



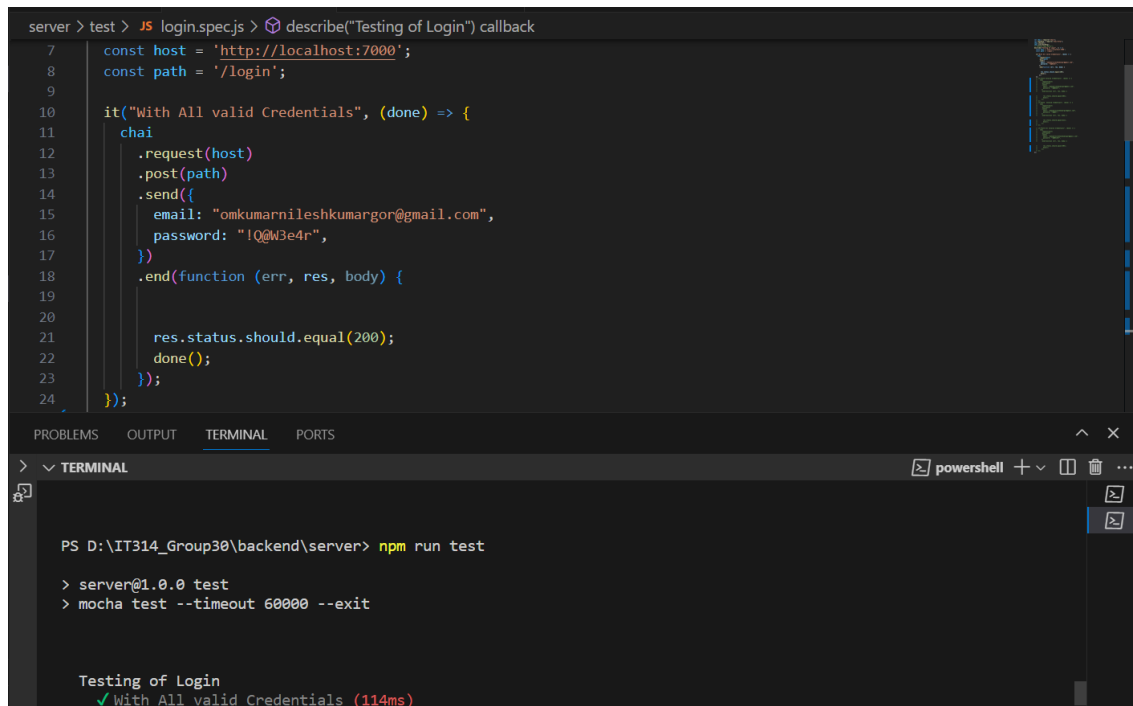
Software Engineering (IT314)

Unit Testing

Group: 30

Identify the Test case: Sign Up Functionality

Prepare the test environment:



The screenshot shows a Visual Studio Code editor with a file named `login.spec.js` open. The code defines a test case for login functionality using Mocha and Chai. The test case is named "With All valid Credentials" and expects a 200 status code. The terminal at the bottom shows the command `npm run test` being executed, which runs the test successfully, outputting "Testing of Login" and "✓ With All valid Credentials (114ms)".

```
server > test > .js login.spec.js > describe("Testing of Login") callback
7  const host = 'http://localhost:7000';
8  const path = '/login';
9
10 it("With All valid Credentials", (done) => {
11   chai
12     .request(host)
13     .post(path)
14     .send({
15       email: "omkumarnileshkumargor@gmail.com",
16       password: "lQ@W3e4r",
17     })
18     .end(function (err, res, body) {
19
20       res.status.should.equal(200);
21       done();
22     });
23 });
24
```

PROBLEMS OUTPUT TERMINAL PORTS

> ▼ TERMINAL powershell + - ▢ ▢ ...

PS D:\IT314_Group30\backend\server> npm run test

> server@1.0.0 test

> mocha test --timeout 60000 --exit

Testing of Login

✓ With All valid Credentials (114ms)

Execute and record the test results:

