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Semester : 7th
Subject : 705

Assignment 3

Start Date : 25 october 2024

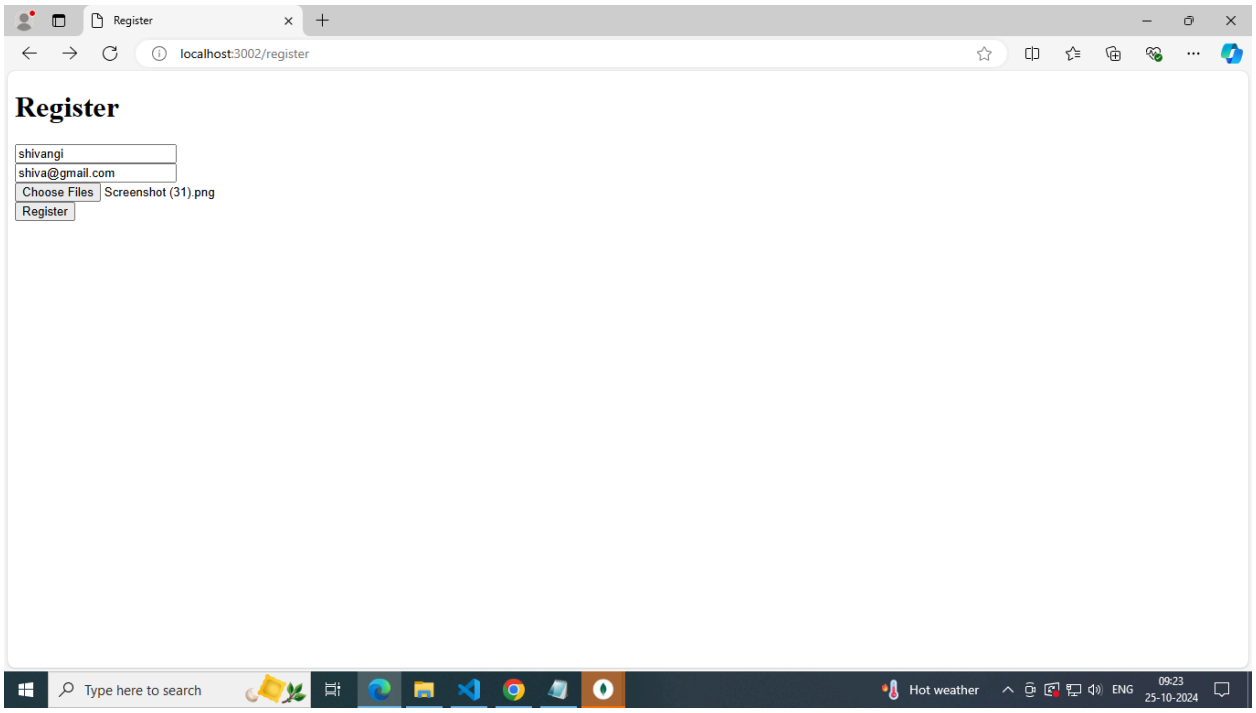
Q:1

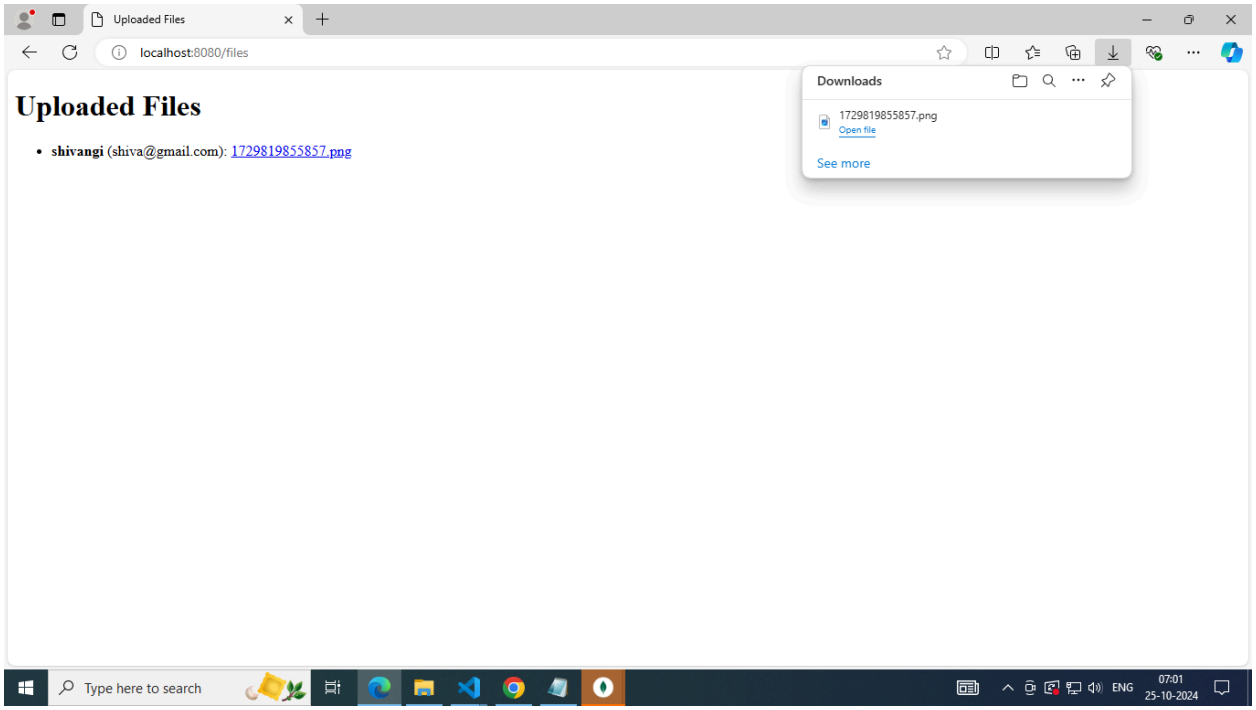
```
//app.js

const express = require('express');
const mongoose = require('mongoose');
const multer = require('multer');
const path = require('path');

const app = express();
const PORT = process.env.PORT || 8080;

// Connect to MongoDB (replace <DB_URI> with your MongoDB connection string)
//mongoose.connect('<DB_URI>', { useNewUrlParser: true, useUnifiedTopology: true });
//mongoose.connect('mongodb://localhost:27017/upload', { useNewUrlParser: true,
useUnifiedTopology: true });

//const mongoose = require('mongoose');

// Update this with your actual connection string
const mongoURI = 'mongodb://localhost:27017/upload';

mongoose.connect(mongoURI, { useNewUrlParser: true, useUnifiedTopology: true })
    .then(() => console.log('MongoDB connected!'))
    .catch(err => console.error('MongoDB connection error:', err));

// Middleware
app.use(express.urlencoded({ extended: true }));
app.use('/uploads', express.static('uploads')); // Serve uploaded files
app.set('view engine', 'ejs');

app.listen(PORT, () => {
    console.log(`Server is running on http://localhost:${PORT}`);
});
const storage = multer.diskStorage({
```

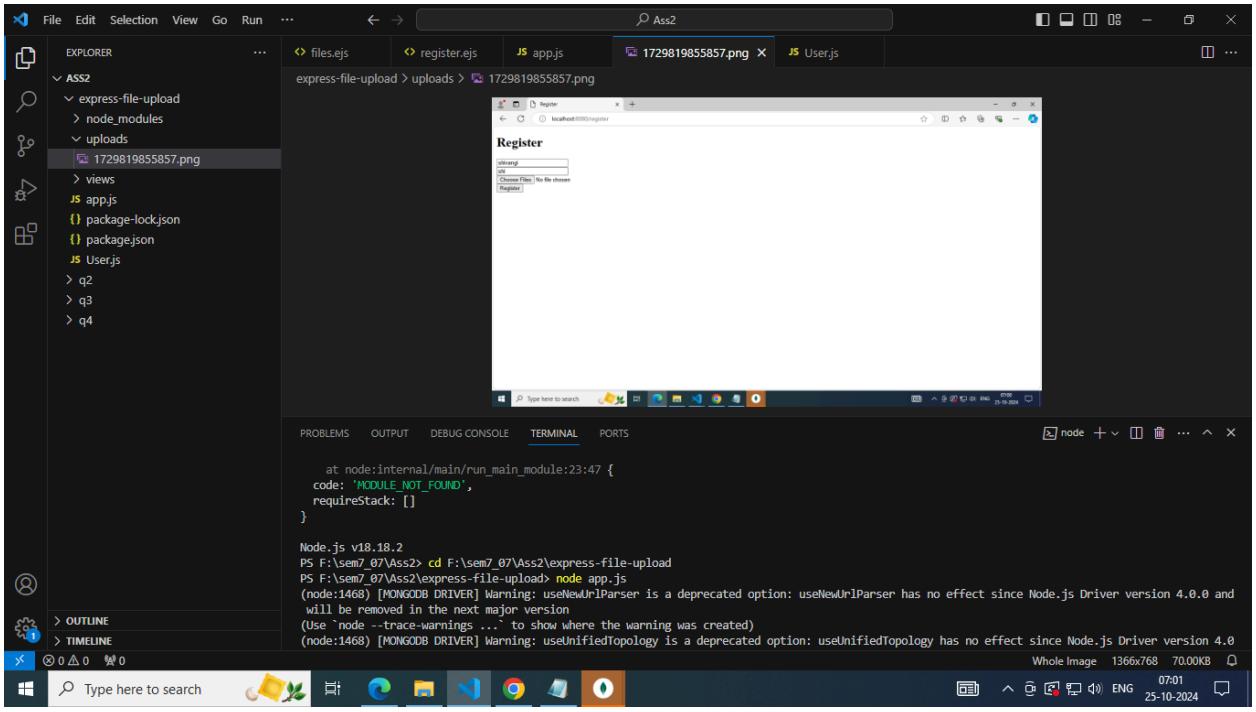
```
    destination: (req, file, cb) => {
        cb(null, 'uploads/');
    },
    filename: (req, file, cb) => {
        cb(null, Date.now() + path.extname(file.originalname)); // Appending extension
    }
});

const upload = multer({
    storage: storage,
    limits: { fileSize: 1 * 1024 * 1024 }, // Limit file size to 1MB
    fileFilter: (req, file, cb) => {
        const filetypes = /jpeg|jpg|png|gif|pdf/;
        const mimetype = filetypes.test(file.mimetype);
        const extname = filetypes.test(path.extname(file.originalname).toLowerCase());
        if (mimetype && extname) {
            return cb(null, true);
        }
        cb("Error: File type not supported");
    }
});
const User = require('./User');

// Render registration form
app.get('/register', (req, res) => {
    res.render('register');
});

// Handle user registration
app.post('/register', upload.array('files'), async (req, res) => {
    const { username, email } = req.body;
    const files = req.files.map(file => file.filename);

    const user = new User({ username, email, files });
    await user.save();
    res.redirect('/files');
});

// List uploaded files
app.get('/files', async (req, res) => {
    const users = await User.find();
    res.render('files', { users });
});
```

```
// Download file
app.get('/files/download/:filename', (req, res) => {
    const file = path.join(__dirname, 'uploads', req.params.filename);
    res.download(file);
});

//user.js

const mongoose = require('mongoose');


const userSchema = new mongoose.Schema({
    username: { type: String, required: true },
    email: { type: String, required: true },
    files: [{ type: String }]
});

module.exports = mongoose.model('User', userSchema);

//register.ejs

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Register</title>
</head>
<body>
    <h1>Register</h1>
    <form action="/register" method="POST" enctype="multipart/form-data">
        <input type="text" name="username" placeholder="Username" required><br>
        <input type="email" name="email" placeholder="Email" required><br>
        <input type="file" name="files" multiple required><br>
        <button type="submit">Register</button>
    </form>
</body>
</html>

//files.ejs

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
```

```
    <title>Uploaded Files</title>
</head>
<body>
    <h1>Uploaded Files</h1>
    <ul>
        <% users.forEach(user => { %>
            <li><strong><%= user.username %></strong> (<%= user.email %>):
                <% user.files.forEach(file => { %>
                    <a href="/files/download/<%= file %>"><%= file %></a>
                <% }) %>
            </li>
        <% }) %>
    </ul>
</body>
</html>
```




