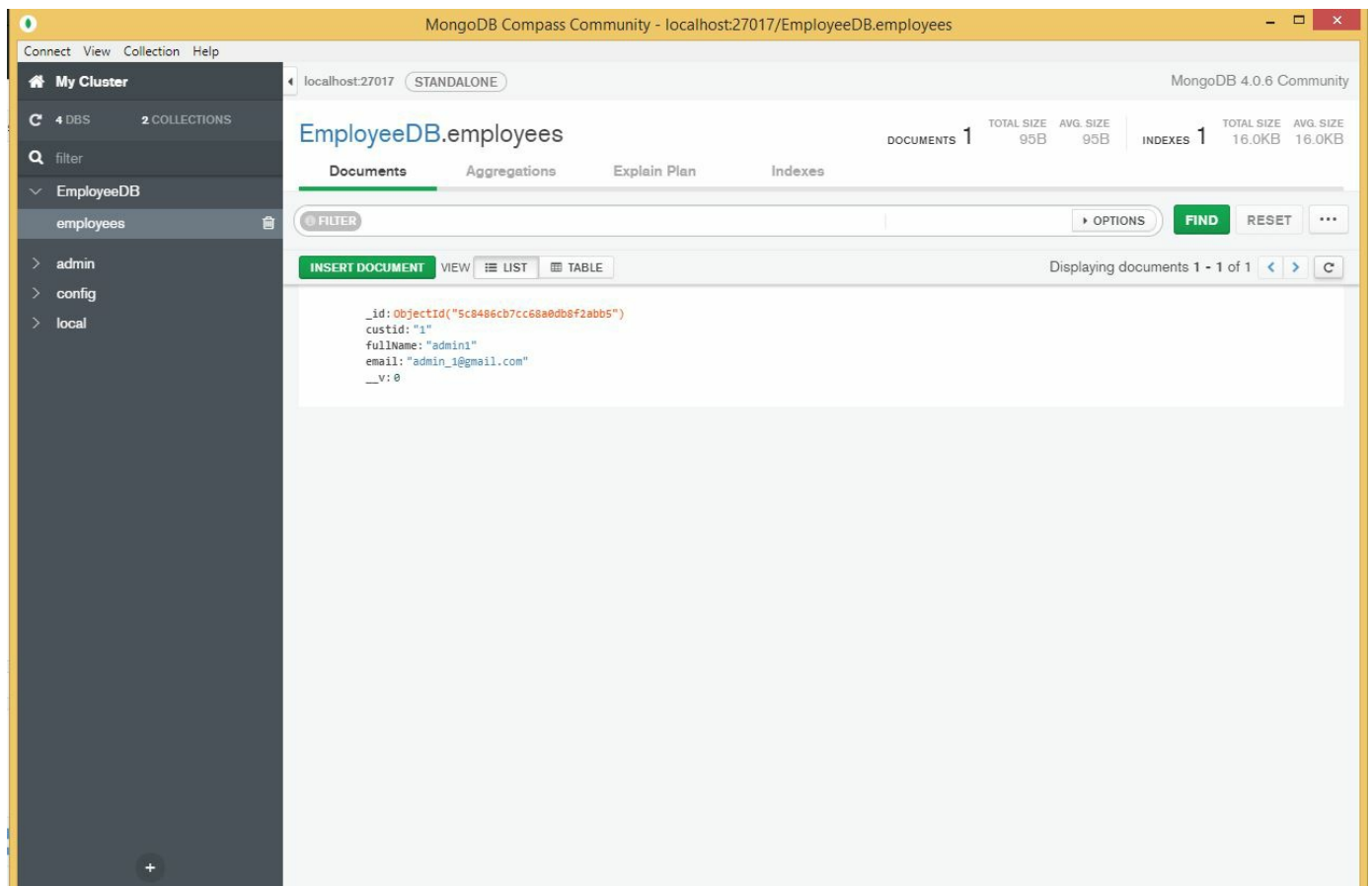


ICP6

We have created an node js express CRUD application using MongoDB

We have installed mongoDB in desktop and created a database for storing details of customer and used cmd to start server



```
C:\WINDOWS\system32\cmd.exe

C:\Users\purnak\Desktop>cd C:\Program Files\MongoDB\Server\4.0\bin

C:\Program Files\MongoDB\Server\4.0\bin>mongod.exe --dbpath C:\Users\purnak\mongoddata
2019-03-10T08:48:59.864+0530 I CONTROL [main] Automatically disabling TLS 1.0,
to force-enable TLS 1.0 specify --sslDisabledProtocols 'none'
2019-03-10T08:48:59.885+0530 I CONTROL [initandlisten] MongoDB starting : pid=6164 port=27017 dbpath=C:\Users\purnak\mongoddata 64-bit host=Purna
2019-03-10T08:48:59.898+0530 I CONTROL [initandlisten] targetMinOS: Windows 7/Windows Server 2008 R2
2019-03-10T08:48:59.899+0530 I CONTROL [initandlisten] db version v4.0.6
2019-03-10T08:48:59.901+0530 I CONTROL [initandlisten] git version: caa42a1f75a56c7643d0b68d3880444375ec42e3
2019-03-10T08:48:59.903+0530 I CONTROL [initandlisten] allocator: tcmalloc
2019-03-10T08:48:59.924+0530 I CONTROL [initandlisten] modules: none
2019-03-10T08:48:59.937+0530 I CONTROL [initandlisten] build environment:
2019-03-10T08:48:59.939+0530 I CONTROL [initandlisten] distmod: 2008plus-ssl
2019-03-10T08:48:59.941+0530 I CONTROL [initandlisten] distarch: x86_64
2019-03-10T08:48:59.941+0530 I CONTROL [initandlisten] target_arch: x86_64
2019-03-10T08:48:59.942+0530 I CONTROL [initandlisten] options: { storage: { dbPath: "C:\Users\purnak\mongoddata" } }
2019-03-10T08:48:59.952+0530 I STORAGE [initandlisten] Detected data files in C:\Users\purnak\mongoddata created by the 'wiredTiger' storage engine, so setting the active storage engine to 'wiredTiger'.
2019-03-10T08:48:59.955+0530 I STORAGE [initandlisten] wiredtiger_open config: create,cache_size=3530M,session_max=20000,eviction=(threads_min=4,threads_max=4),config_base=false,statistics=(fast),log=(enabled=true,archive=true,path=journal,compressor=snappy),file_manager=(close_idle_time=100000),statistics_log=(wait=0),verbose=(recovery_progress)