Output: Valid registration test passed

Status Code: 200 - Passed

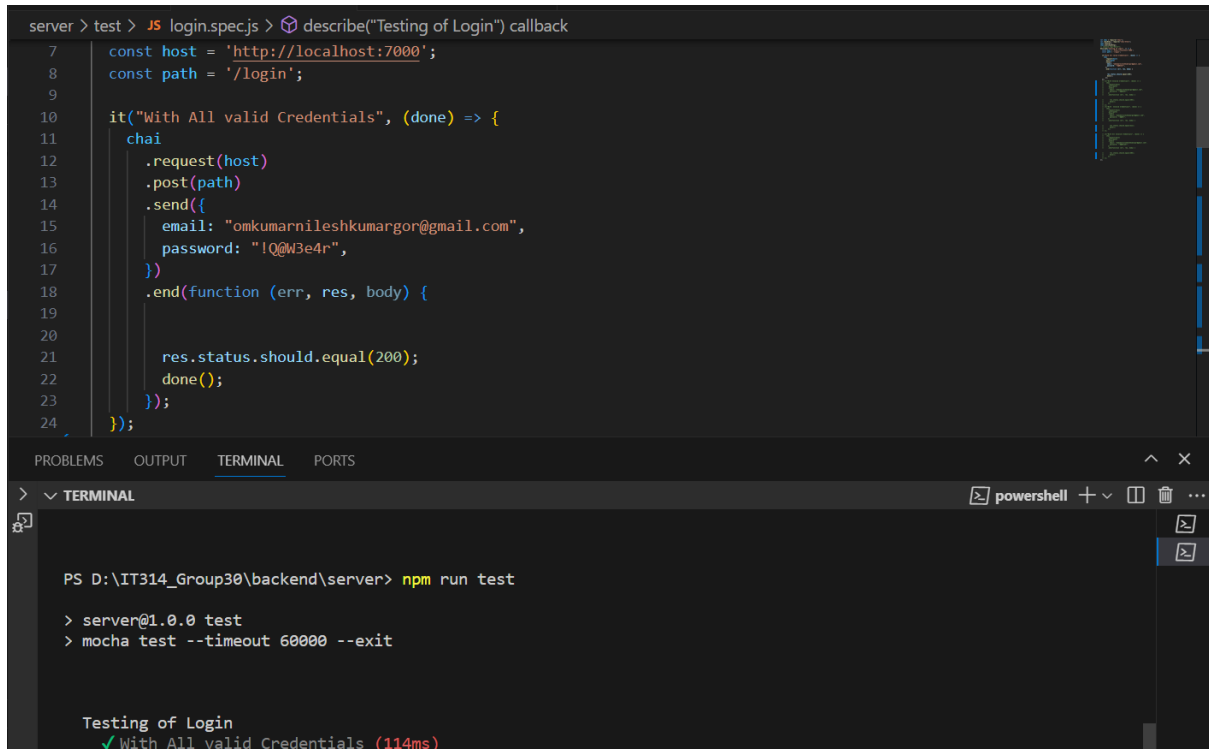
Taken Time: 114ms

Number of Test: 1

Analyse the results: Here, credentials are email, password is not registered in our system. So, this is valid registered credentials.

Identify the Test case: Sign Up Functionality

Prepare the test environment:



The screenshot shows a Visual Studio Code editor with a test file named `login.spec.js`. The file contains a Jest test case for the login functionality. The test case is named "With All valid Credentials" and it uses the `chai` assertion library to verify that a POST request to `http://localhost:7000/login` with the email `omkumarnileshkumargor@gmail.com` and password `!Q@W3e4r` returns a status code of 200. The test is executed using the command `npm run test` in the terminal. The terminal output shows that the test passed with a status code of 200 and took 114ms to execute.

```
server > test > JS login.spec.js > describe("Testing of Login") callback
7   const host = 'http://localhost:7000';
8   const path = '/login';
9
10  it("With All valid Credentials", (done) => {
11    chai
12      .request(host)
13      .post(path)
14      .send({
15        email: "omkumarnileshkumargor@gmail.com",
16        password: "!Q@W3e4r",
17      })
18      .end(function (err, res, body) {
19
20
21        res.status.should.equal(200);
22        done();
23      });
24  });
```

PROBLEMS OUTPUT TERMINAL PORTS

> TERMINAL powershell + -

PS D:\IT314_Group30\backend\server> npm run test

> server@1.0.0 test

> mocha test --timeout 60000 --exit

Testing of Login

✓ With All valid Credentials (114ms)

Execute and record the test results:

