1. Setup the Database (Mongo Atlas (Cloud based)) , and database store the information of the songs (ArtistName, TrackName, ImageURL, AudioURL)
ImageURL , AudioURL - GitHub

https://www.mongodb.com/cloud/atlas/register  Atlas Steps

a) Register User
b) Login User
c) Cluster Create (Pizza Slice)
d) DB User/Password
e) Network Access
f) Connect to the Application
(mongodb+srv://amit:amit123@musicdb.vfdbr.mongodb.net/myFirstDatabase?retryWrites=true&w=majority)

Step-2 Writing the BackEnd Code

a) Connect to the Database

BackEnd Setup
1.1 npm init -y —> package.json
(Meta Information of a Project)
e.g Project Name, Project Version ,
Library (Packages) Used
Dependencies

1.2 npm i express

1.3 nodemon - Hot Restart
npm i nodemon -g

1.4 Code: app.js
Application Start on Port 1234

```
// This is an Application File
(Represent Entire Application)
const express = require('express');
const app = express();
// app start on port no 1234, so it
listen the client request on 1234
port no
```

```
app.listen(1234,err=>{
    if(err){
        console.log('Server
Error..... ', err);
    }
    else{
        console.log("######Server
Started.............");
    }
})
```

## 1.5 Code connect to the Mongo Atlas DataBase.

npm i mongoose

## create db folder / connection.js

```
// This file is used to connect to the
DataBase (Mongo Atlas)
const DB_URL  = "mongodb+srv://
amit:amit123@musicdb.vfdbr.mongodb.net/
musicdb?retryWrites=true&w=majority";
const mongoose = require('mongoose');
mongoose.connect(DB_URL, err=>{
    if(err){
        console.log('Connection Error ',err);
    }
```

```
    else{
        console.log('Connection Created.....
');
    }
})
```

## 1.6 Data Store in Mongo Atlas

a) Identify the Structure of the Data (Schema) to Store in the Database.

Data Store in Mongo in Form of JSON.

JSON = {Key: Value }

{artistName:'Sonu Nigam' , trackName:'Kal ho na ho', image:'', audio:''}

```
// {artistName:'Sonu Nigam' , trackName:'Kal
ho na ho', image:'', audio:''} - Structure of
Schema
const { SchemaTypes } = require('./
connection');
const mongoose = require('./connection');
const Schema  = mongoose.Schema; // Can Create
```

```
a Schema
const songSchema = new Schema({
    artistName : SchemaTypes.String,
    trackName: SchemaTypes.String,
    image : SchemaTypes.String, // IMAGE URL
    audio: SchemaTypes.String // AUDIO URL
});
const SongModel = mongoose.model('songs',
songSchema); // songs is become a collection
in Mongo Atlas
module.exports = SongModel;
```

# b) Store the Data in the DataBase so we create SongOperations.js this js will do the CRUD Operations

```
// CRUD Operations Perform
const SongModel = require('./song-schema');
const songOperations = {
    async addSong(songObject){
            return await
SongModel.create(songObject);
    } ,
    readAllSong(){

    } ,
    findSongByArtistName(){
```

```
    },
    removeSong(){

    },
    updateSong(){

    }
}

const songObject = {artistName:'Sonu Nigam' ,
trackName:'Kal ho na ho', image:'https://
images.indianexpress.com/2021/07/sonu-
nigam-1200-1.jpg', audio:'https://github.com/
brainmentorspvtltd/MERN-DU/blob/main/songs/
a.m4a?raw=true'};
songOperations.addSong(songObject);
console.log('Added....');
```