Uploaded Files
localhost:8080/files
Downloads
1729819855857.png
Open file
See more
Uploaded Files
shivangi (shiva@gmail.com): 1729819855857.png
Type here to search
ENG
07:01
25-10-2024


File Edit Selection View Go Run
Ass2
EXPLORER
ASS2
express-file-upload
node_modules
uploads
1729819855857.png
views
app.js
package-lock.json
package.json
User.js
q2
q3
q4
files.ejs
register.ejs
app.js
1729819855857.png
User.js
express-file-upload > uploads > 1729819855857.png
Register
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
at node:internal/main/run_main_module:23:47 {
code: 'MODULE_NOT_FOUND',
requireStack: []
}
Node.js v18.18.2
PS F:\sem7_07\Ass2> cd F:\sem7_07\Ass2\express-file-upload
PS F:\sem7_07\Ass2\express-file-upload> node app.js
(node:1468) [MONGODB DRIVER] Warning: useNewUrlParser is a deprecated option: useNewUrlParser has no effect since Node.js Driver version 4.0.0 and will be removed in the next major version
(Use `node --trace-warnings ...` to show where the warning was created)
(node:1468) [MONGODB DRIVER] Warning: useUnifiedTopology is a deprecated option: useUnifiedTopology has no effect since Node.js Driver version 4.0
OUTLINE
TIMELINE
Whole Image 1366x768 70.00KB
Type here to search
ENG
07:01
25-10-2024

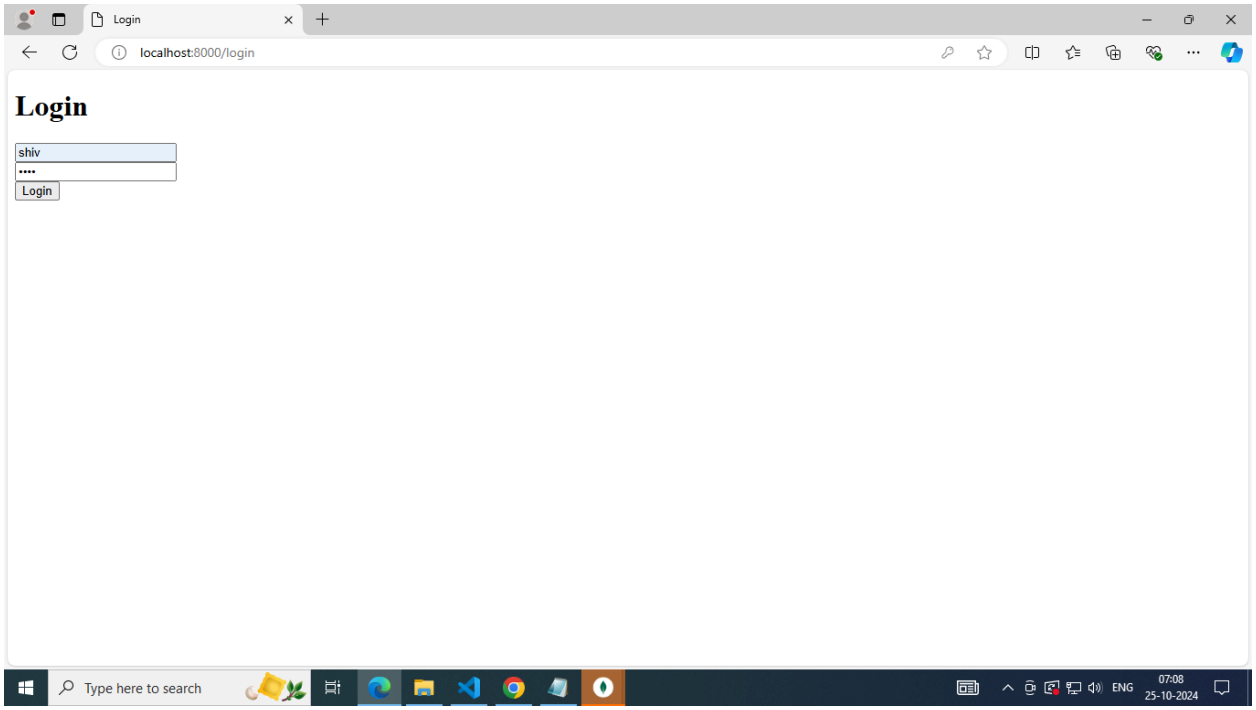
Q:2

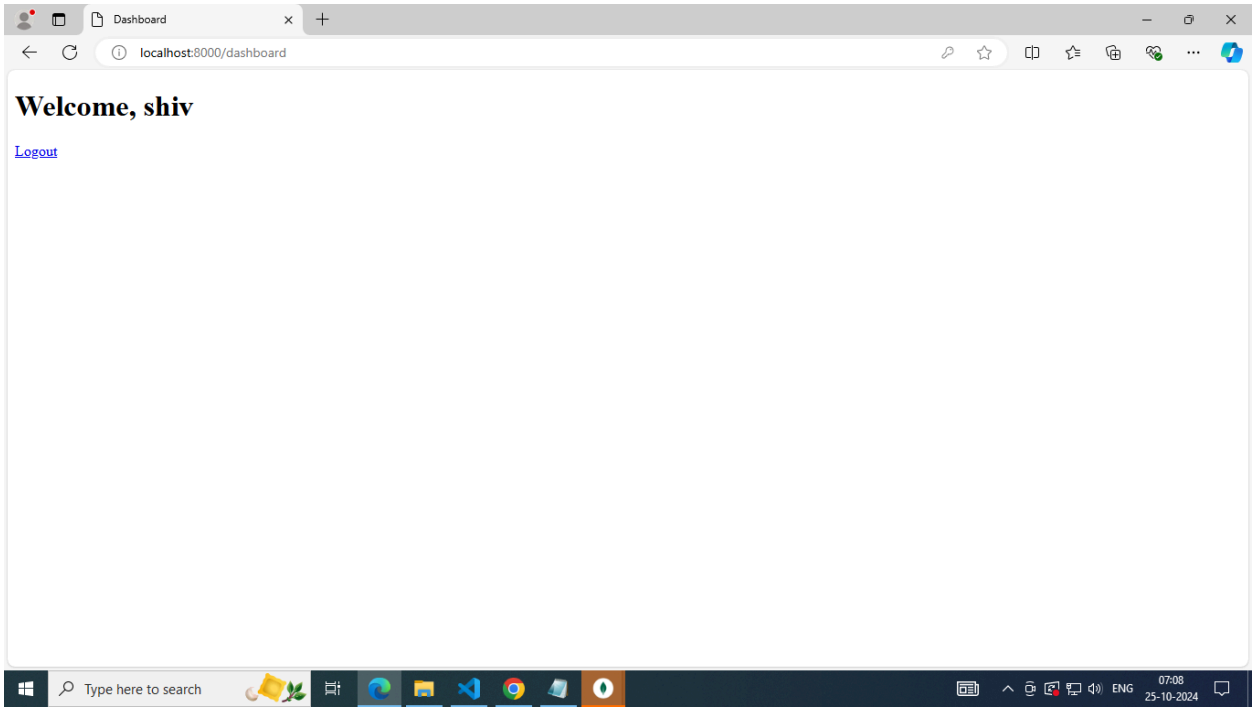
//app.js

```
const express = require('express');
const session = require('express-session');
const flash = require('connect-flash');
const bodyParser = require('body-parser');
const path = require('path');

const app = express();
const PORT = process.env.PORT || 8000;

// Simple in-memory user store for demonstration purposes
const users = [{ username: 'shiv', password: 'shiv' }];

// Setup session
app.use(session({
    secret: 'secret_key', // Replace with a strong secret in production
    resave: false,
    saveUninitialized: true,
    cookie: { maxAge: 60000 } // 1 minute
}));

// Flash messages middleware
app.use(flash());

// Middleware
app.use(bodyParser.urlencoded({ extended: true }));
app.set('view engine', 'ejs');
app.use(express.static(path.join(__dirname, 'public'))); // Serve static files

// Render login form
app.get('/login', (req, res) => {
    res.render('login', { messages: req.flash('error') });
});

// Handle login
app.post('/login', (req, res) => {
    const { username, password } = req.body;

    // Check user credentials
    const user = users.find(u => u.username === username && u.password === password);
```

```
    if (user) {
        req.session.user = user;
        req.flash('success', 'Logged in successfully!');
        return res.redirect('/dashboard');
    }

    req.flash('error', 'Invalid username or password');
    res.redirect('/login');
});

// Render dashboard
app.get('/dashboard', (req, res) => {
    if (!req.session.user) {
        req.flash('error', 'Please log in first');
        return res.redirect('/login');
    }
    res.render('dashboard', { user: req.session.user });
});

// Logout
// Logout
app.get('/logout', (req, res) => {
    req.flash('success', 'Logged out successfully'); // Set flash message before destroying session
    req.session.destroy(err => {
        if (err) {
            return res.redirect('/dashboard'); // Handle session destruction error
        }
        res.redirect('/login'); // Redirect to login after session is destroyed
    });
});

app.listen(PORT, () => {
    console.log(`Server is running on http://localhost:${PORT}`);
});

//login.ejs

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Login</title>
</head>
<body>
```

```
    <h1>Login</h1>
    <% if (messages.length) { %>
        <ul>
            <% messages.forEach(msg => { %>
                <li><%= msg %></li>
            <% }) %>
        </ul>
    <% } %>
    <form action="/login" method="POST">
        <input type="text" name="username" placeholder="Username" required><br>
        <input type="password" name="password" placeholder="Password" required><br>
        <button type="submit">Login</button>
    </form>
</body>
</html>

//dashboard.ejs

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Dashboard</title>
</head>
<body>
    <h1>Welcome, <%= user.username %></h1>
    <a href="/logout">Logout</a>
</body>
</html>
```


