

Cloud Computing Lab 3

Problem Statement 1

```
PROBLEMS  TERMINAL  PORTS  GITLENS  DEBUG CONSOLE  OUTPUT
PS C:\Users\somsi\cloud_computing_lab\lab3> yarn init -y
```

```
no changes added to commit (use 'git add' and/or 'git commit -a')
● PS C:\Users\somsi\cloud_computing_lab\lab3> touch index.js
○ PS C:\Users\somsi\cloud_computing_lab\lab3>
```

```
● PS C:\Users\somsi\cloud_computing_lab\lab3> yarn add express
yarn add v1.22.19
warning package.json: License should be a valid SPDX license expression
info No lockfile found.
warning cc_lab3_ps_1@1.0.0: License should be a valid SPDX license expression
[1/4] Resolving packages...
[2/4] Fetching packages...
[3/4] Linking dependencies...
[4/4] Building fresh packages...

success Saved lockfile.
warning cc_lab3_ps_1@1.0.0: License should be a valid SPDX license expression
success Saved 38 new dependencies.
```

```

PS C:\Users\somsi\cloud_computing_lab\lab3> yarn add ejs mongoose
yarn add v1.22.19
warning package.json: License should be a valid SPDX license expression
warning cc_lab3_ps_1@1.0.0: License should be a valid SPDX license expression
[1/4] Resolving packages...
[2/4] Fetching packages...
[3/4] Linking dependencies...
[4/4] Building fresh packages...

success Saved lockfile.
warning cc_lab3_ps_1@1.0.0: License should be a valid SPDX license expression
success Saved 29 new dependencies.
info Direct dependencies
├─ ejs@3.1.9
└─ mongoose@8.1.1
info All dependencies
├─ @mongodb-js/saslprep@1.1.4
├─ @types/webidl-conversions@7.0.3
├─ @types/whatwg-url@11.0.4
└─ ansi-styles@4.3.0

```

```

PS C:\Users\somsi\cloud_computing_lab\lab3> mkdir views

```

Directory: C:\Users\somsi\cloud_computing_lab\lab3

Mode	LastWriteTime	Length	Name
d----	05-02-2024 10:58		views

```

PS C:\Users\somsi\cloud_computing_lab\lab3>

```

▼ views

<> home.ejs

U

JS index.js M X

<> home.ejs U

JS index.js > app.get("/") callback

You, 1 second ago | 1 author (You)

```
1 let express = require("express");
2 let app = express();
3 app.listen(5001, () => {
4   | console.log("Up and Running on 5k+1");
5 });
6 app.get("/", (req, res) => {
7   | res.send("lab3");
8 });
9
```

You, 1 second ago • Uncommitted chan

PROBLEMS

TERMINAL

PORTS

GITLENS

DEBUG CONSOLE

OUTPUT

PS C:\Users\somsi\cloud_computing_lab\lab3> nodemon index.js

[nodemon] 3.0.2

[nodemon] to restart at any time, enter `rs`

[nodemon] watching path(s): *.*

[nodemon] watching extensions: js,mjs,cjs,json

[nodemon] starting `node index.js`

Up and Running on 5k+1

New version of nodemon available!