Output: Invalid registration test passed

Status Code: 200 - Passed

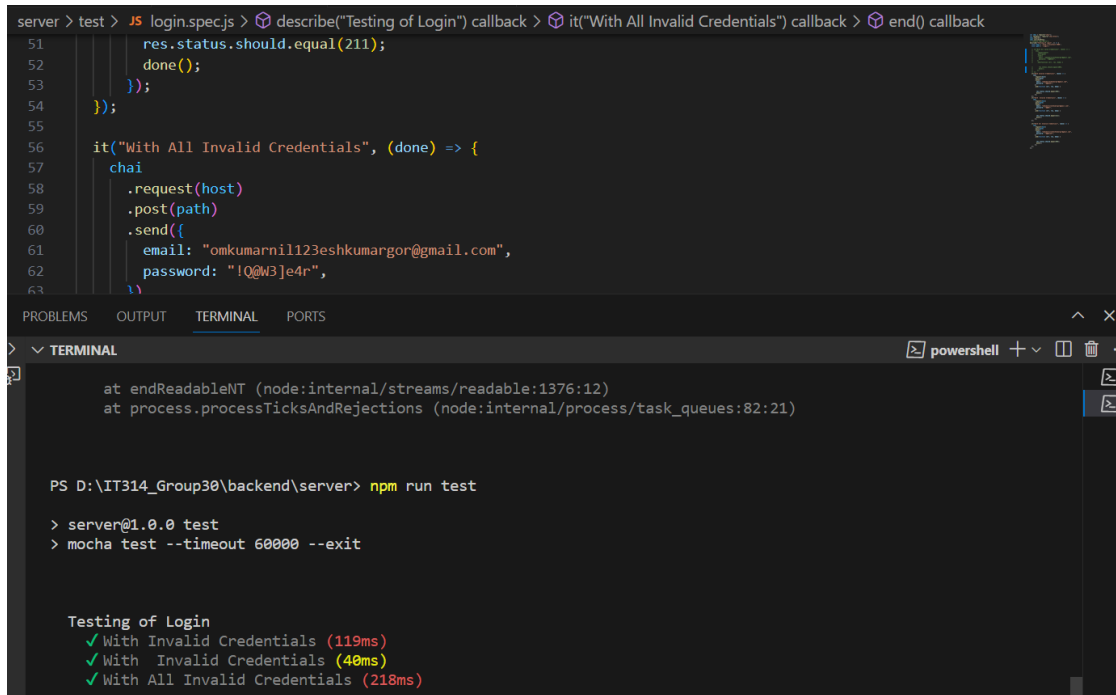
Taken Time: 114ms

Number of Test: 1

Analyse the results: Here, credentials are email, password is not registered in our system. So, this is valid registered credentials.

Identify the Test case: Sign Up Functionality

Prepare the test environment:



The screenshot shows a VS Code editor with a file named `login.spec.js`. The code defines a test suite for login functionality. It includes a `describe` block for "Testing of Login" and an `it` block for "With All Invalid Credentials". The `it` block uses `chai` to assert that the response status is 211. The test sends a POST request to a specific path with an email and a password. The terminal output shows the command `npm run test` being executed, which runs the tests. The output indicates that all three tests passed: "With Invalid Credentials" (119ms), "With Invalid Credentials" (40ms), and "With All Invalid Credentials" (218ms).

```
server > test > js login.spec.js > describe("Testing of Login") callback > it("With All Invalid Credentials") callback > end() callback
51 |     res.status.should.equal(211);
52 |     done();
53 |   });
54 | });
55 |
56 | it("With All Invalid Credentials", (done) => {
57 |   chai
58 |     .request(host)
59 |     .post(path)
60 |     .send({
61 |       email: "omkumarnil123eshkumargor@gmail.com",
62 |       password: "!Q@W3]e4r",
63 |     })
    at endReadableNT (node:internal/streams/readable:1376:12)
    at process.processTicksAndRejections (node:internal/process/task_queues:82:21)

PS D:\IT314_Group30\backend\server> npm run test

> server@1.0.0 test
> mocha test --timeout 60000 --exit

Testing of Login
✓ With Invalid Credentials (119ms)
✓ With Invalid Credentials (40ms)
✓ With All Invalid Credentials (218ms)
```

Execute and record the test results:

Output: Invalid registration test passed

Status Code: All - Passed

Taken Time: 377ms

Number of Test: 3

Analyse the results: Here, credentials are email, password is not registered in our system. So, this is invalid registered credentials.

We have given different passwords.

Identify the Test case: Email Verification Functionality

Prepare the test environment:

```
server > test > JS verifyemail.spec.js > describe("Testing of Verify Email") callback
1  let chai = require("chai");
2  let chaiHttp = require("chai-http");
3  chai.should();
4  chai.use(chaiHttp);
5  describe("Testing of Verify Email", () => {
6      const host = 'http://localhost:7000';
7      const path = '/verifyEmail';
8
9      it("With Valid Credential", (done) => {
10         chai
11             .request(host)
12             .post(path)
13             .send({
14                 email: "202101467@daiict.ac.in"
15             })
16             .end(function (err, res, body) {
17
18                 res.status.should.equal(222);
19                 done();
20             });
21     });
22 }
```

PROBLEMS OUTPUT TERMINAL PORTS

▼ TERMINAL powershell

Testing of Verify Email
✓ With Valid Credential

Execute and record the test results:

Output: Valid Email test passed

Status Code: 222- Passed

Taken Time: 377ms

Number of Test: 1

Analyse the results: Here, credential is email is registered in our system. So, this is valid registered credentials.