Login
localhost:8000/login
Login
shiv
Login
Type here to search
ENG
07:08
25-10-2024


Dashboard
localhost:8000/dashboard
Welcome, shiv
Logout
Type here to search
ENG
07:08
25-10-2024

Q:3

```
//server.js

const express = require('express');
const session = require('express-session');
const RedisStore = require('connect-redis').default; // Import Redis store
const flash = require('connect-flash');
const bodyParser = require('body-parser');
const redis = require('redis');
const path = require('path');

const app = express();
const PORT = process.env.PORT || 3001;


// Configure Redis client
// const redisClient = redis.createClient();
const redisClient = redis.createClient({
    host: '127.0.0.1', // Use IPv4
    port: 6379 // Default Redis port
});

redisClient.on('error', (err) => console.log('Redis Client Error', err));

// Simple in-memory user store for demonstration purposes
const users = [{ username: 'shiv', password: 'shiv' }];

// Setup session with Redis store
app.use(session({
    store: new RedisStore({ client: redisClient }),
    secret: 'secret_key', // Replace with a strong secret in production
    resave: false,
    saveUninitialized: false,
    cookie: { maxAge: 60000 } // 1 minute
}));

// Flash messages middleware
app.use(flash());

// Middleware
app.use(bodyParser.urlencoded({ extended: true }));
app.set('view engine', 'ejs');
app.use(express.static(path.join(__dirname, 'public'))); // Serve static files
```

```
// Render login form
app.get('/login', (req, res) => {
    res.render('login', { messages: req.flash('error') });
});

// Handle login
app.post('/login', (req, res) => {
    const { username, password } = req.body;

    // Check user credentials
    const user = users.find(u => u.username === username && u.password === password);
    if (user) {
        req.session.user = user;
        req.flash('success', 'Logged in successfully!');
        return res.redirect('/dashboard');
    }

    req.flash('error', 'Invalid username or password');
    res.redirect('/login');
});

// Render dashboard
app.get('/dashboard', (req, res) => {
    if (!req.session.user) {
        req.flash('error', 'Please log in first');
        return res.redirect('/login');
    }
    res.render('dashboard', { user: req.session.user });
});

// Logout
app.get('/logout', (req, res) => {
    req.flash('success', 'Logged out successfully');
    req.session.destroy(err => {
        if (err) {
            return res.redirect('/dashboard');
        }
        res.redirect('/login');
    });
});

// Start the server
app.listen(PORT, () => {
```

```
    console.log(`Server is running on http://localhost:${PORT}`);
});

// Connect to Redis
(async () => {
    try {
        await redisClient.connect();
        console.log('Connected to Redis');
    } catch (err) {
        console.error('Redis Client Error', err);
    }
})();

//login.ejs

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Login</title>
</head>
<body>
    <h1>Login</h1>
    <% if (messages.length) { %>
        <ul>
            <% messages.forEach(msg => { %>
                <li><%= msg %></li>
            <% }) %>
        </ul>
    <% } %>
    <form action="/login" method="POST">
        <input type="text" name="username" placeholder="Username" required><br>
        <input type="password" name="password" placeholder="Password" required><br>
        <button type="submit">Login</button>
    </form>
</body>
</html>

//dashboard.ejs

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
```

```
    <title>Login</title>
</head>
<body>
    <h1>Login</h1>
    <% if (messages.length) { %>
        <ul>
            <% messages.forEach(msg => { %>
                <li><%= msg %></li>
            <% }) %>
        </ul>
    <% } %>
    <form action="/login" method="POST">
        <input type="text" name="username" placeholder="Username" required><br>
        <input type="password" name="password" placeholder="Password" required><br>
        <button type="submit">Login</button>
    </form>
</body>
</html>
```

Q:4

//server.js

```
const express = require('express');
const mongoose = require('mongoose');
const jwt = require('jsonwebtoken');
const bcrypt = require('bcryptjs');
const path = require('path');
const session = require('express-session');
const methodOverride = require('method-override');
const app = express();
const PORT = process.env.PORT || 3001;

// Middleware
app.use(express.json());
app.use(express.urlencoded({ extended: true }));
app.use(methodOverride('_method')); // For PUT and DELETE methods
app.set('view engine', 'ejs');

// Set views directory
app.set('views', path.join(__dirname, 'views'));
app.set('view engine', 'ejs');

// Session setup
```

```
app.use(session({
    secret: 'your_secret_key',
    resave: false,
    saveUninitialized: true,
}));

// Connect to MongoDB
mongoose.connect('mongodb://localhost:27017/studentDB', { useNewUrlParser: true,
useUnifiedTopology: true })
    .then(() => console.log('MongoDB connected'))
    .catch(err => console.error(err));

// Student Schema
const studentSchema = new mongoose.Schema({
    name: String,
    email: { type: String, unique: true },
    password: String
});

const Student = mongoose.model('Student', studentSchema);

// Middleware for JWT verification
const authenticateJWT = (req, res, next) => {
    const token = req.session.token;
    if (!token) return res.redirect('/'); // Redirect if not logged in

    jwt.verify(token, 'your_jwt_secret', (err, user) => {
        if (err) return res.redirect('/'); // Redirect if token is invalid
        req.user = user;
        next();
    });
};

// Routes
app.get('/', (req, res) => {
    res.render('index');
});
```

```
// Register
app.post('/register', async (req, res) => {
    const hashedPassword = await bcrypt.hash(req.body.password, 10);
    const newStudent = new Student({
        name: req.body.name,
        email: req.body.email,
        password: hashedPassword
    });

    try {
        await newStudent.save();
        res.status(201).send('Student registered');
    } catch (error) {
        res.status(400).send('Error registering student');
    }
});

// Login
app.post('/login', async (req, res) => {
    const student = await Student.findOne({ email: req.body.email });
    if (student && (await bcrypt.compare(req.body.password, student.password))) {
        const token = jwt.sign({ email: student.email }, 'your_jwt_secret', { expiresIn: '1h' });
        req.session.token = token;
        res.redirect('/students'); // Redirect to the students page
    } else {
        res.status(403).send('Invalid credentials');
    }
});

// Logout
app.post('/logout', (req, res) => {
    req.session.destroy(err => {
        if (err) return res.status(500).send('Could not log out');
        res.redirect('/');
    });
});

// View students
app.get('/students', authenticateJWT, async (req, res) => {
    try {
        const students = await Student.find();
        res.render('student', { students });  // Renders the student.ejs view
    } catch (error) {
        res.status(500).send('Error retrieving students');
```

```
    }
});
// Add student form
app.get('/students/new', authenticateJWT, (req, res) => {
    res.render('insert');
});

// Handle adding a new student
app.post('/students', authenticateJWT, async (req, res) => {
    const hashedPassword = await bcrypt.hash(req.body.password, 10);
    const newStudent = new Student({
        name: req.body.name,
        email: req.body.email,
        password: hashedPassword
    });

    try {
        await newStudent.save();
        res.redirect('/students');
    } catch (error) {
        res.status(400).send('Error creating student');
    }
});

// Update student form
app.get('/students/:id/edit', authenticateJWT, async (req, res) => {
    try {
        const student = await Student.findById(req.params.id);
        res.render('update', { student });
    } catch (error) {
        res.status(400).send('Error retrieving student');
    }
});

// Handle updating a student
app.put('/students/:id', authenticateJWT, async (req, res) => {
    const updateData = {
        name: req.body.name,
        email: req.body.email,
    };

    if (req.body.password) {
        updateData.password = await bcrypt.hash(req.body.password, 10);
    }
```

```
    try {
        await Student.findByIdAndUpdate(req.params.id, updateData);
        res.redirect('/students');
    } catch (error) {
        res.status(400).send('Error updating student');
    }
});

// Handle deleting a student
app.delete('/students/:id', authenticateJWT, async (req, res) => {
    try {
        await Student.findByIdAndDelete(req.params.id);
        res.redirect('/students');
    } catch (error) {
        res.status(400).send('Error deleting student');
    }
});

// Start server
app.listen(PORT, () => {
    console.log(`Server running on http://localhost:${PORT}`);
});
```

//index.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Student Management System</title>
</head>
<body>
    <h1>Welcome to the Student Management System</h1>

    <!-- Login Form -->
    <h2>Login</h2>
    <form action="/login" method="POST">
        <label for="email">Email:</label>
        <input type="email" name="email" required>
        <label for="password">Password:</label>
        <input type="password" name="password" required>
        <button type="submit">Login</button>
    </form>
```

```
    <!-- Registration Form -->
    <h2>Register</h2>
    <form action="/register" method="POST">
        <label for="name">Name:</label>
        <input type="text" name="name" required>
        <label for="email">Email:</label>
        <input type="email" name="email" required>
        <label for="password">Password:</label>
        <input type="password" name="password" required>
        <button type="submit">Register</button>
    </form>
</body>
</html>
```

//students.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Student List</title>
</head>
<body>
    <h1>Student List</h1>
    <table border="1">
        <thead>
            <tr>
                <th>Name</th>
                <th>Email</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            <% students.forEach(student => { %>
                <tr>
                    <td><%= student.name %></td>
                    <td><%= student.email %></td>
                    <td>
                        <!-- Edit button -->
                        <a href="/students/<%= student._id %>/edit">Edit</a>

                        <!-- Delete button -->
```

```
                    <form action="/students/<%= student._id %>?_method=DELETE"
method="POST" style="display:inline;">
                        <button type="submit">Delete</button>
                    </form>
                </td>
            </tr>
        <% }) %>
    </tbody>
  </table>

  <!-- Add New Student Button -->
  <a href="/students/new">Add New Student</a>

  <!-- Logout Button -->
  <form action="/logout" method="POST">
    <button type="submit">Logout</button>
  </form>
</body>
</html>
```

