

2. Write a spring boot application use Mongoddb database implement BookStore database include the members l'd,bookname,book athorname,And write the following Operations :

-Post

-Get

-Delete

Step 1: Open Spring Boot Suite app,Click on create new spring starter project, add project name.

Step 2: Add the following dependency

- Spring Web

-MongoDB

-Lombok

-DevTools

Step 3: Create 3 packages and create some classes and interfaces inside the Packages.

1. model

2. repository

3. controller

Step 4: Inside the model package Creating a simple class name as Book inside the Book.java file.

```
package com.ii; import org.springframework.data.annotation.Id;
```

```
import org.springframework.data.mongodb.core.mapping.Document;
```

```
import lombok.AllArgsConstructor; import lombok.Data; import
```

```
lombok.NoArgsConstructor;
```

```
//Annotations
```

```
@Data
```

@AllArgsConstructor

@NoArgsConstructor

@Document (collection="Book")

//Class public

class Book { //

Attributes

 @Id

 private Integer id;

private String bookname;

private String authorname;

 public Integer getId() {

 return id;

 }

 public void setId(Integer id) {

 this.id = id;

 }

 public String getBookname() {

 return bookname;

 }

 public void setBookame(String bookname) {

 this.bookname = bookname;

 }

 public double getAuthorname() {

 return authorname;

 }

 public void setAuthorname(String authorname) {

this.authorname = authorname;

 }

```
}
```

Step 5: Inside the repository package Create a simple interface and name the interface as BookRepo. This interface is going to extend the MongoRepository .

```
// Java Program to Illustrate BookRepo File
```

```
import com.globallogic.spring.mongodb.model.Book; import
org.springframework.data.mongodb.repository.MongoRepository; public
interface BookRepo extends MongoRepository <Book, Integer>
{
}
```

Step 6: Inside the controller package Inside the package create one class named as BookController and perform the operations.

```
import com.globallogic.spring.mongodb.model.Book; import
com.globallogic.spring.mongodb.repository.BookRepo; import
org.springframework.beans.factory.annotation.Autowired; import
org.springframework.web.bind.annotation.*;
import java.util.List; //
Annotation
@RestController
// Class public class
BookController {
    @Autowired private
    BookRepo repo; //Post
    Operation

    @PostMapping("/addBook") public String
    saveBook (@RequestBody Book book){
    repo.save(book); return "Added Successfully";
    }

    //Get Operation
```

```
@GetMapping("/findAllBooks")
public List<Book> getBooks() { return
repo.findAll();
}
```

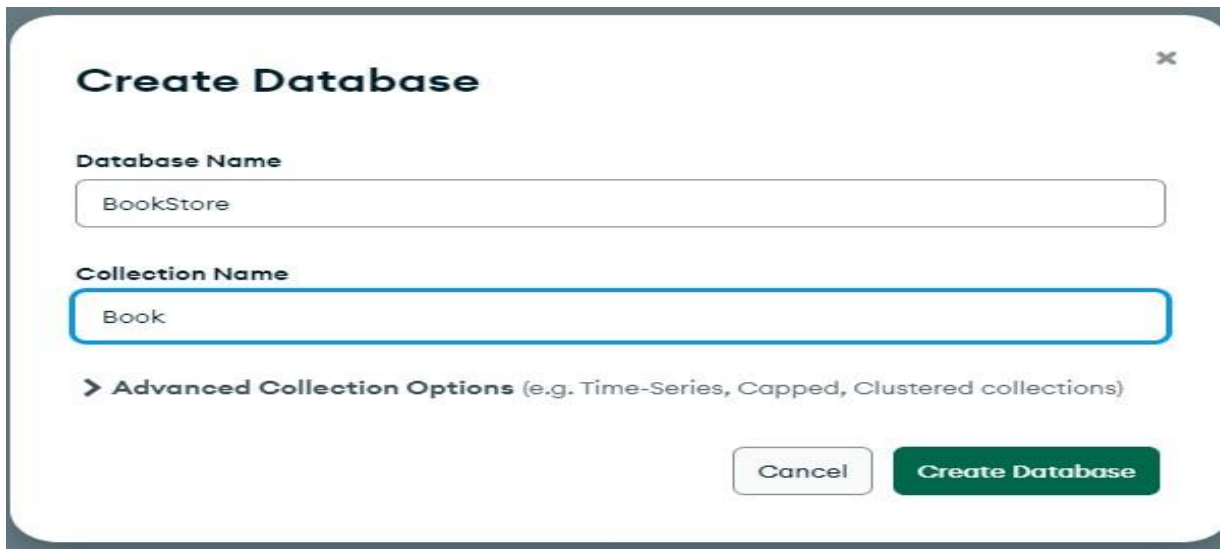
//Delete Operation

```
@DeleteMapping("/delete/{id}") public String
deleteBook(@PathVariable int id){
repo.deleteById(id); return "Deleted
Successfully";
}}
```

Step 7: Below is the code to connect the MongoDB Server Write in the application.properties file .

```
server.port = 8989
# MongoDB Configuration server.port:8989
spring.data.mongodb.host=localhost
spring.data.mongodb.port=27017
spring.data.mongodb.database=BookStore
```

Step 8: Inside the MongoDB Compass Go to your MongoDB Compass and create a Database named BookStore and inside the database create a collection named Book as seen in the below image.