Identify the Test case: Email Verification Functionality

Prepare the test environment:



The screenshot shows a VS Code editor with a file named `verifyemail.spec.js`. The code is a Jest test using Chai and Supertest to verify an email. The test is titled "With Invalid Credential". The code sends a POST request to a specific path with an email address "1234@daiict.ac.in". The test expects a status code of 200. The terminal at the bottom shows the test passing with a green checkmark and the message "With Invalid Credential (151ms)".

```
server > test > JS verifyemail.spec.js > describe("Testing of Verify Email") callback

24   it("With Invalid Credential", (done) => {
25     chai
26       .request(host)
27       .post(path)
28       .send({
29         email: "1234@daiict.ac.in"
30       })
31       .end(function (err, res, body) {
32
33
34         res.status.should.equal(200);
35         done();
36       });
37
38   });
39
40 });
```

PROBLEMS OUTPUT TERMINAL PORTS

> TERMINAL

✓ With Invalid Credential (151ms)

Execute and record the test results:

Output: Valid Email test passed

Status Code: 200- Passed

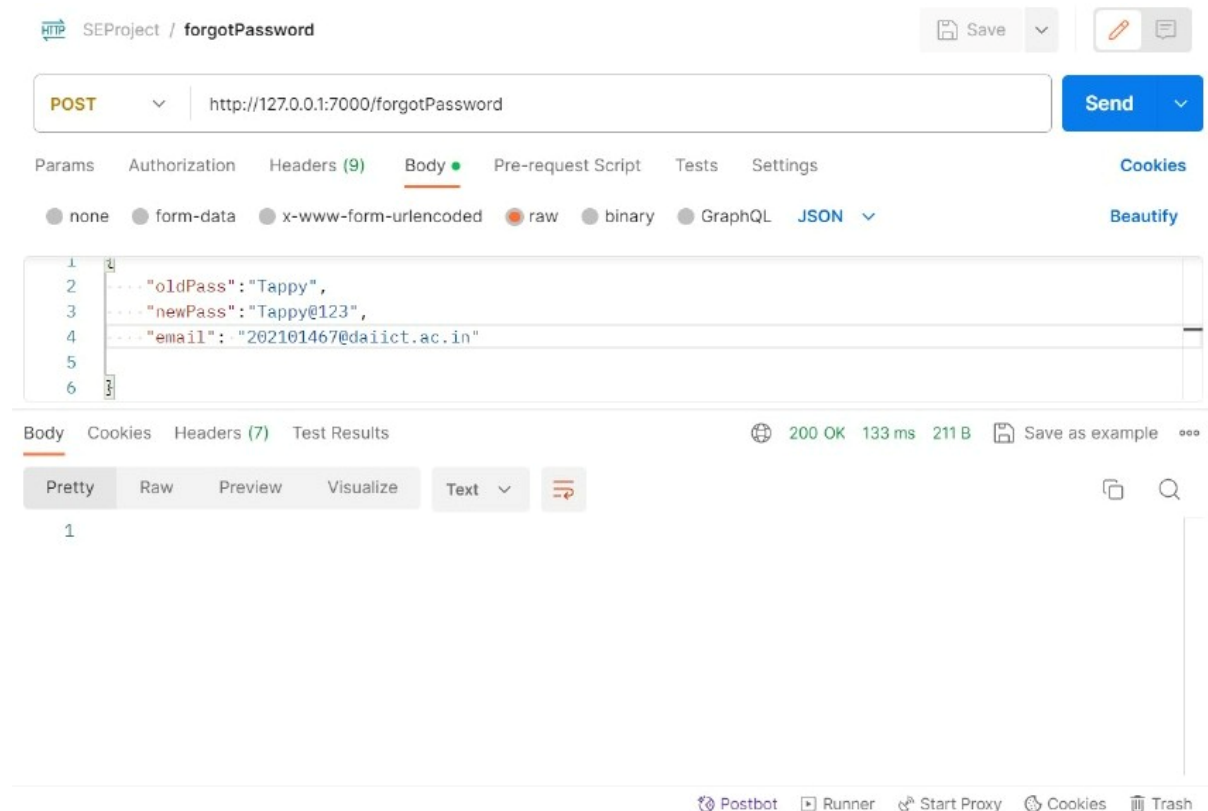
Taken Time: 151ms

Number of Test: 1

Analyse the results: Here, credential is email is not registered in our system. So, this is invalid registered credentials.

