

Statement Purpose:

To familiarize the students with

- ▣ Installation of MongoDB Compass, MongoDB Atlas
- ▣ Sign Up Application (React, Node.js, Express and MongoDB)

### **MongoDB**

- Mongo shell
- Create database in mongodb
- Create collections in database
- Open mongo shell and write
  - show dbs
- write use mydatabase
- write show collections to check how many collections are in the database
- Create Collection using mongo shell
- Syntax
  - `db.createCollection("empDetails")`  
`{ "ok" : 1 }`
  - If collection is created
  - Then write  

```
db.customers.insertOne(
  ... {
  ... First_Name:"Junaid",
  ... Last_Name:"Nazar",
  ... email:"junaid_it63@yahoo.com"
  ... })
```
- Open **VS code**
- Write **mkdir send** in terminal or create folder in workspace
- **cd send**
- `npm create-react-app signupfront`
- **cd signupfront**
- create folder in "**signupfront**" by writing commane **mkdir signupbackend** in terminal

- cd **signupbackend**
- create **package.json** in signupbackend folder using command
  - npm init -y
- install
  - npm install express nodemon mongoose dotenv cors

1. create server.js file in “**signupbackend**”
  - a. first, write this in “**server.js**” file

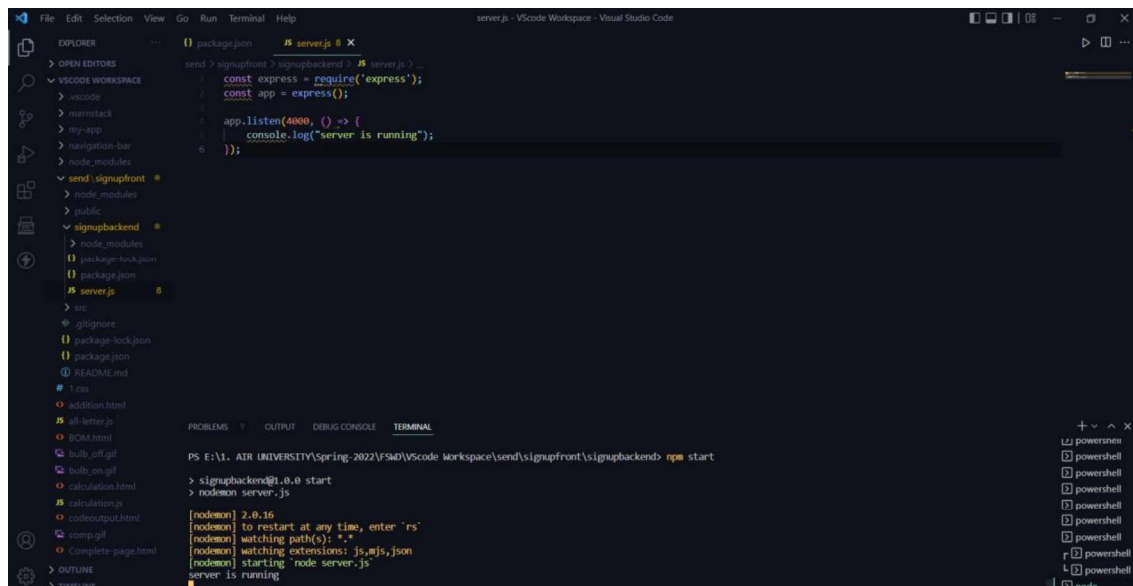
```
const express = require('express');
const app = express();

app.listen(4000, () => {
  console.log("server is running");
})
```

- b. Then open **package.json** file and add

```
"scripts": {
  "start": "nodemon server.js"
```

- c. Write npm start



- d. Next, create a file named “**routes.js**” in signupbackend (Responsible for Routing the request)
- e. In routes.js

```
const express = require('express');
const router = express.Router();
```

```
router.post('/signup', (request, response) => {  
  response.send('send');  
});
```