Current Version: 3.0.2

Latest Version: 3.0.3

```
JS index.js M    <> home.ejs U X
views > <> home.ejs > ...
3   <head>
4     <meta charset="UTF-8" />
5     <meta name="viewport" content="width=device-width, initial-scale=1.0" />
6     <title>Home</title>
7   </head>
8   <body>
9     <h1>Home Page of Cloud Computing Lab 3</h1>
10    <div>
11      <p><a href="/signup">SIGN-UP</a></p>
12      <p><a href="/login">LOGIN</a></p>
13      <p><a href="/protected">Protected-Route</a></p>
14    </div>
15  </body>
16 </html>
17
```

```
8   app.get("/", (req, res) => {
9     |   return res.render("home");
10  });
11  app.get("/signup", (req, res) => {
12    |   return res.render("signup");
13  });
14  app.get("/login", (req, res) => {
15    |   return res.render("login");
16  });
17  app.get("/protected", (req, res) => {
18    |   return res.render("protect"); You, 1 second ag
19  });
20
```

```
views > <> signup.ejs > html > body > section > div.signin > div.content > div.form > form > div.inputBox > input
66
67     <div class="signin">
68         <div class="content">
69             <h2>User Registration Form</h2>
70             <div class="form">
71                 <form action="/signup" method="post">
72                     <div class="inputBox">
73                         <input type="text" name="username" required /> <i>Username</i>
74                     </div>
75
76                     <div class="inputBox">
77                         <input
78                             type="password"
79                             id="password"
80                             name="password"
81                             required
82                         /><i>Password</i>
83                     </div>
84
85                     <div class="inputBox">
86                         <input type="text" id="firstname" name="firstname" required />
87                         <i>First Name</i>
88                     </div>
89
90                     <div class="inputBox">
91                         <input type="text" id="lastname" name="lastname" required />
92                         <i>Last Name</i>
93                     </div>
94
95                     <div class="inputBox">
96                         <input
97                             type="date"
98                             id="dateofbirth"
```

Main.css

hos4kmla6 | Untitled document - G | SomSingh23/cc-lab3 | BTP-Minor-Project/ind | CodePen - Anima | ChatGPT | Hacker Login Form | +

localhost:5001/signup

HR | practise | CF | CC | do it | MDB | Azure | Render | D | D | Redis | Q | A2OJ | LeetCode | gfg | practise | H

USER REGISTRATION FORM

Username
som

Password

First Name
som

Last Name
som

01-03-2024

Email
githubsom@gmail.com

Submit

```
7 // middlewares to parse req.body
8
9 app.use(express.json());
10 app.use(express.urlencoded({ extended: true }));
```

```
28
29   app.post("/signup", (req, res) => {
30     |   res.json(req.body);
31   });
32   |
```

```
C:\Users\somsi>mongosh
Current Mongosh Log ID: 65c07bb290975670308bb3ba
Connecting to:      mongodb://127.0.0.1:27017/?directConnection=true&serverSelect
Using MongoDB:      6.0.7
Using Mongosh:      1.10.1

For mongosh info see: https://docs.mongodb.com/mongoddb-shell/

-----
The server generated these startup warnings when booting
2024-02-03T09:49:41.066+05:30: Access control is not enabled for the database. Rea
-----

test> |
```



```
JS index.js M JS user.js U X <> signup.ejs U # main.css U <> home.ejs U <

JS user.js > ...
1 let mongoose = require("mongoose");
2 mongoose
3   .connect("mongodb://127.0.0.1:27017/cloudComputing_lab3_ps1")
4   .then((p) => {
5     console.log("connected to local mongoDB");
6   })
7   .catch((err) => console.log(err));
8
```