Identify the Test case: Edit Password Functionality

Prepare the test environment:



Execute and record the test results:

Output: Change Password test passed

Status Code: 200- Passed

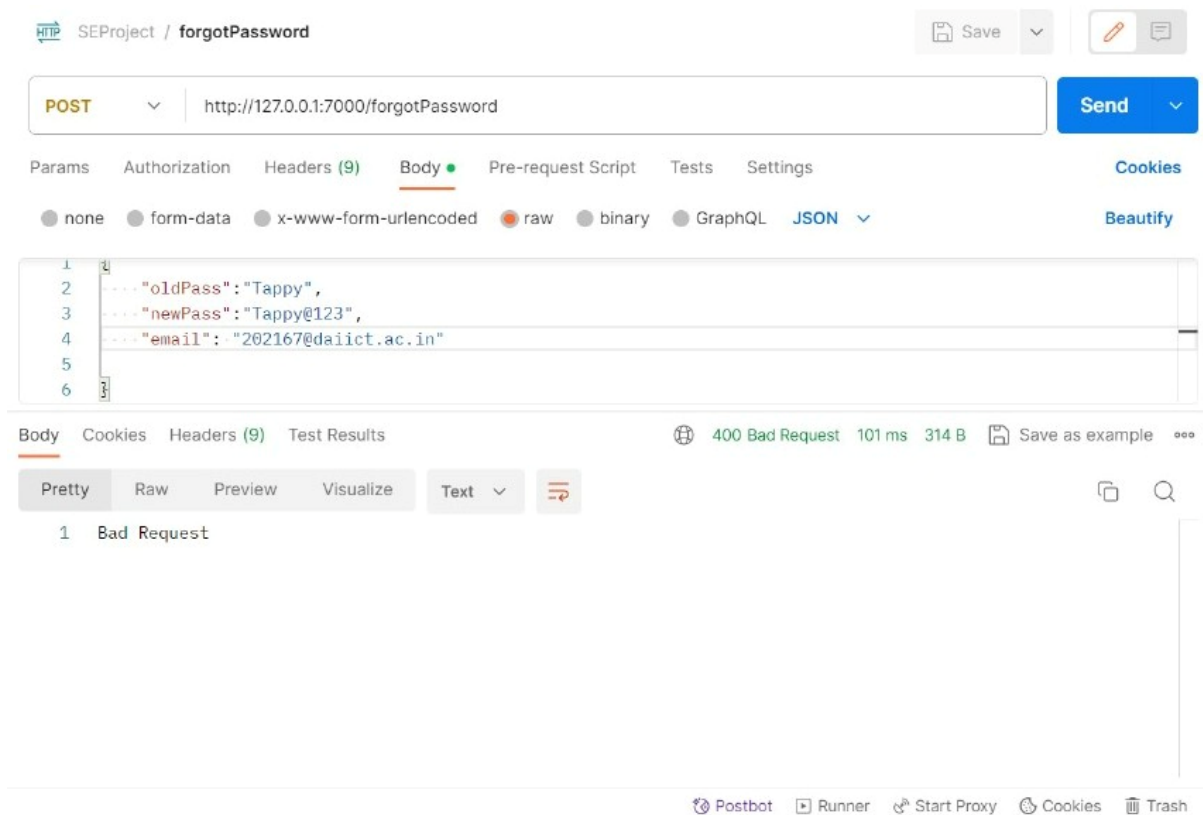
Taken Time: 133ms

Number of Test: 1

Analyse the results: Here, credential is old password, new password and email is getting changed successfully in our system. So, this is valid credentials.

Identify the Test case: Change Password Functionality

Prepare the test environment:



Execute and record the test results:

Output: Invalid Email test passed

Status Code: 400- Passed

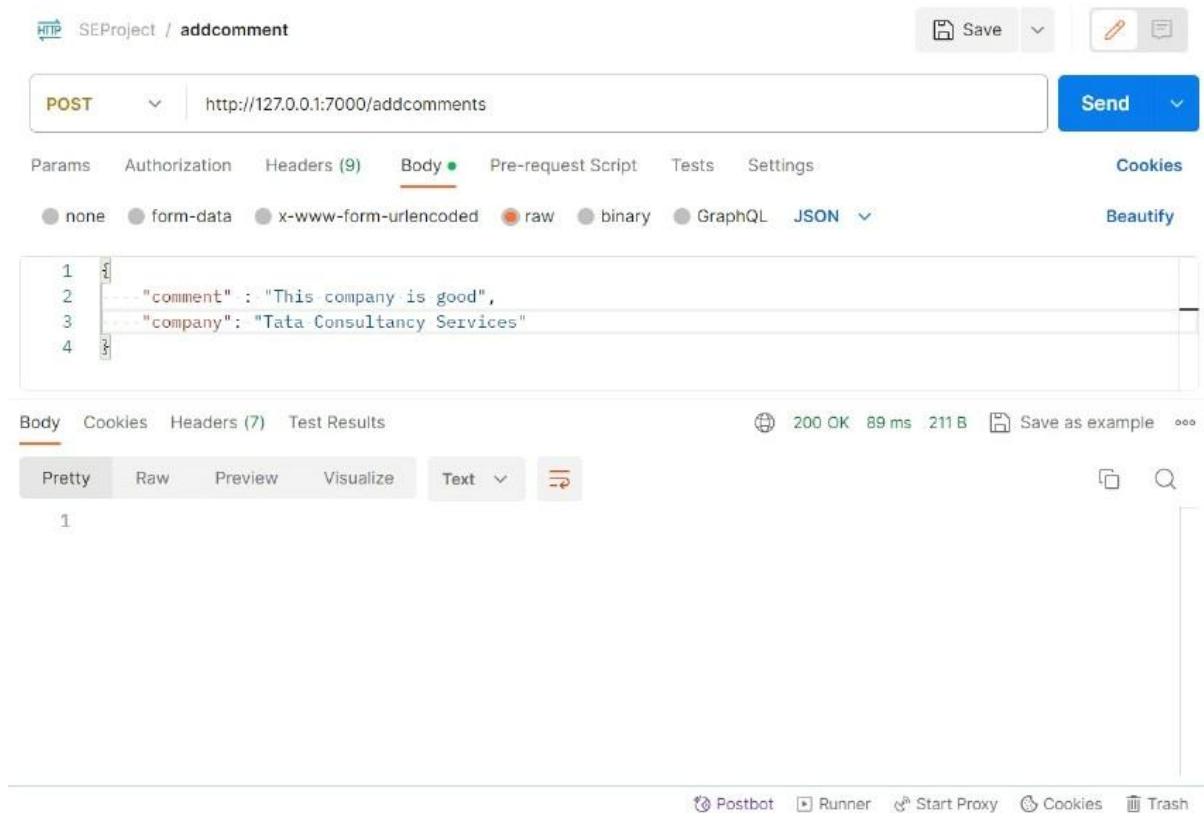
Taken Time: 101ms

Number of Test: 1

Analyse the results: Here, credential email is not registered in our system. So, this is invalid registered credentials. As, from this email ID there is no user registered. So, we cannot change the password.

Identify the Test case: Add Comment Functionality

Prepare the test environment:



Execute and record the test results:

Output: comment test passed

Status Code: 200- Passed

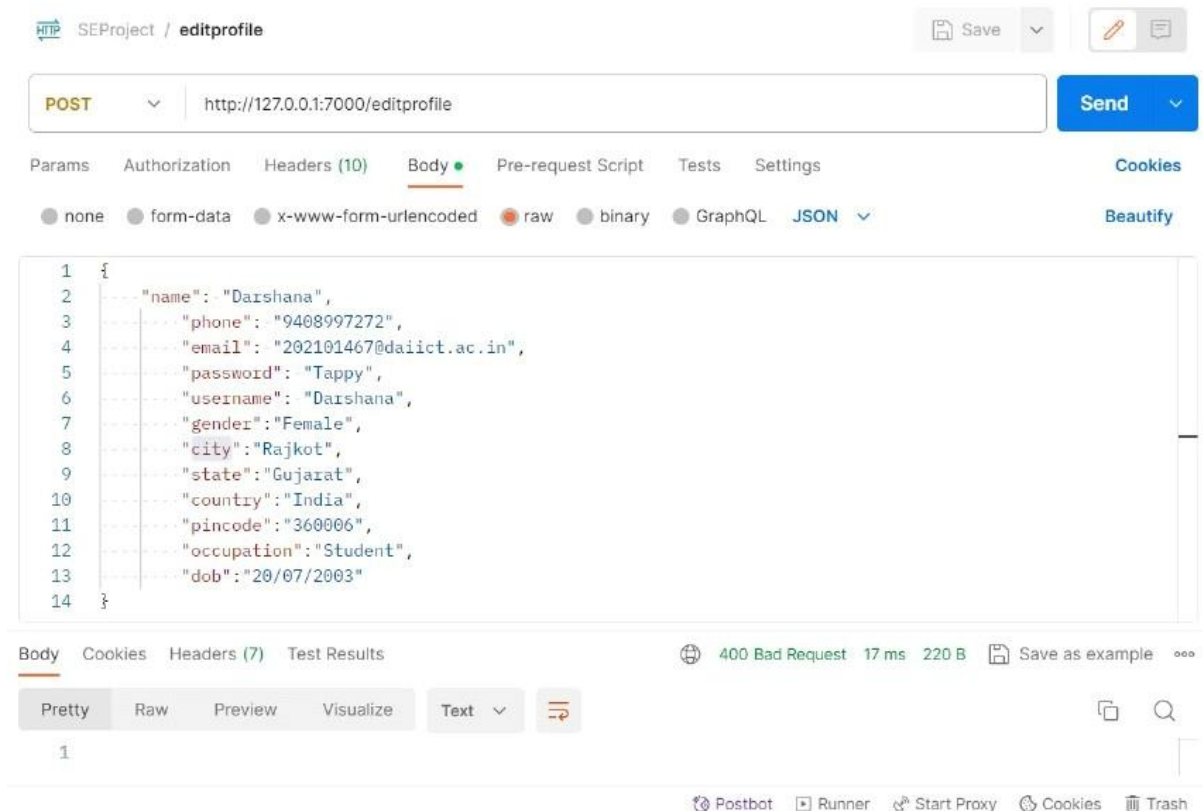
Taken Time: 89ms

Number of Test: 1

Analyse the results: Here, credential are company name and the data of comment which is successfully added into the database.

Identify the Test case: Edit Profile Functionality

Prepare the test environment:



Execute and record the test results:

Output: test passed

Status Code: 404- Passed

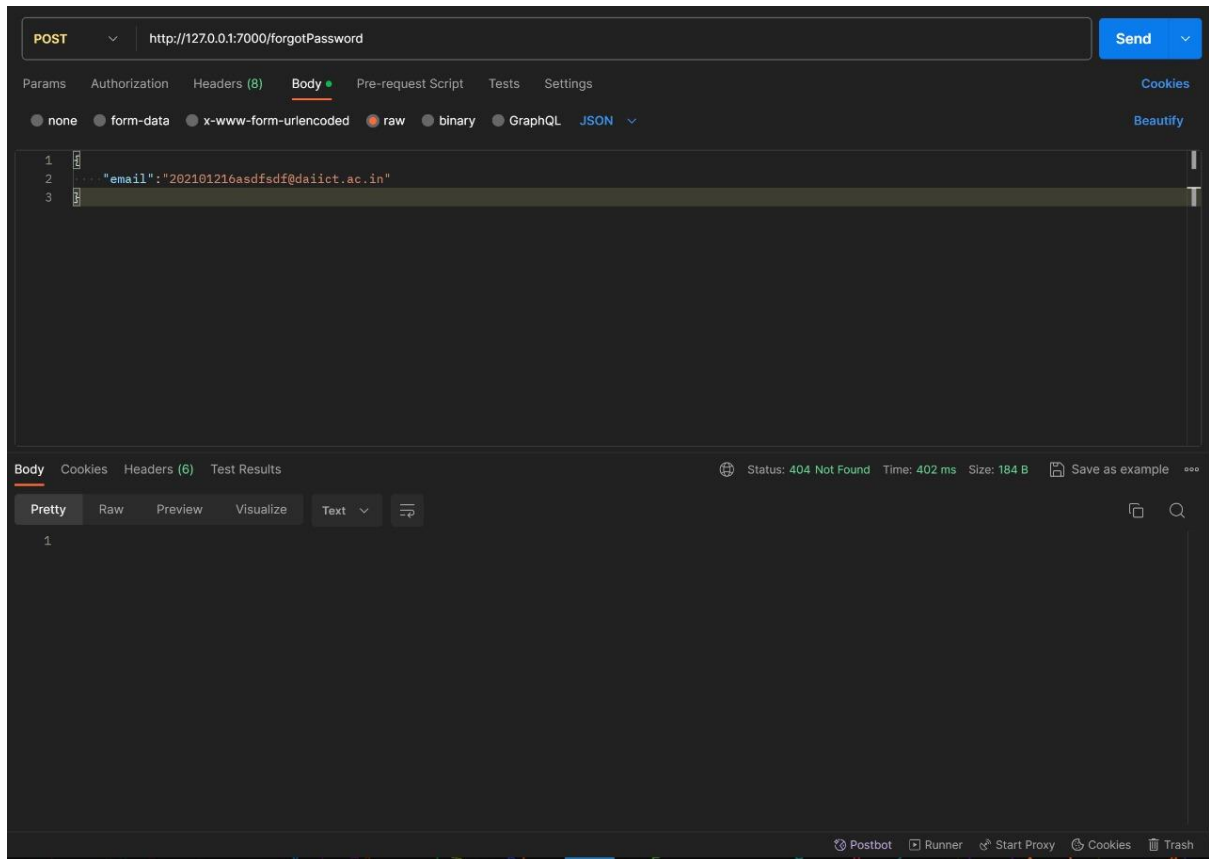
Taken Time: 17ms

Number of Test: 1

Analyse the results: Here, credential is email is not registered in our system. So, this is invalid registered credentials.

