**// 31139 – Durvesh – DBMSLC1**

**// Sample Code**

package mongojavacon;  
  
import com.mongodb.client.\*;  
import com.mongodb.client.MongoCollection;  
import com.mongodb.client.model.Updates;  
import org.bson.Document;  
  
import java.util.ArrayList;  
import java.util.Scanner;  
  
public class Main {  
  
 public static void main(String[] args) {  
 MongoClient mongoClient = MongoClients.*create*("mongodb://127.0.0.1:27017");  
 MongoDatabase db = mongoClient.getDatabase("doorways");  
 MongoCollection<Document> teachers = db.getCollection("teachers");  
 Scanner scanner = new Scanner(System.*in*);  
 System.*out*.println("-------------Welcome to Teacher Database!-----------");  
 int choice = 0;  
 while(choice!=8){  
 System.*out*.println("0. View Selective 1. View all 2. Insert One 3. Insert Many 4. Update One\n5. Update Many" +  
 " 6. Delete One 7. Delete Many 8. Exit");  
 choice = scanner.nextInt();  
 switch (choice){  
 case 0:  
 scanner.nextLine();  
 Document filterfind=new Document();  
 System.*out*.println("Enter Field you want to match");  
 String matchfieldfind = scanner.nextLine();  
 System.*out*.println("Enter the value of the field you want to match");  
 String matchvaluefind = scanner.nextLine();  
 filterfind.put(matchfieldfind,matchvaluefind);  
 MongoCursor<Document> cursor1 = teachers.find(filterfind).iterator();  
 while (cursor1.hasNext()){  
 System.*out*.println(cursor1.next().toJson());  
 }  
 break;  
 case 1:  
 MongoCursor<Document> cursor = teachers.find().iterator();  
 while (cursor.hasNext()){  
 System.*out*.println(cursor.next().toJson());  
 }  
 break;  
 case 2:  
 scanner.nextLine();  
 String field="";  
 String value;  
 Document docinsert=new Document();  
 while (true){  
 System.*out*.println("Enter Field name or enter exit");  
 field = scanner.nextLine();  
 if(field.equals("exit"))  
 break;  
 System.*out*.println("Enter field value");  
 value = scanner.nextLine();  
 docinsert.put(field,value);  
 }  
 teachers.insertOne(docinsert);  
 break;  
 case 3:  
 ArrayList<Document> objects = new ArrayList<>();  
 System.*out*.println("Enter number of records you want to enter");  
 int numrec = scanner.nextInt();  
 scanner.nextLine();  
 for(int i=0;i<numrec;i++){  
 System.*out*.println("Record no. "+ i);  
 String fieldn="";  
 String valuen;  
 Document docu = new Document();  
 while (true){  
 System.*out*.println("Enter Field name or enter exit");  
 fieldn = scanner.nextLine();  
 if(fieldn.equals("exit"))  
 break;  
 System.*out*.println("Enter field value");  
 valuen = scanner.nextLine();  
 docu.put(fieldn,valuen);  
 }  
 objects.add(docu);  
 }  
 teachers.insertMany(objects);  
 break;  
 case 4:  
 scanner.nextLine();  
 Document filter=new Document();  
 System.*out*.println("Enter Field you want to match");  
 String matchfield = scanner.nextLine();  
 System.*out*.println("Enter the value of the field you want to match");  
 String matchvalue = scanner.nextLine();  
 filter.put(matchfield,matchvalue);  
 System.*out*.println("Enter the Field you want to update");  
 String updatefield = scanner.nextLine();  
 System.*out*.println("Enter the updated value for the field above");  
 String updatevalue = scanner.nextLine();  
 teachers.updateOne(filter, Updates.*set*(updatefield,updatevalue));  
 break;  
 case 5:  
 scanner.nextLine();  
 Document filtermult=new Document();  
 System.*out*.println("Enter Field you want to match");  
 String matchfieldmult = scanner.nextLine();  
 System.*out*.println("Enter the value of the field you want to match");  
 String matchvaluemult = scanner.nextLine();  
 filtermult.put(matchfieldmult,matchvaluemult);  
 System.*out*.println("Enter the Field you want to update");  
 String updatefieldmult = scanner.nextLine();  
 System.*out*.println("Enter the updated value for the field above");  
 String updatevaluemult = scanner.nextLine();  
 teachers.updateMany(filtermult,Updates.*set*(updatefieldmult,updatevaluemult));  
 break;  
 case 6:  
 scanner.nextLine();  
 System.*out*.println("Enter Field you want to match");  
 String matchfielddelete = scanner.nextLine();  
 System.*out*.println("Enter the value of the field you want to match");  
 String matchvaluedelete = scanner.nextLine();  
 Document filterdelete = new Document();  
 filterdelete.put(matchfielddelete,matchvaluedelete);  
 teachers.deleteOne(filterdelete);  
 break;  
 case 7:  
 scanner.nextLine();  
 System.*out*.println("Enter Field you want to match");  
 String matchfielddeletemult = scanner.nextLine();  
 System.*out*.println("Enter the value of the field you want to match");  
 String matchvaluedeletemult = scanner.nextLine();  
 Document filterdeletemult = new Document();  
 filterdeletemult.put(matchfielddeletemult,matchvaluedeletemult);  
 teachers.deleteMany(filterdeletemult);  
 break;  
 case 8:  
  
 break;  
 }  
 }  
 }  
}

**// Outputs**