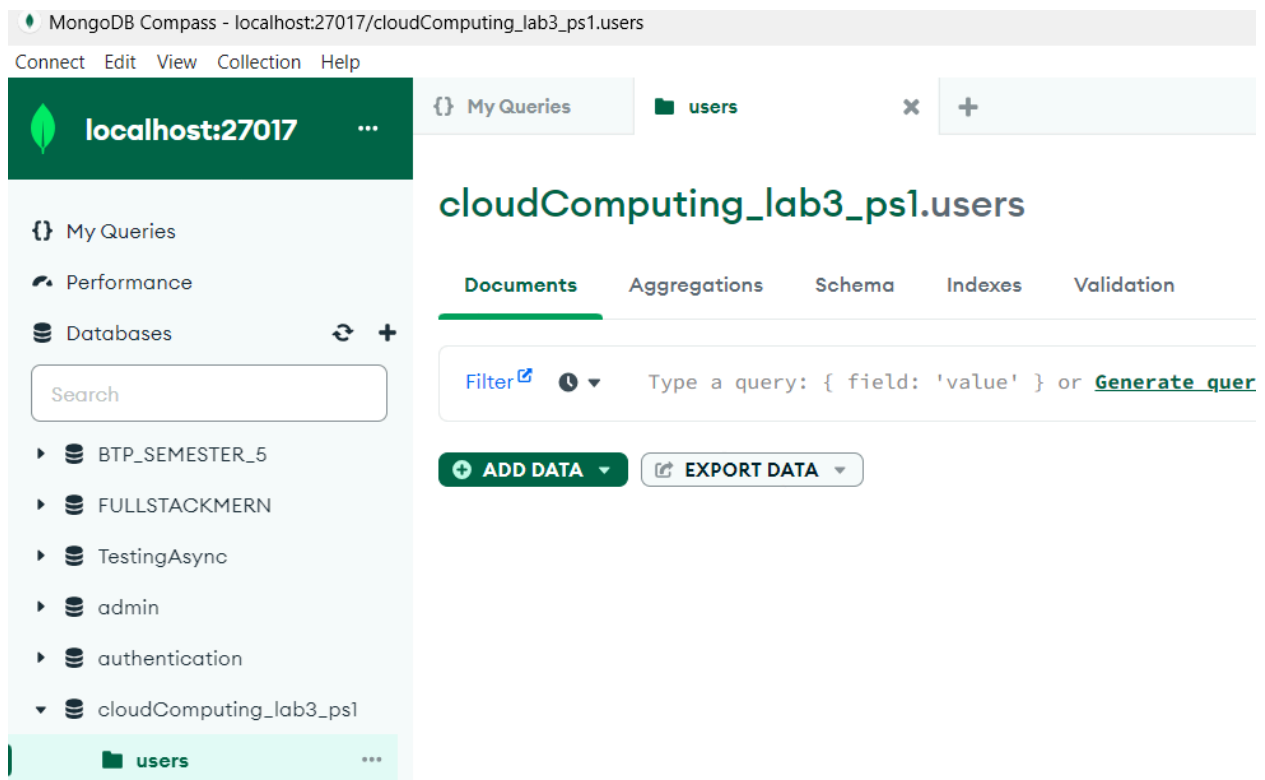
User Schema

```
9 const userSchema = new mongoose.Schema({
10   username: {
11     type: String,
12     required: true,
13     unique: true,
14   },
15   password: {
16     type: String,
17     required: true,
18   },
19   firstname: {
20     type: String,
21     required: true,
22   },
23   lastname: {
24     type: String,
25     required: true,
26   },
27   dateofbirth: {
28     type: Date,
29     required: true,
30   },
31   emailaddress: {
32     type: String,
33     required: true,
34     unique: true,
35   },
36 });
37
38 const User = mongoose.model("User", userSchema);
39
```

Local db connected

```
PROBLEMS  TERMINAL  PORTS  GITLENS  DEBUG CONSOLE  OUTPUT

PS C:\Users\somsi\cloud_computing_lab\lab3> nodemon index.js
[nodemon] 3.0.2
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node index.js`
Up and Running on 5k+1
connected to local mongoDB
█
```



USER REGISTRATION FORM

Username
som singh lodhi

Password
...