Identify the Test case: Forgot Password Functionality

Prepare the test environment:



Execute and record the test results:

Output: Valid Email test passed

Status Code: 404- Passed

Taken Time: 402

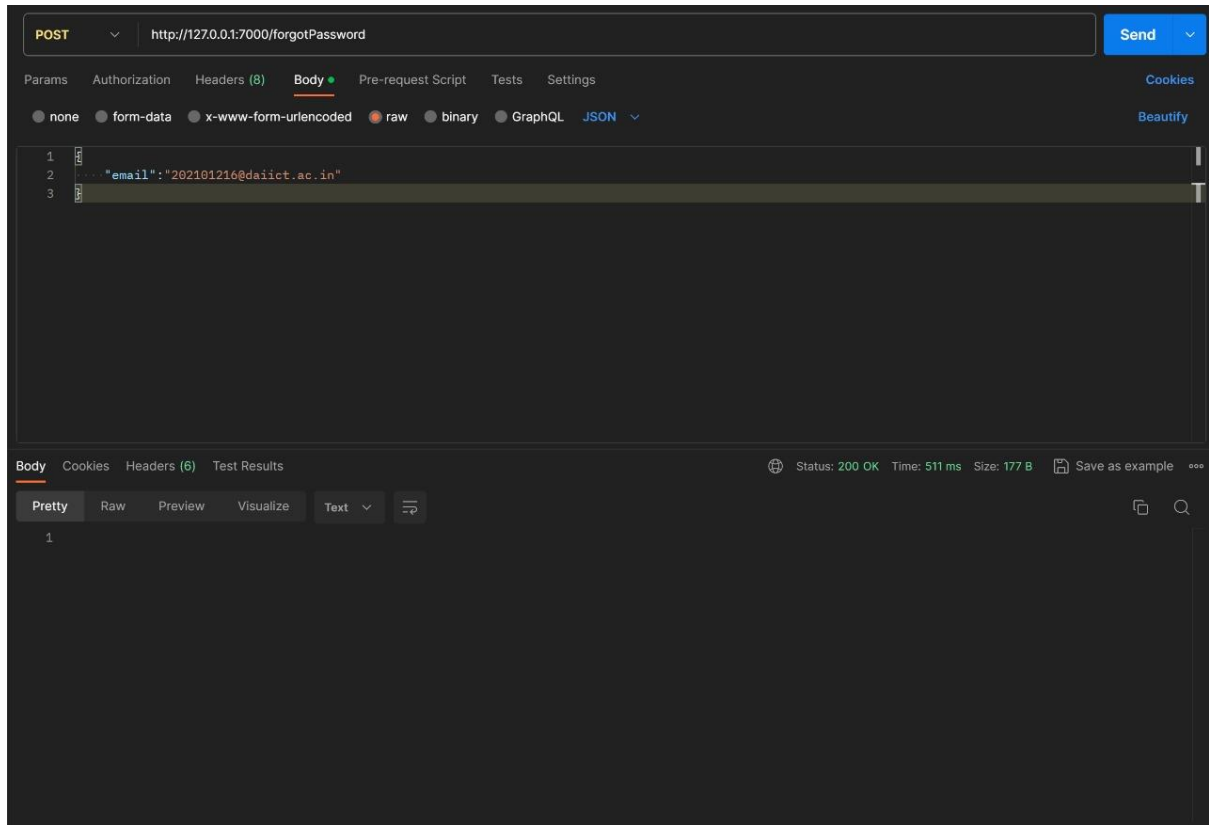
Number of Test: 1

Analyse the results: Here, credential is email is not registered in our system. So, this is invalid registered credentials.

So, we cannot send request of forget password.

Identify the Test case: Forget Password Functionality

Prepare the test environment:



Execute and record the test results:

Output: Valid Email test passed

Status Code: 200- Passed

Taken Time: 511ms

Number of Test: 1

Analyse the results: Here, credential is email is registered in our system. So, this is valid registered credentials. So, email we be sent to our email ID.