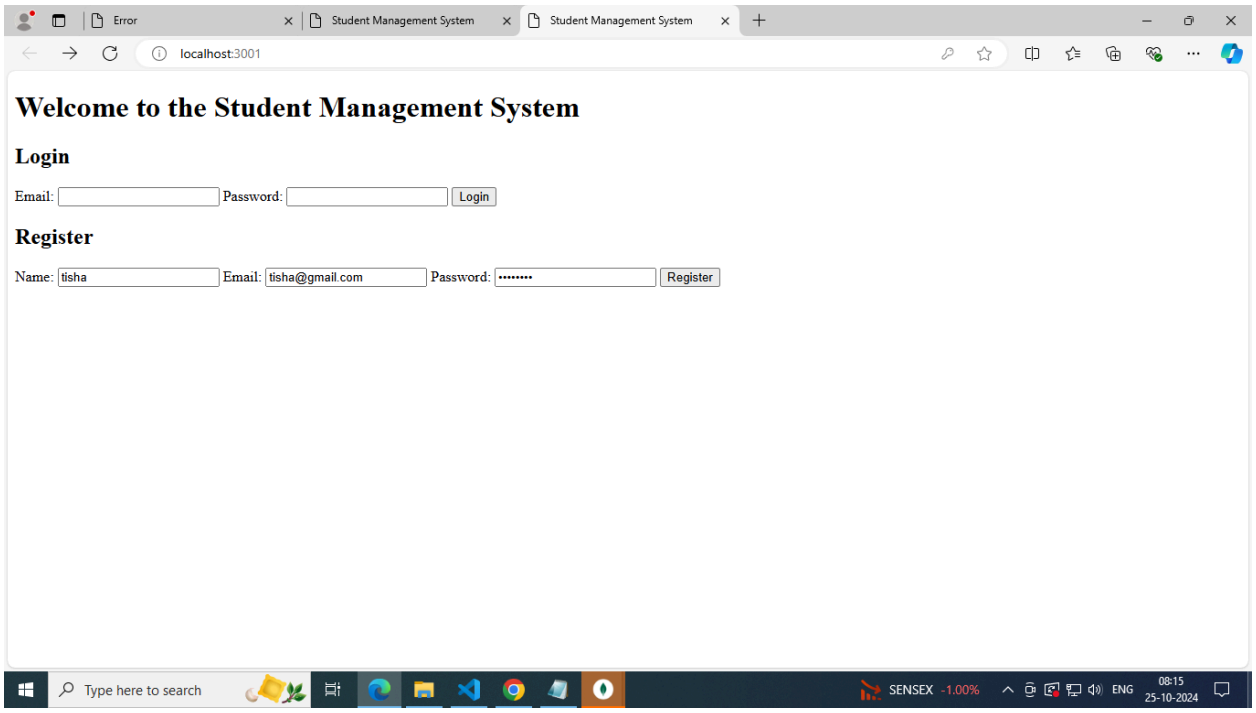
//insert.ejs

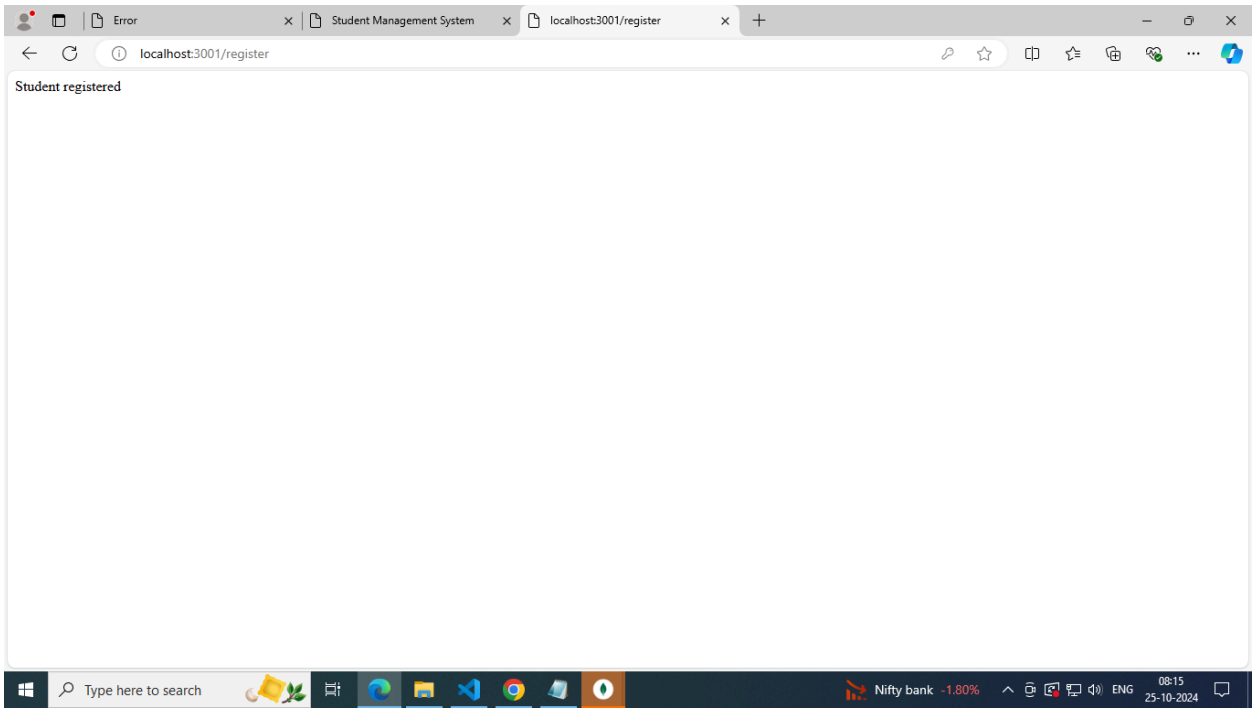
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Add New Student</title>
</head>
<body>
  <h1>Add New Student</h1>
  <form action="/students" method="POST">
    <label for="name">Name:</label>
    <input type="text" name="name" required>
    <label for="email">Email:</label>
    <input type="email" name="email" required>
    <label for="password">Password:</label>
    <input type="password" name="password" required>
    <button type="submit">Add Student</button>
  </form>
  <a href="/students">Back to Students List</a>
</body>
</html>
```

//update.ejs

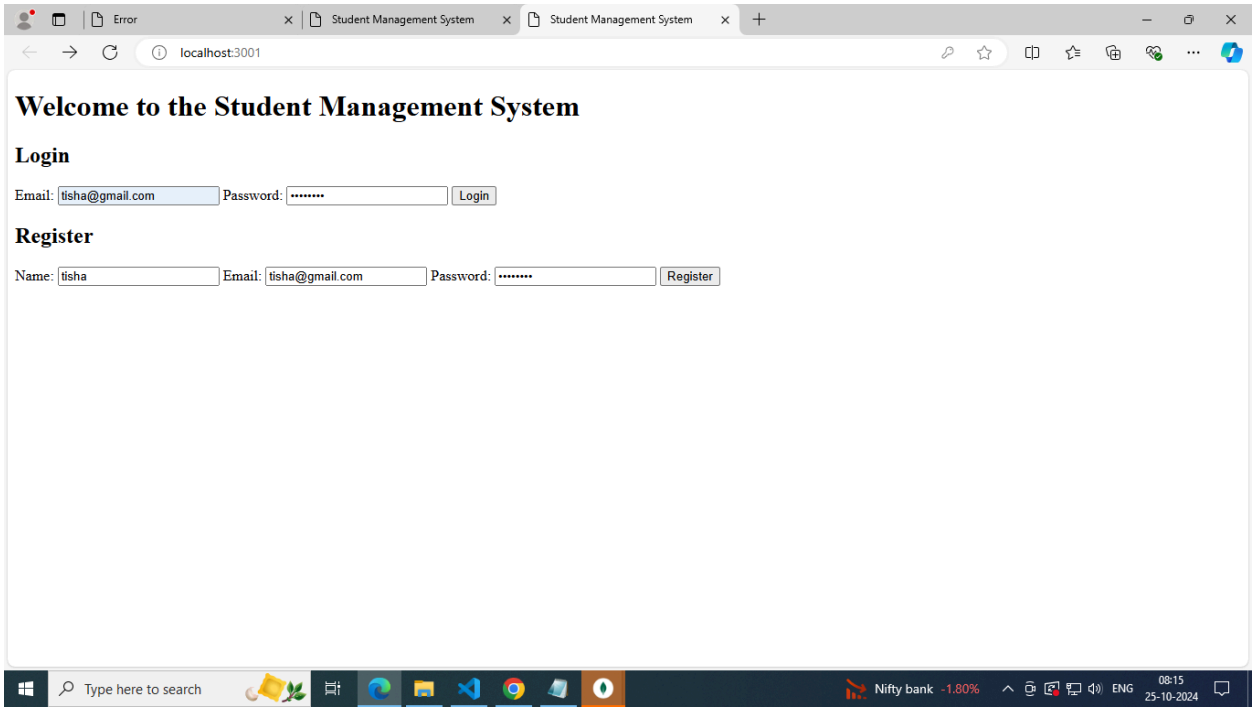
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Add New Student</title>
</head>
<body>
    <h1>Add New Student</h1>
    <form action="/students" method="POST">
        <label for="name">Name:</label>
        <input type="text" name="name" required>
        <label for="email">Email:</label>
        <input type="email" name="email" required>
        <label for="password">Password:</label>
        <input type="password" name="password" required>
        <button type="submit">Add Student</button>
    </form>
    <a href="/students">Back to Students List</a>
</body>
</html>
```

