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**MONGODB CONNECTION:**

**DATABASE CREATION:**

**package** connection;

**import** org.bson.Document;

**import** com.mongodb.client.MongoClient;

**import** com.mongodb.client.MongoClients;

**import** com.mongodb.client.MongoCollection;

**import** com.mongodb.client.MongoDatabase;

**import** com.mongodb.client.MongoIterable;

**public** **class** DatabaseCreation {

**public** **static** **void** main(String[] args) {

MongoClient mongoClient = MongoClients.*create*("mongodb://localhost:27017");

MongoDatabase database=mongoClient.getDatabase("monday123");

database.createCollection("employeeRecord");

MongoCollection<Document> collection=database.getCollection("sampleCollection");

Document document= **new** Document("title","MongoDB");

collection.insertOne(document);

MongoIterable<String> loop1 = mongoClient.listDatabaseNames();

**for** (String name : loop1) {

System.***out***.println(name);

}

}

}

**DATABASE DROP:**

**package** connection;

**import** org.bson.Document;

**import** com.mongodb.client.MongoClient;

**import** com.mongodb.client.MongoClients;

**import** com.mongodb.client.MongoCollection;

**import** com.mongodb.client.MongoDatabase;

**import** com.mongodb.client.MongoIterable;

**public** **class** MongoDBDrop {

**public** **static** **void** main(String[] args) {

MongoClient mongoClient = MongoClients.*create*("mongodb://localhost:27017");

MongoDatabase database=mongoClient.getDatabase("monday123");

database.drop();

System.***out***.println("Database dropped.");

MongoIterable<String> loop1 = mongoClient.listDatabaseNames();

**for** (String name : loop1) {

System.***out***.println(name);

}

}

}

**COLLECTION CREATION AND DISPLAY:**

**package** connection;

**import** org.bson.Document;

**import** com.mongodb.client.MongoClient;

**import** com.mongodb.client.MongoClients;

**import** com.mongodb.client.MongoCollection;

**import** com.mongodb.client.MongoDatabase;

**import** com.mongodb.client.MongoIterable;

**public** **class** collectionlistout {

**public** **static** **void** main(String[] args) {

MongoClient mongoClient = MongoClients.*create*("mongodb://localhost:27017");

MongoDatabase database = mongoClient.getDatabase("myDb");

database.createCollection("sampleCollection");

MongoIterable<String> collections = database.listCollectionNames();

**for** (String name : collections) {

System.***out***.println(name);

}

}

}

**DOCUMENTS INSERTION:**

**package** connection;

**import** java.util.ArrayList;

**import** java.util.List;

**import** org.bson.Document;

**import** com.mongodb.client.MongoClient;

**import** com.mongodb.client.MongoClients;

**import** com.mongodb.client.MongoCollection;

**import** com.mongodb.client.MongoDatabase;

**public** **class** documentInsertion {

**public** **static** **void** main(String[] args) {

MongoClient mongoClient = MongoClients.*create*("mongodb://localhost:27017");

MongoDatabase database = mongoClient.getDatabase("myDb");

MongoCollection<Document> collection = database.getCollection("sampleCollection");

Document document = **new** Document("First\_Name", "Mahesh")

.append("Last\_Name", "Parashar")

.append("Date\_Of\_Birth", "1990-08-21")

.append("e\_mail", "mahesh\_parashar.123@gmail.com")

.append("phone", "9034343345");

collection.insertOne(document);

List<Document> documents = **new** ArrayList<>();

documents.add(**new** Document("First\_Name", "Radhika")

.append("Last\_Name", "Sharma")

.append("Date\_Of\_Birth", "1995-09-26")

.append("e\_mail", "radhika\_sharma.123@gmail.com")

.append("phone", "9000012345"));

documents.add(**new** Document("First\_Name", "Rachel")

.append("Last\_Name", "Christopher")

.append("Date\_Of\_Birth", "1990-02-16")

.append("e\_mail", "Rachel\_Christopher.123@gmail.com")

.append("phone", "9000054321"));

documents.add(**new** Document("First\_Name", "Fathima")

.append("Last\_Name", "Sheik")

.append("Date\_Of\_Birth", "1990-02-16")

.append("e\_mail", "Fathima\_Sheik.123@gmail.com")

.append("phone", "9000054321"));

collection.insertMany(documents);

System.***out***.println("Documents inserted.");

}

}

**RETRIEVING DOCUMENTS FROM THE COLLECTION:**

**package** connection;

**import** org.bson.Document;

**import** com.mongodb.client.FindIterable;

**import** com.mongodb.client.MongoClient;

**import** com.mongodb.client.MongoClients;

**import** com.mongodb.client.MongoCollection;

**import** com.mongodb.client.MongoDatabase;

**import** com.mongodb.client.model.Filters;

**public** **class** documentRetrieval {

**public** **static** **void** main(String[] args) {

MongoClient mongoClient = MongoClients.*create*("mongodb://localhost:27017");