First Name
som

Last Name
lodhi

01-01-2024



Email
demo@gmail.com|

Submit

Data store locally on mongoDB running on **127.0.0.1:27017**

{ } My Queries

users

x

+

cloudComputing_lab3_ps1.users

Documents

Aggregations

Schema

Indexes

Validation

Filter



Type a query: { field: 'value' } or [Generate query](#)

+ ADD DATA

EXPORT DATA

```
_id: ObjectId('65c07f29ae652cae936061ed')
username: "som singh lodhi"
password: "123"
firstname: "som"
lastname: "lodhi"
dateofbirth: 2024-01-01T00:00:00.000+00:00
emailaddress: "demo@gmail.com"
__v: 0
```

```

66
67     <div class="signin">
68         <div class="content">
69             <h2>Login Form</h2>
70             <div class="form">
71                 <form action="/login" method="post">      You, 1 second ago • Uncommitted changes
72                 <div class="inputBox">
73                     <input type="text" name="username" required /> <i>Username</i>
74                 </div>
75
76                 <div class="inputBox" style="margin-top: 10px;">
77                     <input
78                         type="password"
79                         id="password"
80                         name="password"
81                         required
82                     /><i>Password</i>
83                 </div>
84
85
86                 <button style="margin-top: 30px;" submit">Login</button>
87             </form>
88         </div>
89     </div>
90 </div>
91 </section>
92 <!-- partial -->
93 </body>
94 </html>

```

Login preview

LOGIN FORM

Username



Password

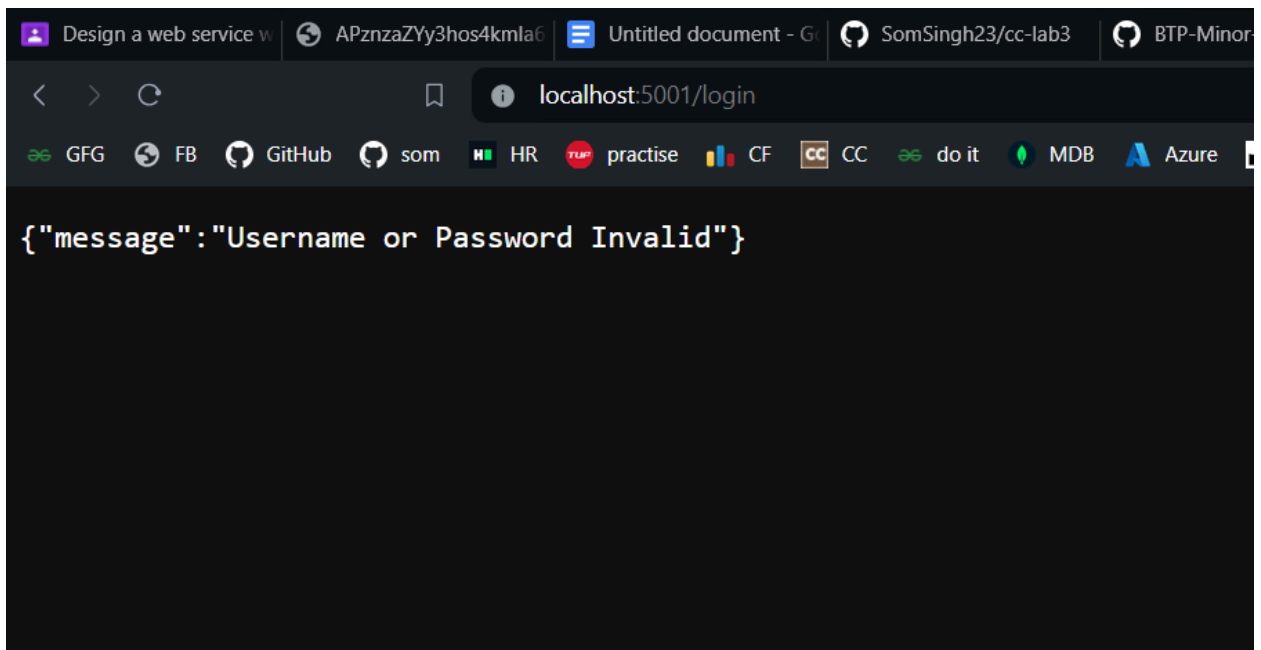


Login

```

37
38 ✓ app.post("/login", async (req, res) => {
39   ✓ let data = await User.findOne({
40     username: req.body.username,
41     password: req.body.password,
42   });
43   ✓ if (!data) {
44     ✓ return res.json({
45       | message: "Username or Password Invalid",
46     });
47   }
48   ✓ return res.render("success", {
49     password: req.body.password,
50     username: req.body.username,
51   });
52 });
53
54 ✓ app.post("/final_login", (req, res) => {
55   | res.send(req.body);
56 });
57

```



LOGIN FORM

Username
som



Password
...



