

Perfect — let's build a simple Express + Mongoose backend for a collection called Record that stores:

➡ **name, city, and phone.**

I'll show you the **complete working example**, step-by-step ☐

☐ **Step 1: Setup Project**

In your terminal:

```
mkdir record-api
cd record-api
npm init -y
npm install express mongoose
```

Then create a file:

☐ **server.js**

☐ **Step 2: Full Code (Express + MongoDB)**

```
// server.js

const express = require('express');
const mongoose = require('mongoose');
const app = express();

app.use(express.json()); // to parse JSON requests

// 1 ☐ Connect to MongoDB
mongoose.connect('mongodb://localhost:27017/recorddb')
  .then(() => console.log('Connected to MongoDB'))
  .catch(err => console.log(err));

// 2 ☐ Define Schema + Model
const Record = mongoose.model('Record', new mongoose.Schema({
  name: String,
  city: String,
  phone: String
}));

// 3 ☐ Routes

// > GET all records
app.get('/api/records', async (req, res) => {
  const records = await Record.find();
  res.json(records);
});
```

```

// > POST (Add a new record)
app.post('/api/records', async (req, res) => {
  const record = new Record({
    name: req.body.name,
    city: req.body.city,
    phone: req.body.phone
  });
  await record.save();
  res.send('Record saved successfully!');
});

// > GET record by ID
app.get('/api/records/:id', async (req, res) => {
  const record = await Record.findById(req.params.id);
  if (!record) return res.status(404).send('Record not found');
  res.json(record);
});

// > PUT (Update record)
app.put('/api/records/:id', async (req, res) => {
  const record = await Record.findByIdAndUpdate(
    req.params.id,
    { name: req.body.name, city: req.body.city, phone: req.body.phone },
    { new: true }
  );
  if (!record) return res.status(404).send('Record not found');
  res.json(record);
});

// > DELETE record
app.delete('/api/records/:id', async (req, res) => {
  const record = await Record.findByIdAndDelete(req.params.id);
  if (!record) return res.status(404).send('Record not found');
  res.send('Record deleted successfully!');
});

// 4 Start Server
app.listen(5000, () => console.log('Server running on port 5000'));

```

□ How It Works:-

Route	Method	Description
/api/records	GET	Fetch all records
/api/records/:id	GET	Fetch single record by ID
/api/records	POST	Add a new record
/api/records/:id	PUT	Update an existing record
/api/records/:id	DELETE	Delete a record

□ Step 3: Test Using Postman or Thunder Client

➤ Add a Record (POST)

URL: `http://localhost:5000/api/records`

Body (JSON):

```
{
  "name": "John Doe",
  "city": "Mumbai",
  "phone": "9876543210"
}
```

□ Response: "Record saved successfully!"

➤ Get All Records

GET: `http://localhost:5000/api/records`

□ Response:

```
[
  {
    "_id": "674eaa4d8b...",
    "name": "John Doe",
    "city": "Mumbai",
    "phone": "9876543210"
  }
]
```

➤ Update Record

PUT: `http://localhost:5000/api/records/<id>`

Body:

```
{
  "name": "John Smith",
  "city": "Pune",
  "phone": "9999999999"
}
```

□ Response: updated record object

➤ Delete Record

DELETE: `http://localhost:5000/api/records/<id>`

☐ Response: "Record deleted successfully!"

This is a **real, full CRUD API** for a “Record” collection using:

- ☐ **MongoDB** (for storage)
- ☐ **Mongoose** (for schema + queries)
- ☐ **Express** (for routes)

Perfect — that’s the **professional, interview-ready structure** most MERN developers use. It shows you understand **modular code** and **project organization** — exactly what interviewers love to see.

Let’s refactor your previous “Record” CRUD API into **separate files**:

□ Project Structure

Here’s how your folders/files should look □

```
record-api/  
├── server.js  
├── config/  
│   └── db.js  
├── models/  
│   └── Record.js  
└── routes/  
    └── recordRoutes.js
```

□ Step 1: Install Dependencies

In your project folder:

```
npm init -y  
npm install express mongoose
```

□ Step 2: MongoDB Connection (config/db.js)

```
// config/db.js  
const mongoose = require('mongoose');  
  
const connectDB = async () => {  
  try {  
    await mongoose.connect('mongodb://localhost:27017/recorddb');  
    console.log('□ MongoDB connected');  
  } catch (error) {  
    console.error('□ MongoDB connection failed:', error.message);  
    process.exit(1);  
  }  
};  
  
module.exports = connectDB;
```

□ Step 3: Mongoose Model (models/Record.js)

```
// models/Record.js
const mongoose = require('mongoose');

// Define schema
const recordSchema = new mongoose.Schema({
  name: { type: String, required: true },
  city: { type: String, required: true },
  phone: { type: String, required: true }
});

// Create model
const Record = mongoose.model('Record', recordSchema);

module.exports = Record;
```

□ Step 4: Routes File (routes/recordRoutes.js)

```
// routes/recordRoutes.js
const express = require('express');
const router = express.Router();
const Record = require('../models/Record');

// > GET all records
router.get('/', async (req, res) => {
  const records = await Record.find();
  res.json(records);
});

// > POST (Add new record)
router.post('/', async (req, res) => {
  const record = new Record({
    name: req.body.name,
    city: req.body.city,
    phone: req.body.phone
  });
  await record.save();
  res.send('□ Record saved successfully!');
});

// > GET by ID
router.get('/:id', async (req, res) => {
  const record = await Record.findById(req.params.id);
  if (!record) return res.status(404).send('Record not found');
  res.json(record);
});

// > PUT (Update)
router.put('/:id', async (req, res) => {
  const record = await Record.findByIdAndUpdate(
    req.params.id,
    { name: req.body.name, city: req.body.city, phone: req.body.phone },
    { new: true }
  );
});
```

```
    });
    if (!record) return res.status(404).send('Record not found');
    res.json(record);
  });

  // > DELETE
  router.delete('/:id', async (req, res) => {
    const record = await Record.findByIdAndDelete(req.params.id);
    if (!record) return res.status(404).send('Record not found');
    res.send('☐ Record deleted successfully!');
  });

  module.exports = router;
```

☐ Step 5: Main Server File (server.js)

```
// server.js
const express = require('express');
const connectDB = require('./config/db');
const recordRoutes = require('./routes/recordRoutes');

const app = express();

// Middleware
app.use(express.json());

// Connect to MongoDB
connectDB();

// Routes
app.use('/api/records', recordRoutes);

// Start server
app.listen(5000, () => console.log('☐ Server running on port 5000'));
```

☐ Now Run It

```
node server.js
```

You'll see:

- ☐ MongoDB connected
 - ☐ Server running on port 5000
-

☐ Test API Endpoints (same as before)

Method	Route	Description
GET	/api/records	Get all records

Method	Route	Description
POST	/api/records	Add new record
GET	/api/records/:id	Get record by ID
PUT	/api/records/:id	Update record
DELETE	/api/records/:id	Delete record

□ Why This Separation Is Better

File	Responsibility
server.js	App entry point and route setup
config/db.js	Handles MongoDB connection
models/Record.js	Defines data structure
routes/recordRoutes.js	Defines API endpoints

This makes your code **clean, scalable, and interview-ready**.