MongoDatabase database = mongoClient.getDatabase("myDb");

MongoCollection<Document> collection = database.getCollection("sampleCollection");

FindIterable<Document> allDocuments=collection.find();

**for** (Document document: allDocuments){

System.***out***.println(document);

}

System.***out***.println("\*\*\*Selected Document\*\*\*");

FindIterable<Document> documents=collection.find(Filters.*eq*("First\_Name","Mahesh"));

**for**(Document document: documents){

System.***out***.println(document);

}

}

}

**RETRIEVING DOCUMENTS BASED ON USER INPUTS:**

**package** connection;

**import** org.bson.Document;

**import** java.util.Scanner;

**import** com.mongodb.client.FindIterable;

**import** com.mongodb.client.MongoClient;

**import** com.mongodb.client.MongoClients;

**import** com.mongodb.client.MongoCollection;

**import** com.mongodb.client.MongoDatabase;

**import** com.mongodb.client.model.Filters;

**public** **class** userinput {

**public** **static** **void** main(String[] args) {

MongoClient mongoClient = MongoClients.*create*("mongodb://localhost:27017");

MongoDatabase database = mongoClient.getDatabase("myDb");

MongoCollection<Document> collection = database.getCollection("sampleCollection");

Scanner sc = **new** Scanner(System.***in***);

System.***out***.println("Provide the first name:");

String firstName = sc.nextLine();

System.***out***.println("Provide the last name:");

String lastName = sc.nextLine();

System.***out***.println("Enter the age:");

**int** age = sc.nextInt();

sc.nextLine();

System.***out***.println("Enter your email address:");

String email = sc.nextLine();

System.***out***.println("Provide your phone number:");

String phone = sc.nextLine();

Document newDoc = **new** Document("First\_Name", firstName)

.append("Last\_Name", lastName)

.append("Age", age)

.append("Email", email)

.append("Phone", phone);

collection.insertOne(newDoc);

System.***out***.println("New record successfully added!\n");

System.***out***.println("Complete Record List");

FindIterable<Document> allDocuments = collection.find();

**for** (Document doc : allDocuments) {

System.***out***.println(doc.toJson());

}

System.***out***.println("\nSpecify the field to search (e.g., First\_Name):");

String filterField = sc.nextLine();

System.***out***.println("Enter the search value:");

String filterValue = sc.nextLine();

System.***out***.println("Matching Records");

FindIterable<Document> filteredDocs = collection.find(Filters.*eq*(filterField, filterValue));

**for** (Document doc : filteredDocs) {

System.***out***.println(doc.toJson());

}

sc.close();

mongoClient.close();

}

}

**UPDATE ONE DOCUMENT**

**import** com.mongodb.client.MongoClient;

**import** com.mongodb.client.MongoClients;

**import** com.mongodb.client.MongoCollection;

**import** com.mongodb.client.MongoDatabase;

**import** com.mongodb.client.model.Filters;

**import** com.mongodb.client.model.Updates;

**import** org.bson.Document;

**public** **class** UpdateOne {

**public** **static** **void** main(String[] args) {

MongoClient mongoClient = MongoClients.*create*("mongodb://localhost:27017");

MongoDatabase database = mongoClient.getDatabase("myDb");

MongoCollection<Document> collection = database.getCollection("sampleCollection");

collection.updateOne(

Filters.*eq*("First\_Name", "Mahesh"),

Updates.*set*("e\_mail", "mahesh.updated@gmail.com")

);

System.***out***.println("Document updated.");

mongoClient.close();

}

}

**UPDATE MULTIPLE DOCUMENTS**

**import** com.mongodb.client.MongoClient;

**import** com.mongodb.client.MongoClients;

**import** com.mongodb.client.MongoCollection;

**import** com.mongodb.client.MongoDatabase;

**import** com.mongodb.client.model.Filters;

**import** com.mongodb.client.model.Updates;

**import** org.bson.Document;

**public** **class** UpdateMany {

**public** **static** **void** main(String[] args) {

MongoClient mongoClient = MongoClients.*create*("mongodb://localhost:27017");

MongoDatabase database = mongoClient.getDatabase("myDb");

MongoCollection<Document> collection = database.getCollection("sampleCollection");

collection.updateMany(

Filters.*eq*("First\_Name", "Mahesh"),

Updates.*combine*(

Updates.*set*("e\_mail", "mahesh.updated@gmail.com"),

Updates.*set*("Last\_Name", "Babu")

)

);

System.***out***.println("Documents updated.");

}

}