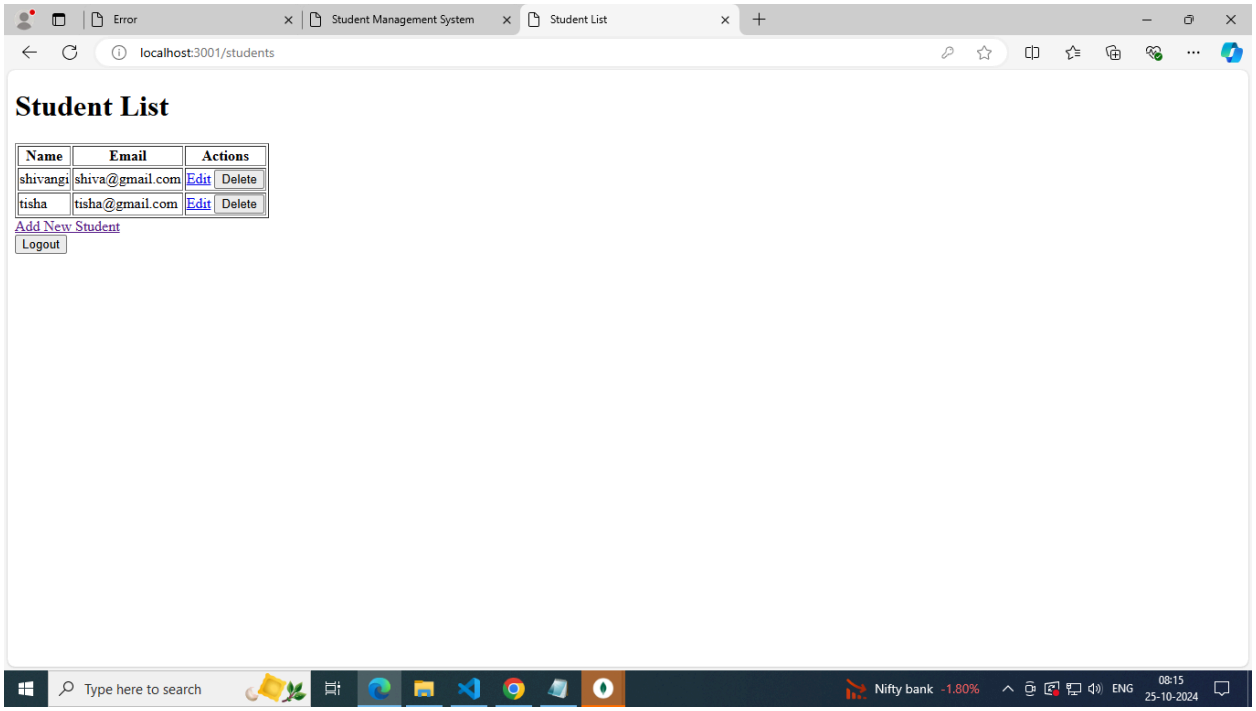
//registration



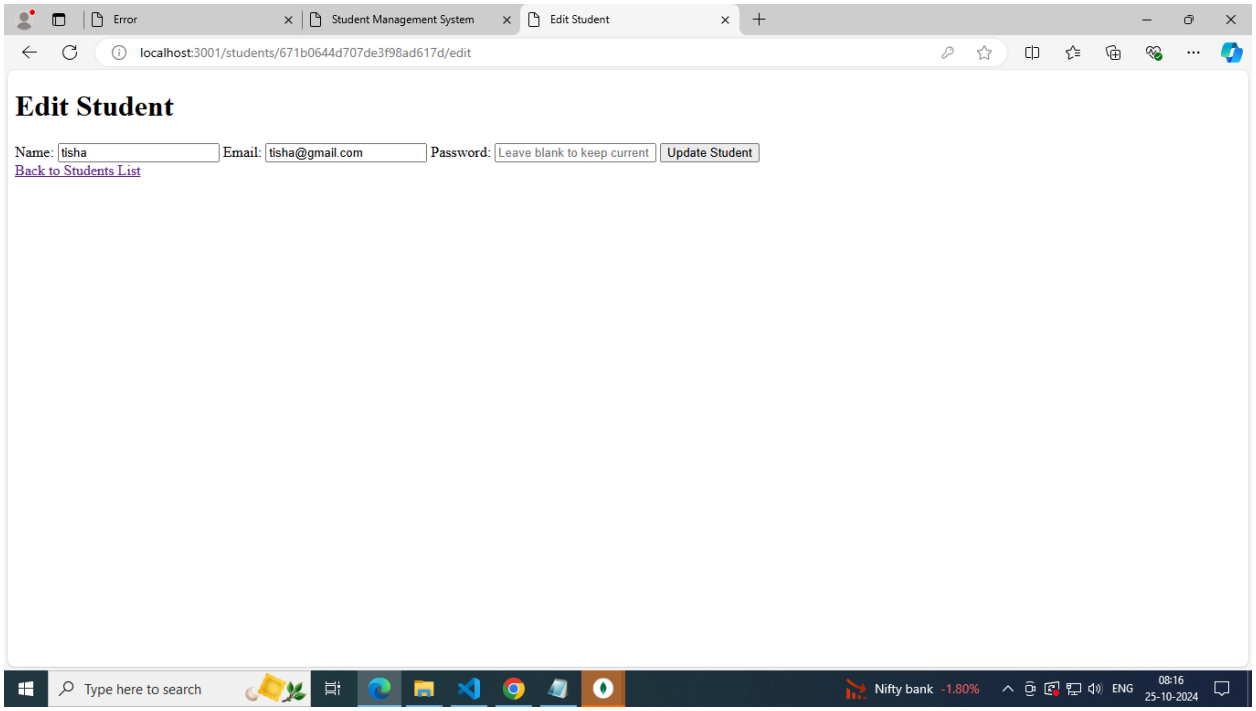

Error
Student Management System
localhost:3001/register
localhost:3001/register
Student registered
Type here to search
Nifty bank -1.80%
ENG
08:15
25-10-2024

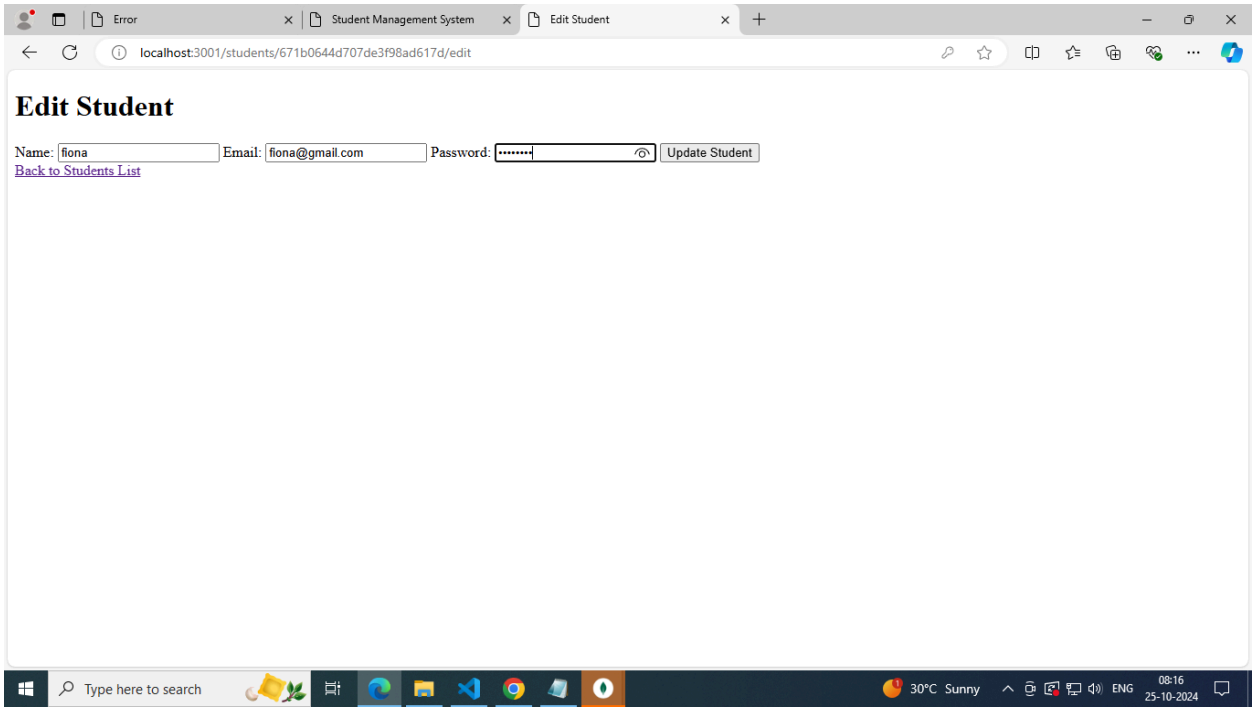
//login

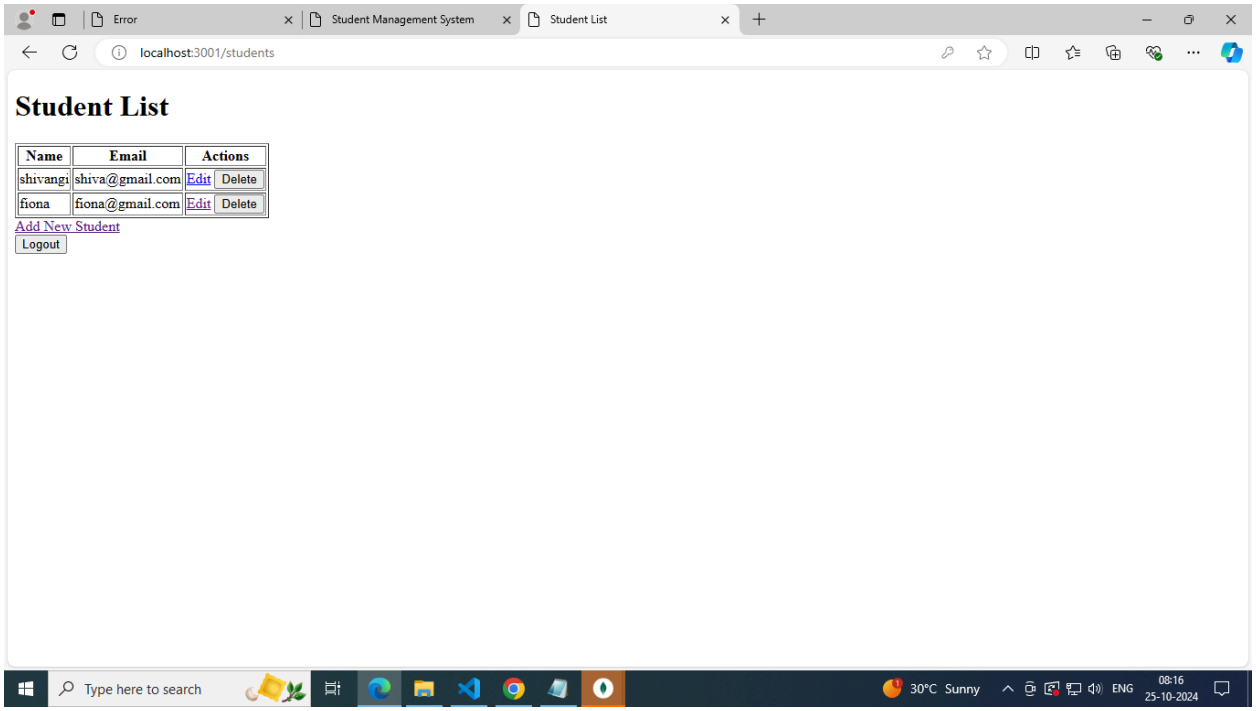

Error
Student Management System
Student Management System
localhost:3001
Welcome to the Student Management System
Login
Email: tisha@gmail.com Password: ••••••••
Login
Register
Name: tisha Email: tisha@gmail.com Password: ••••••••
Register
Type here to search
Nifty bank -1.80%
ENG
08:15
25-10-2024


Error
Student Management System
Student List
localhost:3001/students
Student List
Name
Email
Actions
shivangi
shiva@gmail.com
Edit
Delete
tisha
tisha@gmail.com
Edit
Delete
Add New Student
Logout
Type here to search
Nifty bank -1.80%
ENG
08:15
25-10-2024

