

Самостоятельная работа №1

Вариативная часть

Задание 2.1: Развертывание БД Mongo с помощью Docker

Загрузка последнего образа MongoDB Docker из Docker Hub:

```
PS C:\Users\Мария> docker pull mongo
Using default tag: latest
latest: Pulling from library/mongo
bccd10f490ab: Pull complete
af9fc3f4b6e2: Pull complete
8d7f3ab58bb1: Pull complete
c9d33d2943ba: Pull complete
72665428d050: Pull complete
37d2ccdf8e0a: Pull complete
3caa80570a18: Pull complete
e24ae4ef8206: Pull complete
Digest: sha256:5505a38a8c6044ace154376dfe4c94ac85f01c22585547efdd9483c4922dfa37
Status: Downloaded newer image for mongo:latest
docker.io/library/mongo:latest

What's Next?
  1. Sign in to your Docker account → docker login
  2. View a summary of image vulnerabilities and recommendations → docker scout quickview mongo
```

Развертывание экземпляра MongoDB, и присвоение ему имени:

```
PS C:\Users\Мария> docker run -d --name mongo-cont mongo
5596d56a437b78c581380f1d2bf2926b1ba95ade861530b9014fc730cfabf2be
```

Вывод списка запущенных контейнеров:

```
PS C:\Users\Мария> docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS           NAMES
5596d56a437b   mongo     "docker-entrypoint.s..." 10 hours ago  Up 8 minutes  27017/tcp       mongo-cont
```

Подключение к контейнеру с именем «mongo-cont», запуск оболочки bash:

```
PS C:\Users\Мария> docker exec -it mongo-cont bash
root@5596d56a437b: /#
```

Запуск в этом окружении mongosh для работы с системой, уже локально:

```
PS C:\Users\Мария> docker exec -it mongo-cont bash
root@5596d56a437b: /# mongosh
Current Mongosh Log ID: 66107d67191c95f0997b2da8
Connecting to:      mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.2.2
Using MongoDB:      7.0.8
Using Mongosh:      2.2.2

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

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

-----
The server generated these startup warnings when booting
2024-04-05T22:24:59.126+00:00: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine. See http://dochub.mongodb.org/core/prodnotes-filesystem
2024-04-05T22:24:59.837+00:00: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
2024-04-05T22:24:59.837+00:00: /sys/kernel/mm/transparent_hugepage/enabled is 'always'. We suggest setting it to 'never' in the binary version
2024-04-05T22:24:59.837+00:00: vm.max_map_count is too low
-----

test> |
```

Создание базы данных с именем «first-db»:

```
test> use first-db  
switched to db first-db  
first-db> |
```

Создание коллекции с именем «FirstCollection»:

```
first-db> db.createCollection('FirstCollection')  
{ ok: 1 }
```

Добавление документа «document1» в коллекцию «FirstCollection»

```
first-db> db.FirstCollection.insert({item: "document1", qty: 10})  
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.  
{  
  acknowledged: true,  
  insertedIds: { '0': ObjectId('6610850e191c95f0997b2da9') }  
}
```