Login

ENTER LAST NAME

Username
som



Password
...



Last Name

Login

ENTER LAST NAME

Username
som

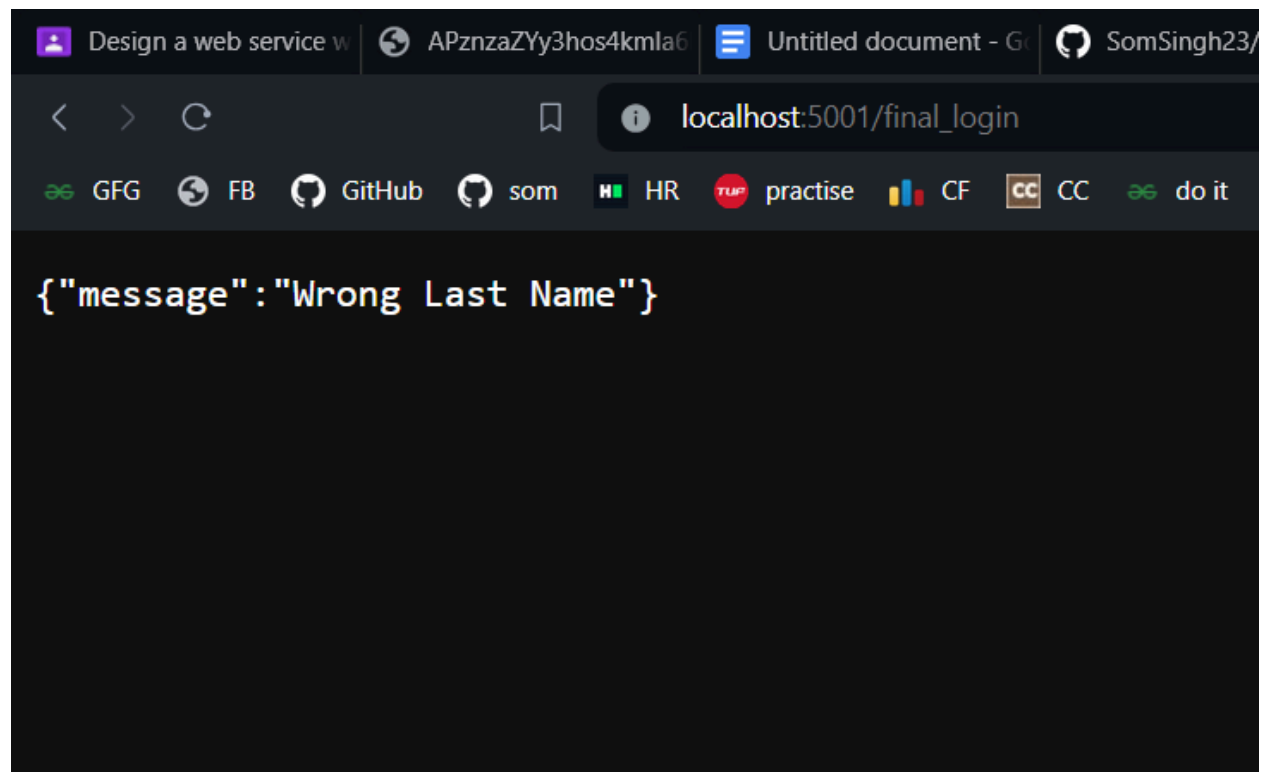


Password
...