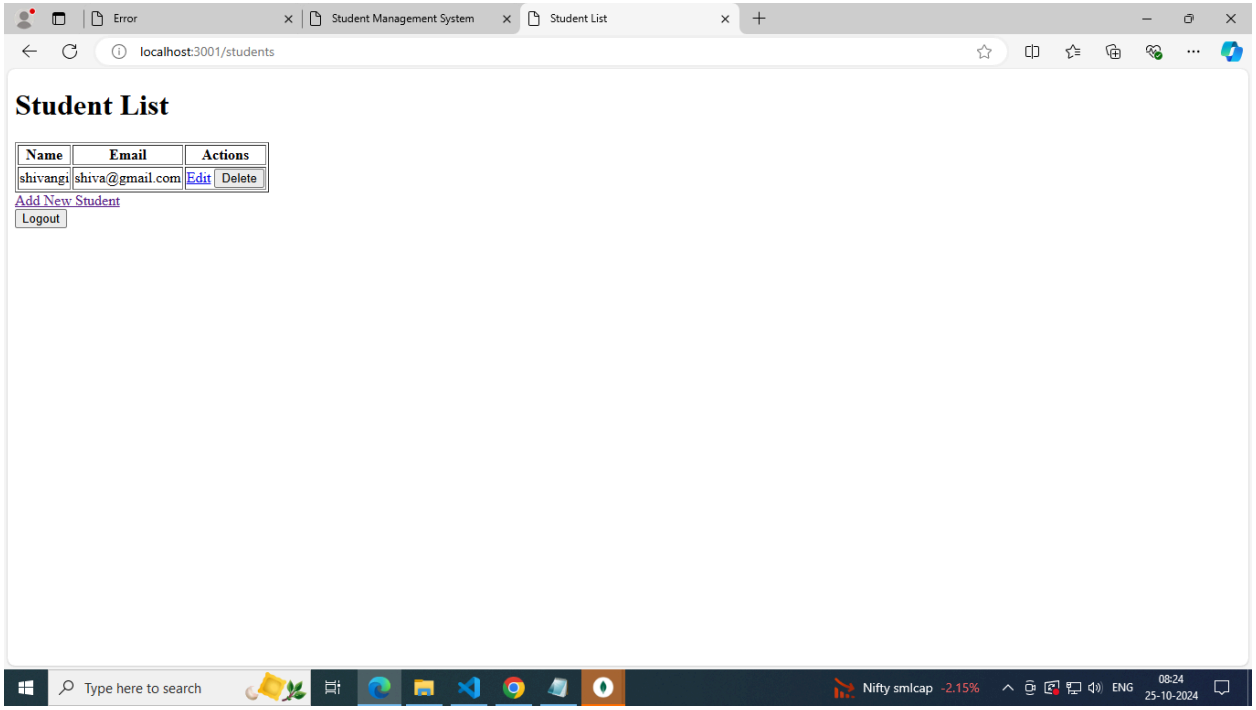
Update


Error
Student Management System
Edit Student
localhost:3001/students/671b0644d707de3f98ad617d/edit
Edit Student
Name:
tisha
Email:
tisha@gmail.com
Password:
Leave blank to keep current
Update Student
Back to Students List
Type here to search
Nifty bank -1.80%
ENG
08:16
25-10-2024


Error
Student Management System
Edit Student
localhost:3001/students/671b0644d707de3f98ad617d/edit
Edit Student
Name: fiona
Email: fiona@gmail.com
Password:
Update Student
Back to Students List
Type here to search
30°C Sunny
ENG
08:16
25-10-2024


Error
Student Management System
Student List
localhost:3001/students
Student List
Name
Email
Actions
shivangi
shiva@gmail.com
Edit
Delete
fiona
fiona@gmail.com
Edit
Delete
Add New Student
Logout
Type here to search
30°C Sunny
ENG
08:16
25-10-2024

//Delete



Q:5

//server.js

```
const express = require('express');
const mongoose = require('mongoose');
const jwt = require('jsonwebtoken');
const bcrypt = require('bcryptjs');
const cors = require('cors');
const path = require('path');
const session = require('express-session');
const methodOverride = require('method-override');
const app = express();
const PORT = process.env.PORT || 8001;

// Middleware
app.use(express.json());
app.use(express.urlencoded({ extended: true }));
app.use(methodOverride('_method')); // For PUT and DELETE methods
app.use(cors());
app.set('view engine', 'ejs');
```

```
// Set views directory
app.set('views', path.join(__dirname, 'views'));
app.use(express.static(path.join(__dirname, 'public')));

// Session setup
app.use(session({
    secret: 'your_secret_key',
    resave: false,
    saveUninitialized: true,
}));

// Connect to MongoDB
mongoose.connect('mongodb://localhost:27017/employeeDB', { useNewUrlParser: true,
useUnifiedTopology: true })
    .then(() => console.log('MongoDB connected'))
    .catch(err => console.error(err));

// Employee Schema
const employeeSchema = new mongoose.Schema({
    name: String,
    email: { type: String, unique: true },
    password: String
});

const Employee = mongoose.model('Employee', employeeSchema);

// Middleware for JWT verification
const authenticateJWT = (req, res, next) => {
    const token = req.session.token;
    if (!token) return res.redirect('/login'); // Redirect to login if not logged in

    jwt.verify(token, 'your_jwt_secret', (err, user) => {
        if (err) return res.redirect('/login'); // Redirect if token is invalid
        req.user = user;
        next();
    });
};

// Routes

// Registration Page
app.get('/register', (req, res) => {
    res.render('register');
```

```
});

// Register new employee
app.post('/register', async (req, res) => {
    const hashedPassword = await bcrypt.hash(req.body.password, 10);
    const newEmployee = new Employee({
        name: req.body.name,
        email: req.body.email,
        password: hashedPassword
    });

    try {
        await newEmployee.save();
        res.redirect('/login'); // Redirect to login page after registration
    } catch (error) {
        res.status(400).send('Error registering employee');
    }
});

// Login Page
app.get('/login', (req, res) => {
    res.render('login');
});

// Login employee
app.post('/login', async (req, res) => {
    const employee = await Employee.findOne({ email: req.body.email });
    if (employee && (await bcrypt.compare(req.body.password, employee.password))) {
        const token = jwt.sign({ email: employee.email }, 'your_jwt_secret', { expiresIn: '1h' });
        req.session.token = token;
        res.redirect('/employees'); // Redirect to the employee list page after login
    } else {
        res.status(403).send('Invalid credentials');
    }
});

// Logout
app.post('/logout', (req, res) => {
    req.session.destroy(err => {
        if (err) return res.status(500).send('Could not log out');
        res.redirect('/login');
    });
});
```

```
// View all employees (Protected route)
app.get('/employees', authenticateJWT, async (req, res) => {
    try {
        const employees = await Employee.find();
        res.render('employeeList', { employees });
    } catch (error) {
        res.status(500).send('Error retrieving employees');
    }
});

// Add employee form (Protected route)
app.get('/employees/new', authenticateJWT, (req, res) => {
    res.render('addEmployee');
});

// Handle adding a new employee
app.post('/employees', authenticateJWT, async (req, res) => {
    const hashedPassword = await bcrypt.hash(req.body.password, 10);
    const newEmployee = new Employee({
        name: req.body.name,
        email: req.body.email,
        password: hashedPassword
    });

    try {
        await newEmployee.save();
        res.redirect('/employees');
    } catch (error) {
        res.status(400).send('Error creating employee');
    }
});

// Update employee form (Protected route)
app.get('/employees/:id/edit', authenticateJWT, async (req, res) => {
    try {
        const employee = await Employee.findById(req.params.id);
        res.render('editEmployee', { employee });
    } catch (error) {
        res.status(400).send('Error retrieving employee');
    }
});

// Handle updating an employee
app.put('/employees/:id', authenticateJWT, async (req, res) => {
```

```
    const updateData = {
        name: req.body.name,
        email: req.body.email,
    };

    if (req.body.password) {
        updateData.password = await bcrypt.hash(req.body.password, 10);
    }

    try {
        await Employee.findByIdAndUpdate(req.params.id, updateData);
        res.redirect('/employees');
    } catch (error) {
        res.status(400).send('Error updating employee');
    }
});

// Handle deleting an employee
app.delete('/employees/:id', authenticateJWT, async (req, res) => {
    try {
        await Employee.findByIdAndDelete(req.params.id);
        res.redirect('/employees');
    } catch (error) {
        res.status(400).send('Error deleting employee');
    }
});

// Start server
app.listen(PORT, () => {
    console.log(`Server running on http://localhost:${PORT}`);
});
```

//register.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Register</title>
    <link rel="stylesheet" href="/styles.css">
</head>
<body>
    <div class="container">
```

```
        <h1>Register</h1>
        <form action="/register" method="POST">
            <div>
                <label for="name">Name:</label>
                <input type="text" id="name" name="name" required>
            </div>
            <div>
                <label for="email">Email:</label>
                <input type="email" id="email" name="email" required>
            </div>
            <div>
                <label for="password">Password:</label>
                <input type="password" id="password" name="password" required>
            </div>
            <button type="submit">Register</button>
        </form>
        <p>Already have an account? <a href="/login">Login here</a></p>
    </div>
    <script src="/script.js"></script>
</body>
</html>
```

// login.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Login</title>
    <link rel="stylesheet" href="/styles.css">
</head>
<body>
    <div class="container">
        <h1>Login</h1>
        <form action="/login" method="POST">
            <div>
                <label for="email">Email:</label>
                <input type="email" id="email" name="email" required>
            </div>
            <div>
                <label for="password">Password:</label>
                <input type="password" id="password" name="password" required>
            </div>
```

```
            <button type="submit">Login</button>
        </form>
        <p>Don't have an account? <a href="/register">Register here</a></p>
    </div>
    <script src="/script.js"></script>
</body>
</html>
```

//employeeList.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Employee List</title>
    <link rel="stylesheet" href="/styles.css"> <!-- Link to your CSS file -->
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script> <!-- Optional jQuery -->
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 20px;
        }
        h1 {
            text-align: center;
        }
        table {
            width: 100%;
            border-collapse: collapse;
            margin-top: 20px;
        }
        table, th, td {
            border: 1px solid #ddd;
        }
        th, td {
            padding: 8px;
            text-align: left;
        }
        th {
            background-color: #f2f2f2;
        }
        tr:hover {
            background-color: #f1f1f1;
        }
```

