Course name: A level   **SUBJECT:DATABASE TECHNOLOGIES**

Topic: MongoDB   **DATE:4/5/2020**

Configuration file in MongoDB

When we install the full version of MongoDB, configuration file **mongod.cfg** is automatically created with default setting and is stored in bin folder of the MongoDB server. We have installed MongoDb on C:\ drive at the default path and the location of the configuration file is **C:\Program Files\MongoDB\Server\4.2\bin .**

If we open this file, the content of the file is as under:

```
# mongod.conf

# for documentation of all options, see:
#   http://docs.mongodb.org/manual/reference/configuration-options/

# Where and how to store data.
storage:
  dbPath: C:\Program Files\MongoDB\Server\4.2\data
  journal:
    enabled: true
#  engine:
#  mmapv1:
#  wiredTiger:

# where to write logging data.
systemLog:
  destination: file
  logAppend: true
  path:  C:\Program Files\MongoDB\Server\4.2\log\mongod.log

# network interfaces
net:
  port: 27017
  bindIp: 127.0.0.1
```

#processManagement:

#security:

#operationProfiling:

#replication:

#sharding:

Enterprise-Only Options:

#auditLog:

#snmp:

We may edit the path and settings or create our own configuration file with these settings. Storage path and system log path is mandatory.

JSON File format for storing documents

JSON stands for **JavaScript Object Notation. Json** is data-interchange format. It is easy for humans to read and write. It is easy for machines to parse and generate. We call JSON as a syntax for storing and exchanging data. JSON is a text format which is completely language independent and written with JavaScript object notation. Json uses conventions that are familiar to programmers of the C-family of languages, including C, C++, C#, Java, JavaScript, Perl, Python, and many others. These properties make JSON an ideal data-interchange language.

JSON is built on two structures:
1. As a collection of name/value or Attribute/Value pairs. This may be an object, record, struct, dictionary, hash table, keyed list, or associative array.
2. An ordered list of values. This may be an array, vector, list, or sequence.

JSON is universal data structures which is virtually supported by all modern programming in one form or another. These JSON structure supports the data format which is interchangeable with programming languages.

Example 1: An *object* is an unordered set of name/value pairs. In JSON, an object starts with **{ left brace** and ends with **} right brace.** Each name is followed by **:colon** and the name/value pairs are separated by **,comma.**

> {"name": "Ajay", "age": 21, "city": "Gorakhpur" }
> { "name": "Mohit", "age": 22, "city": "Deoria" }
> { "name": "Jeetut", "age": 20, "city": "Sonauli" }

Example 2 : An array is an ordered collection of values. An array begins with **[left bracket** and ends with **] right bracket**. Here, values are separated by **,comma**. Here comes some arrays:

> ["Graduation", "Post Graduation", "NIELIT Course"]
> ["BSc", "BCom", "BA", "BBA", "BCA"]
> ["MSc", "MCom", "MA", "MBA", "MCA"]
> ["CCC", "O Level IT", "A Level IT", "CHM O Level", "MAT O Level"]

Example 3 : Array of Objects

> [{"name": "Ajay", "age": 21, "city": "Gorakhpur" },
> { "name": "Mohit", "age": 22, "city": "Deoria" },
> { "name": "Jeetut", "age": 20, "city": "Sonauli" }]

Exchanging Data with JSON File

It is worth to mention here that exchange of data between a browser and a server can only be text.

- JSON is text format and hence we can convert any JavaScript object into JSON, and send JSON to the server.
- Similarly, we may also convert any JSON received from the server into JavaScript objects.

With this technique, we may work with the data with JSON file as JavaScript objects, with no complicated parsing and translations.

Assignment

1. what is the use of configuration file in MongoDB?

2. What is JSON file format? How to use it?