Last Name
SO

Login



ENTER LAST NAME

Username
som

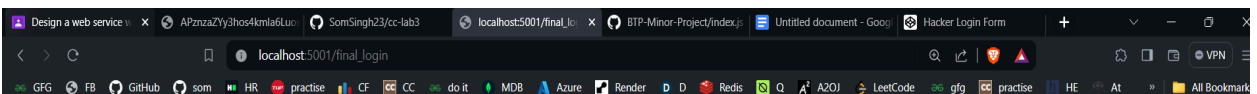


Password
...



Last Name
lodhi

Login



```
{"_id":"65c07f29ae652cae936061ed","username":"som singh lodhi","password":"123","firstname":"som","lastname":"lodhi","dateofbirth":"2024-01-01T00:00:00.000Z","emailaddress":"demo@gmail.com","__v":0}
```

Code Files:

The screenshot shows the Visual Studio Code interface with a project structure on the left and a JavaScript file named `user.js` open in the editor.

EXPLORER (Left Panel):

- OPEN EDITORS:**
 - `JS index.js` (M)
 - `JS user.js` (M)
 - `signup.ejs...` (M)
 - `# main.css` (public/c...)
 - `home.ejs v...` (M)
 - `login.ejs vi...` (M)
 - `success.ejs...` (U)
 - `details.ejs...` (U)
- LAB3:**
 - `node_modules`
 - `public\css`
 - `# main.css`
 - `views`
 - `details.ejs` (U)
 - `home.ejs` (M)
 - `login.ejs` (M)
 - `signup.ejs` (M)
 - `success.ejs` (U)
 - `.gitignore`
 - `JS index.js` (M)
 - `package.json`
 - `problem statement.pdf`
 - `JS user.js` (M)
 - `yarn.lock`
- TIMELINE**

JS user.js (Editor):

```
4 .then((p) => {
5   console.log("connected to local mongoDB");
6 })
7 .catch((err) => console.log(err));
8
9 const userSchema = new mongoose.Schema({
10   username: {
11     type: String,
12   },
13   password: {
14     type: String,
15   },
16   firstname: {
17     type: String,
18   },
19   lastname: {
20     type: String,
21   },
22   dateofbirth: {
23     type: Date,
24   },
25   emailaddress: {
26     type: String,
27   },
28 });
29
30 const User = mongoose.model("User", userSchema);
31
32 module.exports = User;
33
```

A comment on line 20 reads: "You, 36 minutes ago • basic working looking good".

```
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   index.js
        renamed:    views/protect.ejs -> views/details.ejs
        modified:   views/home.ejs
        modified:   views/login.ejs
        modified:   views/signup.ejs
        new file:   views/success.ejs
```

```
somsi@SOM MINGW64 ~/cloud_computing_lab/lab3 (main)
$ git commit -m "all done"
[main c4e4e70] all done
 6 files changed, 130 insertions(+), 11 deletions(-)
 rename views/{protect.ejs => details.ejs} (65%)
 create mode 100644 views/success.ejs
git
somsi@SOM MINGW64 ~/cloud_computing_lab/lab3 (main)
$ git status
On branch main
nothing to commit, working tree clean
gi
somsi@SOM MINGW64 ~/cloud_computing_lab/lab3 (main)
$ git push origin main
```

```
somsi@SOM MINGW64 ~/cloud_computing_lab/lab3 (main)
$ git push origin main
Enumerating objects: 15, done.
Counting objects: 100% (15/15), done.
Delta compression using up to 8 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (9/9), 1.53 KiB | 1.53 MiB/s, done.
Total 9 (delta 5), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (5/5), completed with 5 local objects
To github.com:SomSingh23/cc-lab3.git
    fb1d2b3..c4e4e70  main -> main

somsi@SOM MINGW64 ~/cloud_computing_lab/lab3 (main)
$ _
```

GITHUB REPO LINK:

<https://github.com/SomSingh23/cc-lab3>