```
        .action-buttons {
            display: flex;
            justify-content: space-between;
            margin: 10px 0;
        }
        a {
            text-decoration: none;
            color: white;
            padding: 10px 15px;
            border-radius: 5px;
        }
        .add-button {
            background-color: #4CAF50; /* Green */
        }
        .logout-button {
            background-color: #f44336; /* Red */
        }
        .edit-button {
            color: #007BFF; /* Blue color for the Edit link */
            text-decoration: underline; /* Underline for better visibility */
        }
        .edit-button:hover {
            color: #0056b3; /* Darker blue on hover */
        }
        .delete-button {
            color: red; /* Red for delete button */
            border: none;
            background: none;
            cursor: pointer;
        }
    </style>
</head>
<body>
    <h1>Employee List</h1>

    <div class="action-buttons">
        <a href="/employees/new" class="add-button">Add Employee</a>
        <form action="/logout" method="POST">
            <button type="submit" class="logout-button">Logout</button>
        </form>
    </div>

    <table>
        <thead>
```

```
            <tr>
                <th>Name</th>
                <th>Email</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            <% employees.forEach(employee => { %>
                <tr>
                    <td><%= employee.name %></td>
                    <td><%= employee.email %></td>
                    <td>
                        <a href="/employees/<%= employee._id %>/edit" class="edit-button">Edit</a>
                        <form action="/employees/<%= employee._id %>?_method=DELETE"
method="POST" style="display:inline;">
                            <button type="submit" class="delete-button">Delete</button>
                        </form>
                    </td>
                </tr>
            <% }); %>
        </tbody>
    </table>
</body>
</html>
```

//addEmployee.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Add Employee</title>
    <link rel="stylesheet" href="/styles.css">
</head>
<body>
    <div class="container">
        <h1>Add New Employee</h1>
        <form action="/employees" method="POST">
            <div>
                <label for="name">Name:</label>
                <input type="text" id="name" name="name" required>
            </div>
            <div>
```

```
            <label for="email">Email:</label>
            <input type="email" id="email" name="email" required>
        </div>
        <div>
            <label for="password">Password:</label>
            <input type="password" id="password" name="password" required>
        </div>
        <button type="submit">Add Employee</button>
    </form>
    <a href="/employees" class="btn">Back to Employee List</a>
  </div>
  <script src="/script.js"></script>
</body>
</html>
```

//editEmployee.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Edit Employee</title>
  <link rel="stylesheet" href="/styles.css">
</head>
<body>
  <div class="container">
    <h1>Edit Employee</h1>
    <form action="/employees/<%= employee._id %>?_method=PUT" method="POST">
        <div>
            <label for="name">Name:</label>
            <input type="text" id="name" name="name" value="<%= employee.name %>"
required>
        </div>
        <div>
            <label for="email">Email:</label>
            <input type="email" id="email" name="email" value="<%= employee.email %>"
required>
        </div>
        <div>
            <label for="password">New Password (leave blank to keep current):</label>
            <input type="password" id="password" name="password">
        </div>
        <button type="submit">Update Employee</button>
```

```
        </form>
        <a href="/employees" class="btn">Back to Employee List</a>
    </div>
    <script src="/script.js"></script>
</body>
</html>
```

//style.css

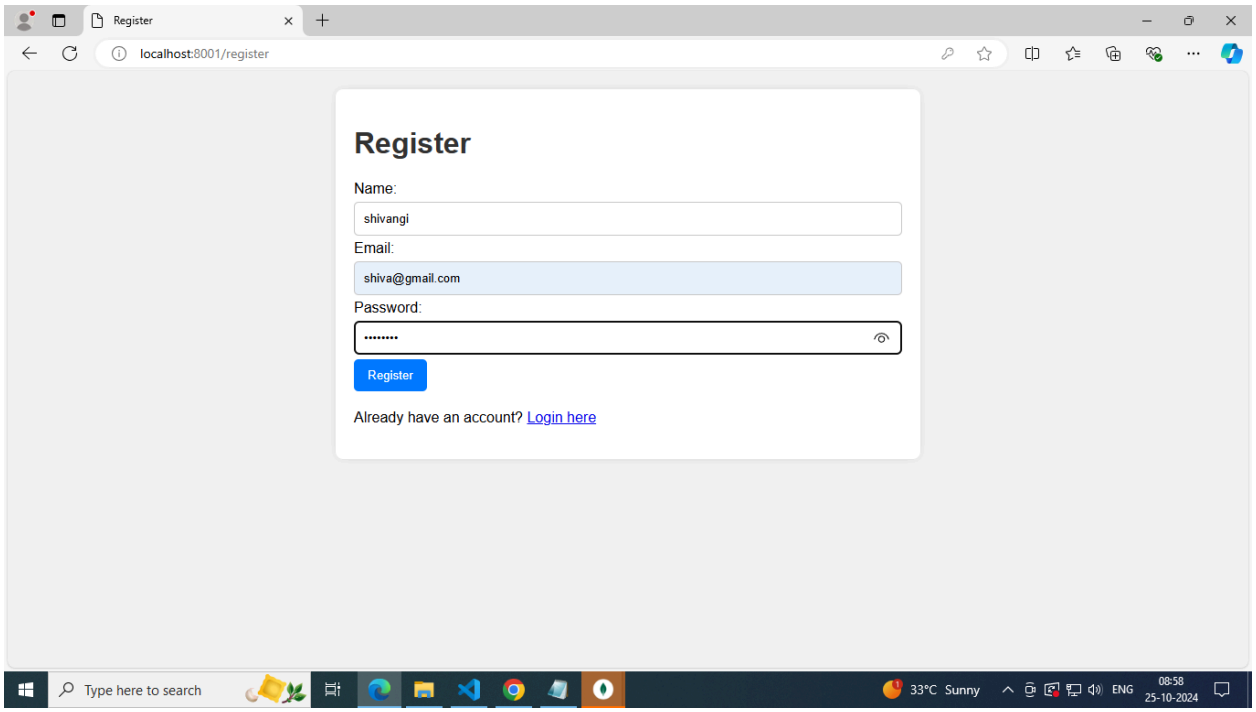
```
body {
    font-family: Arial, sans-serif;
    margin: 20px;
    background-color: #f4f4f4;
}

.container {
    max-width: 600px;
    margin: auto;
    background: white;
    padding: 20px;
    border-radius: 8px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}

h1 {
    color: #333;
}

form {
    margin-bottom: 20px;
}

input {
    margin: 5px 0;
    padding: 10px;
    width: calc(100% - 22px);
    border: 1px solid #ccc;
    border-radius: 5px;
}

button, .btn {
    padding: 10px 15px;
    background-color: #007BFF;
    color: white;
```

```
    border: none;
    border-radius: 5px;
    cursor: pointer;
}

button:hover, .btn:hover {
    background-color: #0056b3;
}

ul {
    list-style: none;
    padding: 0;
}

li {
    padding: 10px;
    border-bottom: 1px solid #ddd;
}
```

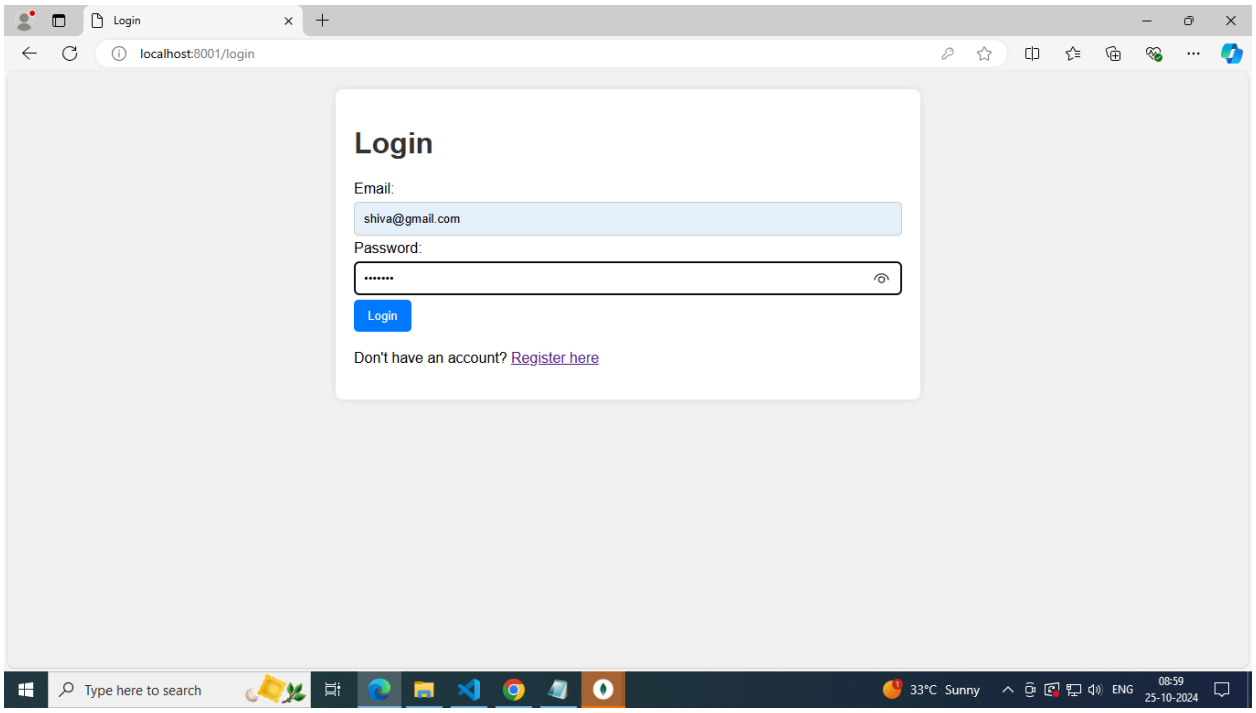
//script.js

