030", "5046", "5405", "9999" ] }
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>
```

Limitations

Time played a major role in the volume of data each Greek character possesses in this database.

The odd phenomenon of duplicate inserts from the Mongo database is an unresolved minor issue since the data is not very large.

Mastery of the various technologies being used for this project.

References

Data Source

The Project Gutenberg EBook of The Argonautica, by Apollonius Rhodius.(

<https://www.gutenberg.org/files/830/830-o.txt>)

Git Repository

https://github.com/nannohk/DataManagement_Greek_Mythology_Project.git