2019-03-10T08:49:00.902+0530 I STORAGE [initandlisten] WiredTiger message [1552187940:901814][6164:140710594875520], txn-recover: Main recovery loop: starting at 1/36736 to 2/256
2019-03-10T08:49:01.261+0530 I STORAGE [initandlisten] WiredTiger message [1552187941:261052][6164:140710594875520], txn-recover: Recovering log 1 through 2
2019-03-10T08:49:01.675+0530 I STORAGE [initandlisten] WiredTiger message [1552187941:675326][6164:140710594875520], txn-recover: Recovering log 2 through 2
2019-03-10T08:49:01.882+0530 I STORAGE [initandlisten] WiredTiger message [1552187941:881463][6164:140710594875520], txn-recover: Set global recovery timestamp: 0
2019-03-10T08:49:02.425+0530 I RECOVERY [initandlisten] WiredTiger recoveryTimestamp: Ts: Timestamp(0, 0)
2019-03-10T08:49:02.705+0530 I CONTROL [initandlisten]
2019-03-10T08:49:02.706+0530 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2019-03-10T08:49:02.706+0530 I CONTROL [initandlisten] ** Read and write access to data and configuration is unrestricted.
2019-03-10T08:49:02.707+0530 I CONTROL [initandlisten]
2019-03-10T08:49:02.707+0530 I CONTROL [initandlisten] ** WARNING: This server is bound to localhost.
2019-03-10T08:49:02.707+0530 I CONTROL [initandlisten] ** Remote systems will be unable to connect to this server.
2019-03-10T08:49:02.708+0530 I CONTROL [initandlisten] ** Start the server with --bind_ip <address> to specify which IP
2019-03-10T08:49:02.708+0530 I CONTROL [initandlisten] ** addresses it should serve responses from, or with --bind_ip_all to
2019-03-10T08:49:02.709+0530 I CONTROL [initandlisten] ** bind to all interfaces. If this behavior is desired, start the
2019-03-10T08:49:02.709+0530 I CONTROL [initandlisten] ** server with --bind_ip 127.0.0.1 to disable this warning.
2019-03-10T08:49:02.710+0530 I CONTROL [initandlisten]
2019-03-10T08:49:03.542+0530 W FTDC [initandlisten] Failed to initialize Performance Counters for FTDC: WindowsPdhError: PdhExpandCounterPathW failed with 'The specified object was not found on the computer.' for counter '\Memory\Available Bytes'
2019-03-10T08:49:03.555+0530 I FTDC [initandlisten] Initializing full-time diagnostic data capture with directory 'C:\Users\purnak\mongoddata\diagnostic.data'
```