```
// Example JavaScript code for future enhancements
$(document).ready(function() {
    // Any JavaScript or jQuery code can be placed here
    console.log("Document is ready!");
});
```

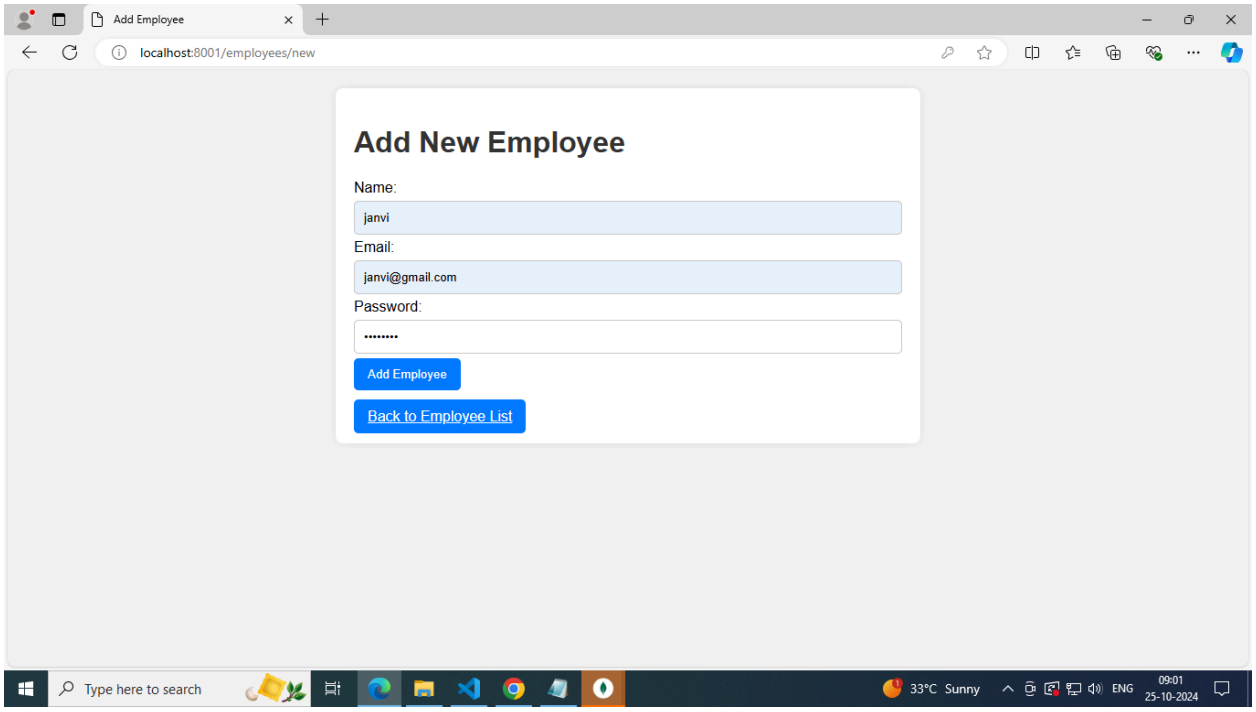
//register



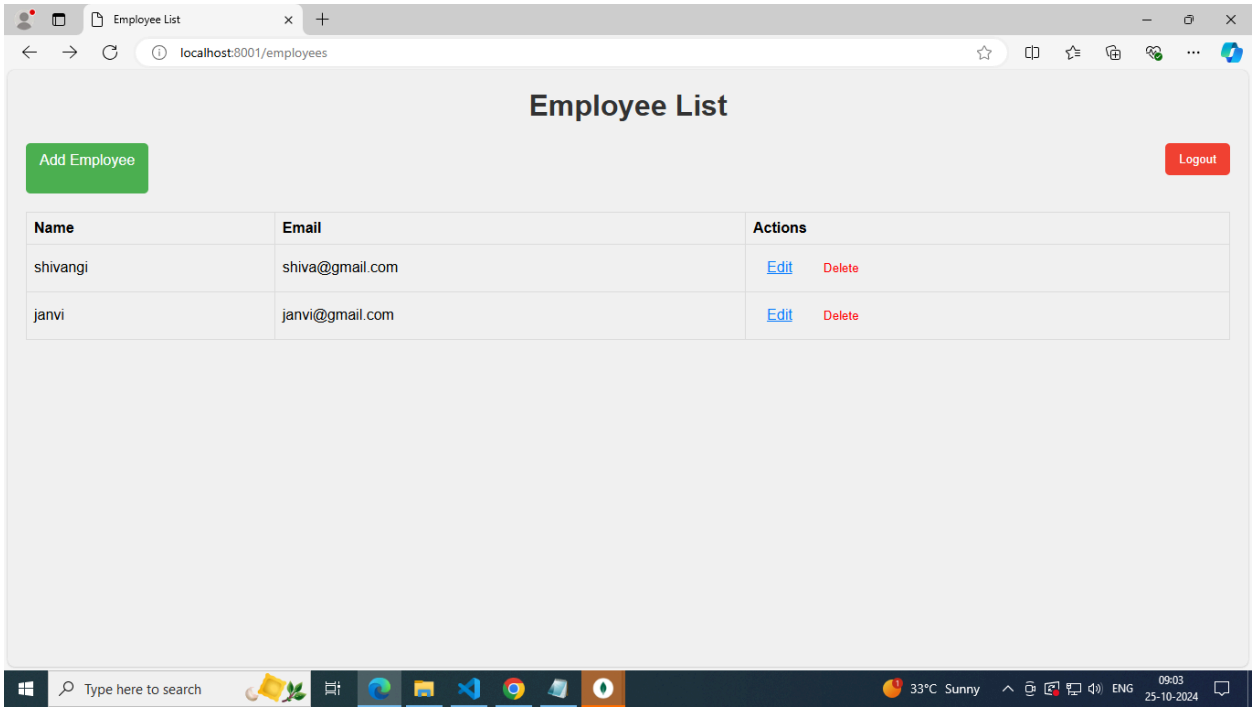
//Login



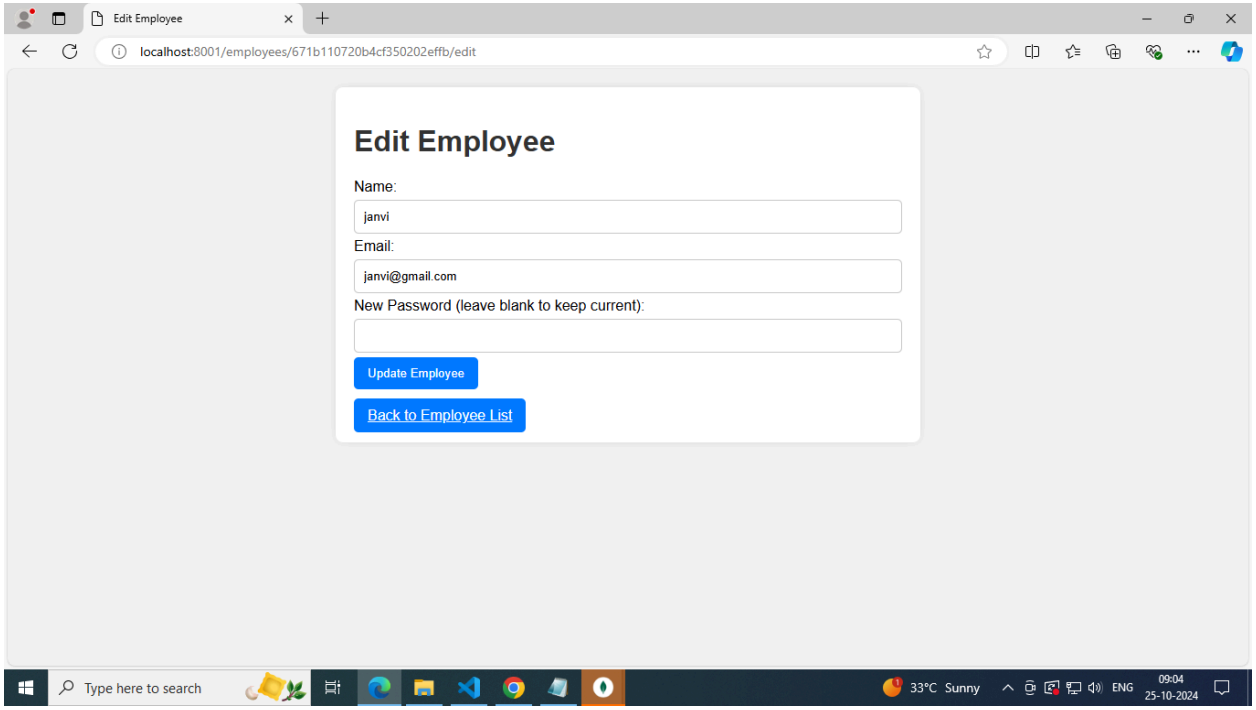
//Addemployee

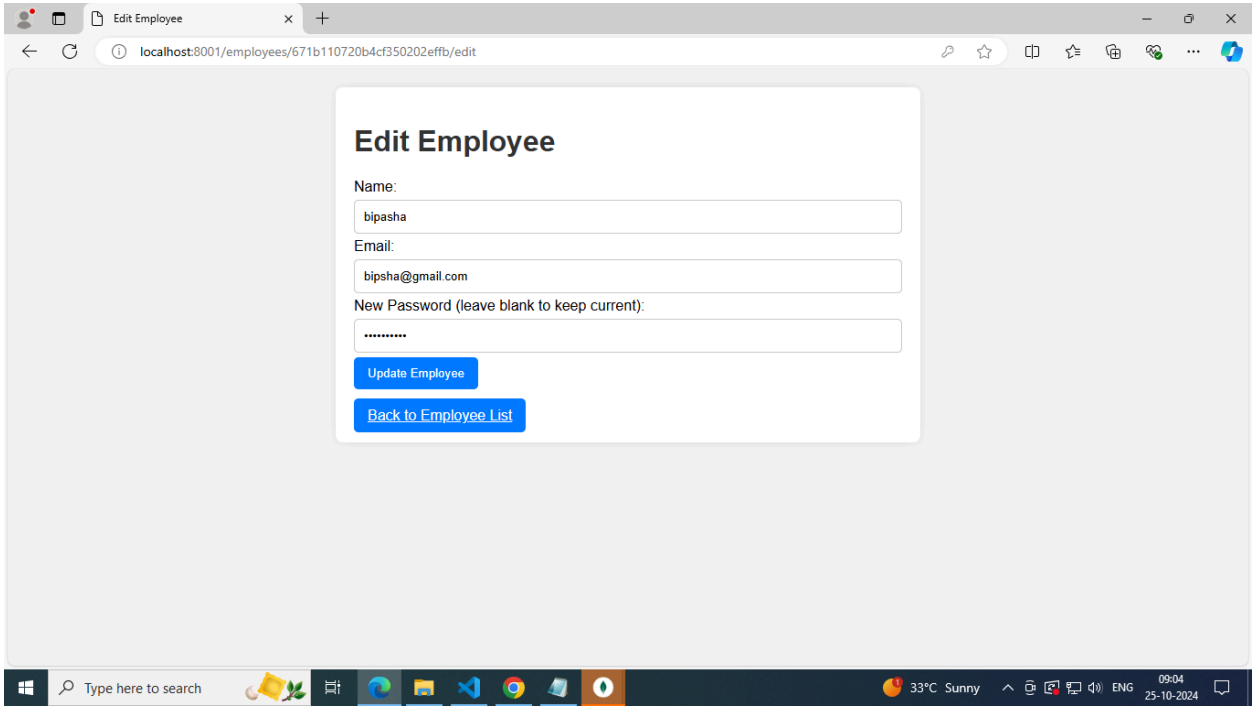


//EmployeeList



//EditEmployee





//updated data