A screenshot of the MongoDB 'Create Database' dialog box. It has a title bar with a close button (X). The 'Database Name' field contains 'BookStore'. The 'Collection Name' field contains 'Book' and is highlighted with a blue border. Below these fields is a link for 'Advanced Collection Options (e.g. Time-Series, Capped, Clustered collections)'. At the bottom right are 'Cancel' and 'Create Database' buttons.

Create Database

Database Name
BookStore

Collection Name
Book

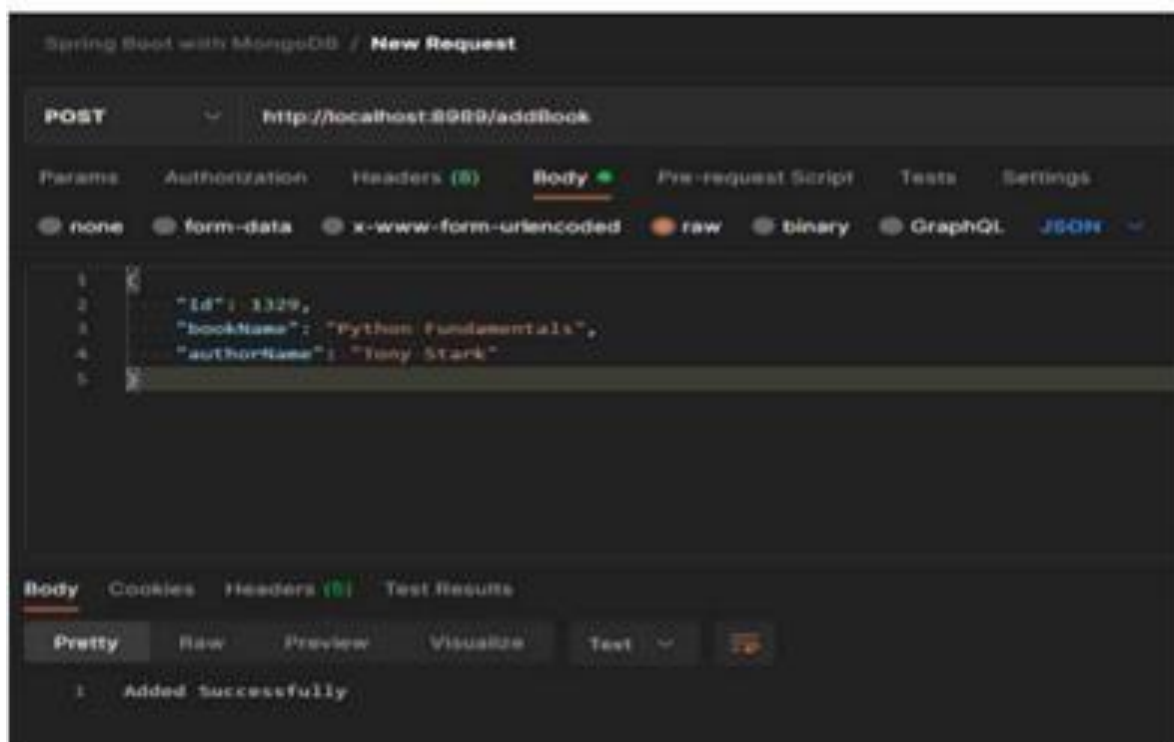
> Advanced Collection Options (e.g. Time-Series, Capped, Clustered collections)

Cancel Create Database

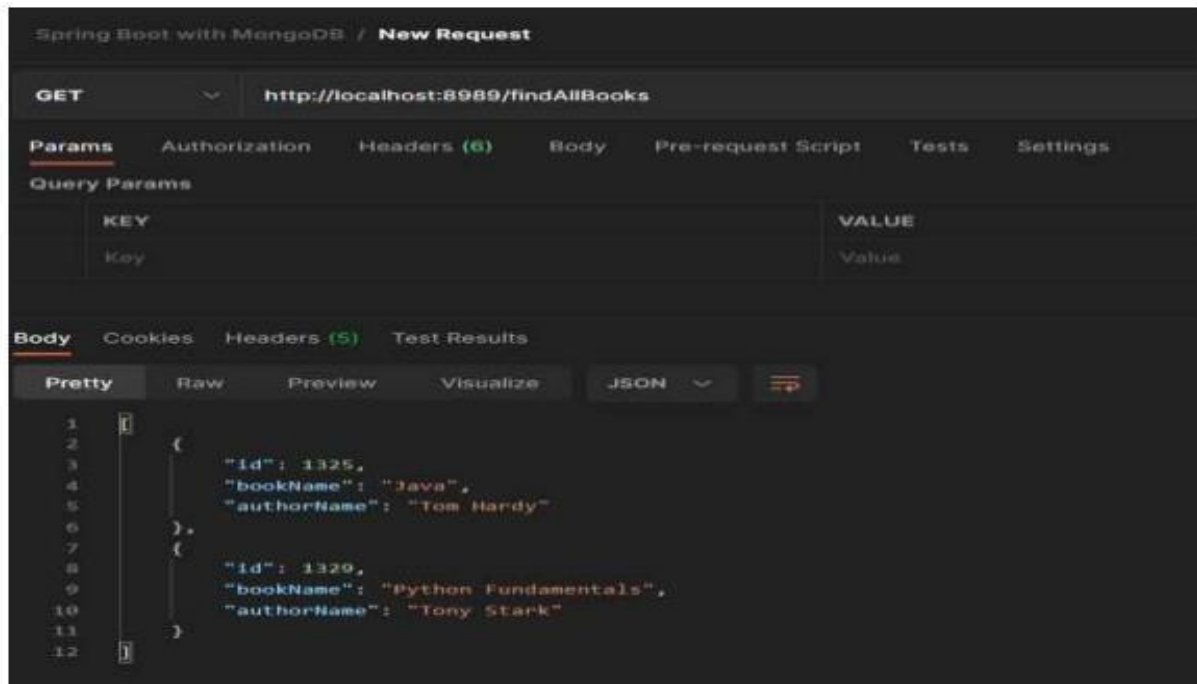
Now run your application and let's test the endpoints in Postman and also refer to our MongoDB Compass.