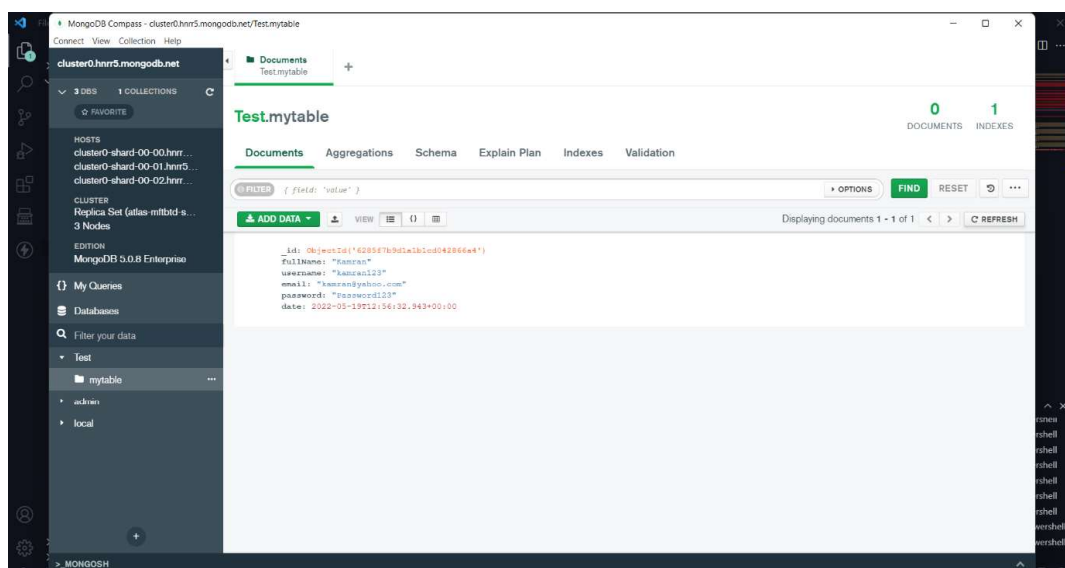
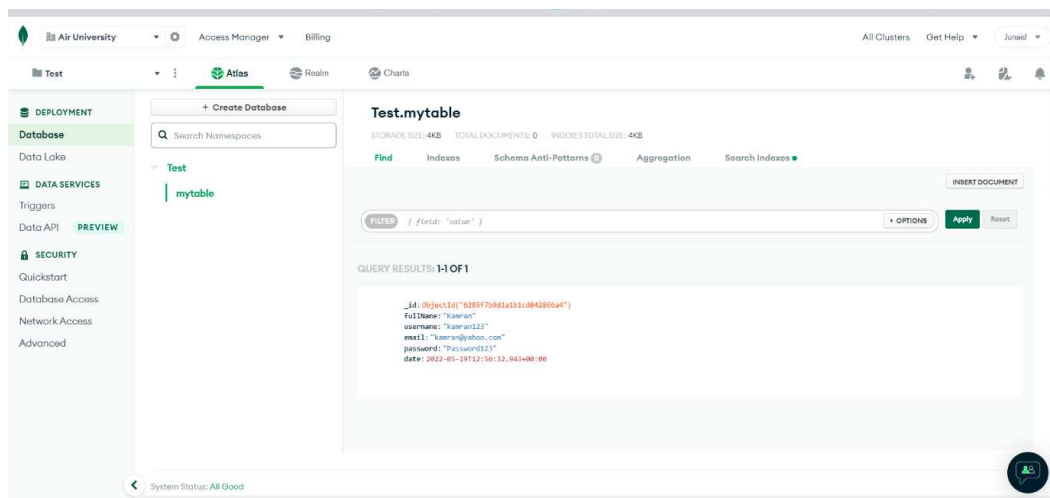
- f. Now creating the schema
- g. Create a folder named “**models**” and file named “**SignUpModels.js**”
- h. In **SignUpModels.js** file

```
const mongoose = require('mongoose');  
  
const signUpTemplate = new mongoose.Schema({  
  fullName:{  
    type: String;  
    required: true  
  },  
  username: {  
    type: String,  
    required: true  
  },  
  email:{  
    type: String,  
    required: true  
  },  
  password:{  
    type: String,  
    required: true  
  },  
  date:{  
    type: Date,  
    default: Date.now  
  }  
});  
  
module.exports=module.exports.model('mytable', signUpTemplate);
```

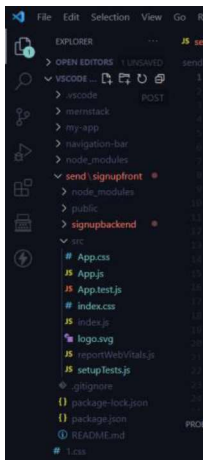
- i. install **env**
- j. npm install **dotenv**
- k. then add in **server.js**

```
const dotenv = require('dotenv');  
  
dotenv.config = ();
```

- l. create a file **.env**
- m. Install extension named “React Client”



n. Open **src** folder and delete selected files



- o. Remove all stuff from index.js and add

```
import react from "react";
import ReactDOM from "react-dom";
import App from './App';

ReactDOM.render(<App/>, document.getElementById('root'));
```