In the application we have installed the following dependencies
dependencies": {

```

"body-parser": "^1.18.3",
"express": "^4.16.4",
"express-handlebars": "^3.0.2",
"mongoose": "^5.4.18",
"nodemon": "^1.18.10"
}

```

in db.js, we are connecting to MongoDB using mongoose




```

1  const mongoose = require('mongoose');
2
3  mongoose.connect('mongodb://localhost:27017/EmployeeDB', { useNewUrlParser: true }, (err) => {
4    if (!err) { console.log('MongoDB Connection Succeeded.') }
5    else { console.log('Error in DB connection : ' + err) }
6  });
7
8  require('./employee.model');

```

in employeemodel.js, we are defining schema for the database in MongoDB required for our application



```

1  const mongoose = require('mongoose');
2
3  var employeeSchema = new mongoose.Schema({
4    custid: {
5      type: String,
6      required: 'This field is required.'
7    },
8    fullName: {
9      type: String,
10     required: 'This field is required.'
11   },
12   email: {
13     type: String
14   }
15 });
16
17 // Custom validation for email
18 employeeSchema.path('email').validate((val) => {
19   emailRegex = /^[^<>()\\[\]\/\.,;:\s@"]+(\.[^<>()\\[\]\/\.,;:\s@"]+)*|"(.)"$/;
20   return emailRegex.test(val);
21 }, 'Invalid e-mail. ');
22
23 mongoose.model('Employee', employeeSchema);
24

```

please find the pages for add/update and listing customers

```
db.js × employeeController.js × server.js × mainLayout.hbs × addOrEdit.hbs × list.hbs × employee.model.js × package.json ×
1 <h3>{{viewTitle}}</h3>
2
3 <form action="/employee" method="POST" autocomplete="off">
4   <input type="hidden" name="_id" value="{{employee._id}}">
5
6   <div class="form-group">
7     <label>Customer ID</label>
8     <input type="text" class="form-control" name="custid" placeholder="Custid" value="{{employee.custid}}">
9     <div class="text-danger">
10      {{employee.custidError}}</div>
11   </div>
12   <div class="form-group">
13     <label>Customer Name</label>
14     <input type="text" class="form-control" name="fullName" placeholder="Full Name" value="{{employee.fullName}}">
15     <div class="text-danger">
16      {{employee.fullNameError}}</div>
17   </div>
18   <div class="form-group">
19     <label>Customer Email</label>
20     <input type="text" class="form-control" name="email" placeholder="Email" value="{{employee.email}}">
21     <div class="text-danger">
22      {{employee.emailError}}</div>
23   </div>
24   <div class="form-group">
25     <button type="submit" class="btn btn-info"><i class="fa fa-database"></i> Submit</button>
26     <a class="btn btn-secondary" href="/employee/list"><i class="fa fa-list-alt"></i> View All</a>
27   </div>
28 </form>
```



In employeecontroller.js, we have written the functions for adding, updating, deleting the customer and also validations for handling errors

Please find the screenshots of our application running in the browser

localhost:3001/employee/5c8486cb7cc68a0db8f2abb5

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Update Customer

Customer ID

Customer Name

Customer Email

[Submit](#) [View All](#)

localhost:3001/employee/list

Apps Tata Consultancy S... YouTube Live Cricket Stream ... Cric 1 - Live Cricket ... CSS551 - ASE 2019 ... LMS | UMKC Online Introduction to Had...

[+ Create New](#)

Customer List

Customer ID	Customer Name	Customer Email	
1	admin1	admin_1@gmail.com	Edit Delete

Thank you