Testing the Endpoint in Postman

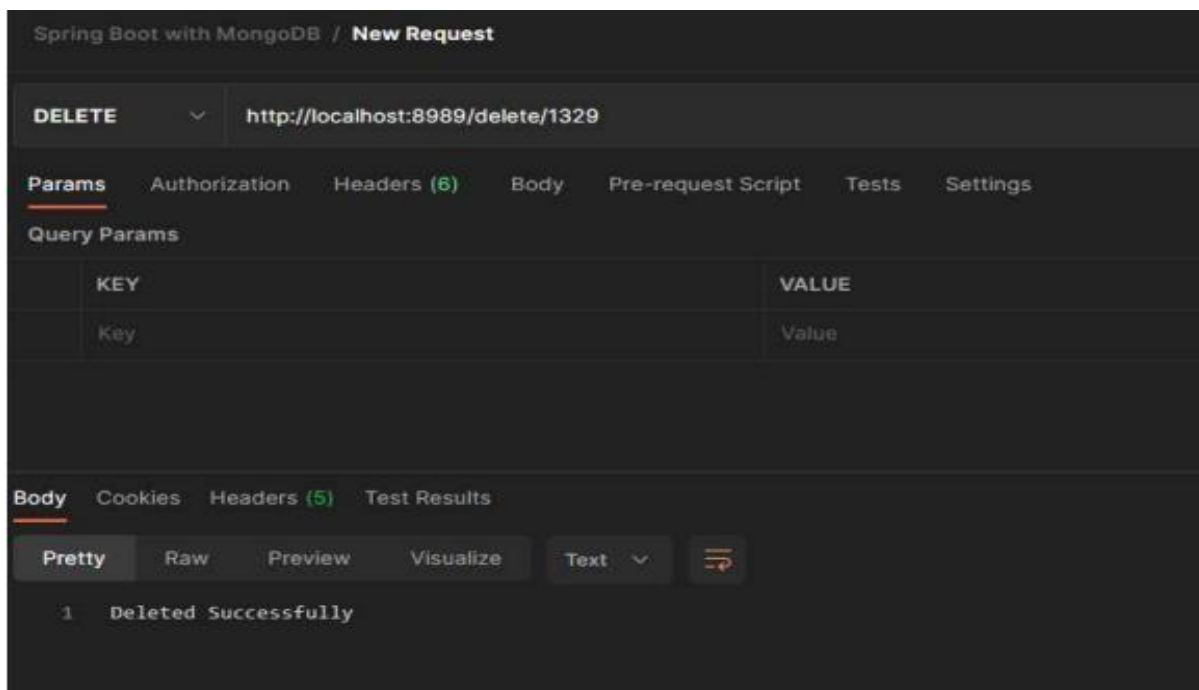
Endpoint 1: POST – <http://localhost:8989/addBook>



Endpoint 2: GET – <http://localhost:8989/findAllBook>



Endpoint 3: DELETE – <http://localhost:8989/delete/1329>



Finally, MongoDB Compass is as depicted in the below image as shown below as follows:

Connect View Collection Help

Local

> 5 DBS 10 COLLECTIONS

☆ FAVORITE

Q Filter your data

▼ BookStore

Book ...

> admin

> config

> devlocaldb

> local

BookStore.Book Documents

BookStore.Book

Documents Aggregations Schema

FILTER

ADD DATA

VIEW

```
{
  "_id": 1325,
  "bookName": "Java",
  "authorName": "Tom Hardy",
  "_class": "com.globallogic.spring.mongodb.model.Book"
}
```

```
{
  "_id": 1329,
  "bookName": "Python Fundamentals",
  "authorName": "Tony Stark",
  "_class": "com.globallogic.spring.mongodb.model.Book"
}
```