- p. Create new file in src folder named “App.jsx”
- q. Install bootstrap in signinfrontend
- r. npm install bootstrap
- s. code App.jsx

```
import React, {Component} from 'react';
import "bootstrap/dist/css/bootstrap.min.css";

class App extends Component {
  constructor()
  {
    super()
    this.state = {
      fullName:"",
      username:"",
      email:"",
      password:""
    }
  }

  changeFullName(event){
    this.setState({
      fullName:event.target.value
    })
  }
  changeUsername(event){
    this.setState({
```

```

        username:event.target.value
    })
}
changeEmail(event){
    this.setState({
        email:event.target.value
    })
}
changePassword(event){
    this.setState({
        password:event.target.value
    })
}

render() {
    return (
        <div>
            <div className="container">
                <div className="form-div">
                    <form>
                        <input type="text"
                            placeholder="Full Name"
                            onChange={this.changeFullName}
                            value={this.state.fullName}
                            className='form-control form-group' />

                        <input type="text"
                            placeholder="User Name"
                            onChange={this.changeUsername}
                            value={this.state.changeUsername}
                            className='form-control form-group' />

                        <input type="text"
                            placeholder="Email"
                            onChange={this.changeEmail}
                            value={this.state.changeEmail}
                            className='form-control form-group' />

                        <input type="text"
                            placeholder="Password"
                            onChange={this.changePassword}
                            value={this.state.changePassword}
                            className='form-control form-group' />

                        <input type='submit' className='btn btn-danger btn-block'
value='Submit'></input>
                    </form>
                </div>
            </div>
        </div>
    )
}

```

```

    </div>

    </div>
  );
}
}

export default App;

```

---

Full Name
User Name
Email
Password
Submit

---

**t. Bind data by writing**

```

class App extends Component {
  constructor()
  {
    super()
    this.state = {
      fullName:"",
      username:"",
      email:"",
      password:"
    }
    this.changeFullName = this.changeFullName.bind(this);
    this.changeUsername = this.changeUsername.bind(this);
    this.changeEmail = this.changeEmail.bind(this);
    this.changePassword = this.changePassword.bind(this);
  }
}

```

**u. Install axios**

```

import React, {Component} from 'react';
import "bootstrap/dist/css/bootstrap.min.css";
import axios from 'axios';

class App extends Component {
  constructor()
  {
    super()
    this.state = {
      fullName:"",
      username:"",
      email:"",
      password:""
    }
    this.changeFullName = this.changeFullName.bind(this);
    this.changeUsername = this.changeUsername.bind(this);
    this.changeEmail = this.changeEmail.bind(this);
    this.changePassword = this.changePassword.bind(this);
  }

  changeFullName(event){
    this.setState({
      fullName:event.target.value
    })
  }
  changeUsername(event){
    this.setState({
      username:event.target.value
    })
  }
  changeEmail(event){
    this.setState({
      email:event.target.value
    })
  }
  changePassword(event){
    this.setState({
      password:event.target.value
    })
  }
  onSubmit(event){
    event.preventDefault();

    const registered = {
      fullName:this.state.fullName,
      username:this.state.username,
      email:this.state.email,
      password:this.state.password
    }
  }
}

```



```

    axios.post('http://localhost:4000/routes/signup', registered).then(response =>
console.log(response.data));
    this.setState({
      fullName:"",
      username:"",
      email:"",
      password:""
    })
  }

  render() {
    return (
      <div>
        <div className="container">
          <div className="form-div">
            <form onSubmit={this.onSubmit}>
              <input type="text"
                placeholder="Full Name"
                onChange={this.changeFullName}
                value={this.state.fullName}
                className='form-control form-group' />

              <input type="text"
                placeholder="User Name"
                onChange={this.changeUsername}
                value={this.state.changeUsername}
                className='form-control form-group' />

              <input type="text"
                placeholder="Email"
                onChange={this.changeEmail}
                value={this.state.changeEmail}
                className='form-control form-group' />

              <input type="text"
                placeholder="Password"
                onChange={this.changePassword}
                value={this.state.changePassword}
                className='form-control form-group' />

              <input type='submit' className='btn btn-danger btn-block'
value='Submit'></input>
            </form>
          </div>
        </div>
      </div>

    </div>

```

```
);  
}  
}  
  
export default App;
```

junaid
junaid122
junaid@yahoo.com
Junaid122

Submit

