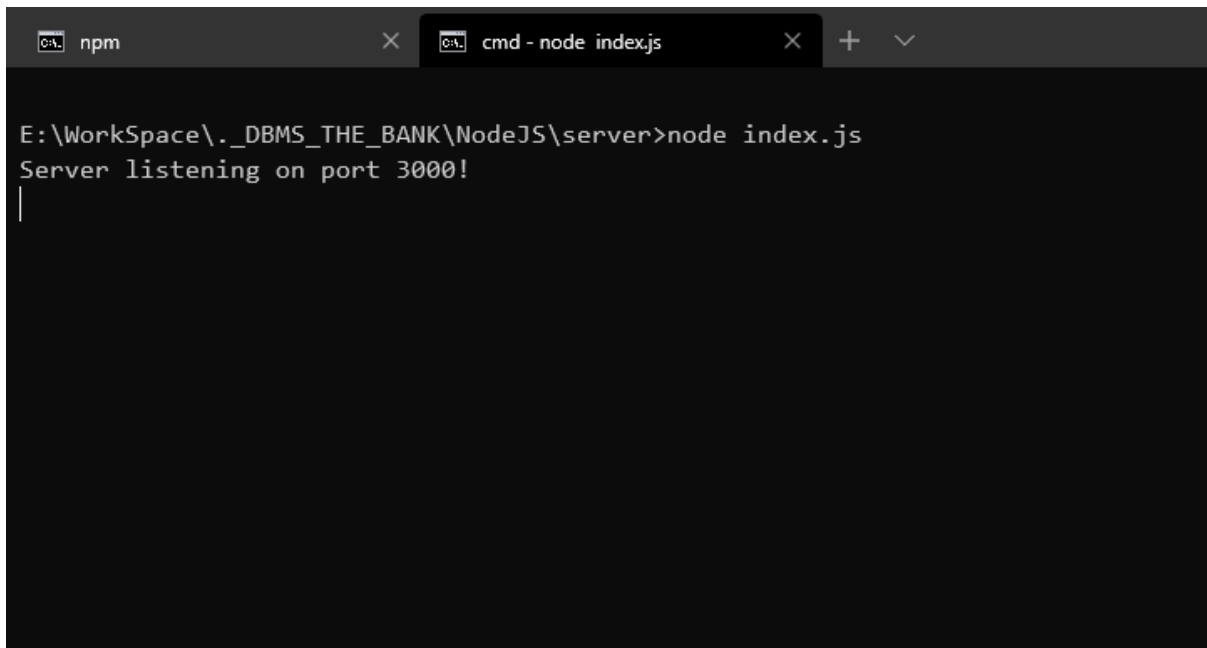


LOGGING IN

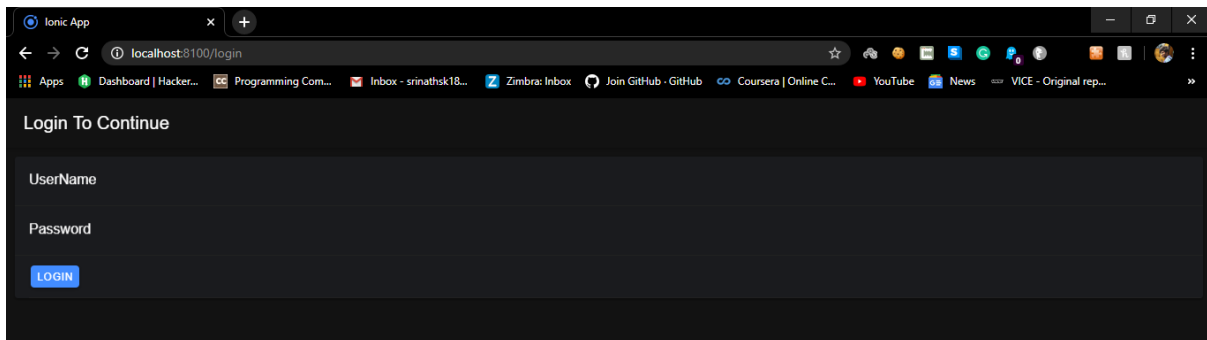
After we have setup the database “TheBank”, we deploy the MySQL Server (this one gets deployed during the boot unless it has been disabled), Node server that makes the backend of our project and Ionic server that makes the front end of our project.

The start-up of Node server

A terminal window with a dark background. The title bar shows two tabs: 'npm' and 'cmd - node index.js'. The command prompt shows the directory 'E:\WorkSpace\._DBMS_THE_BANK\NodeJS\server' and the command 'node index.js' has been executed. The output is 'Server listening on port 3000!' followed by a cursor on a new line.

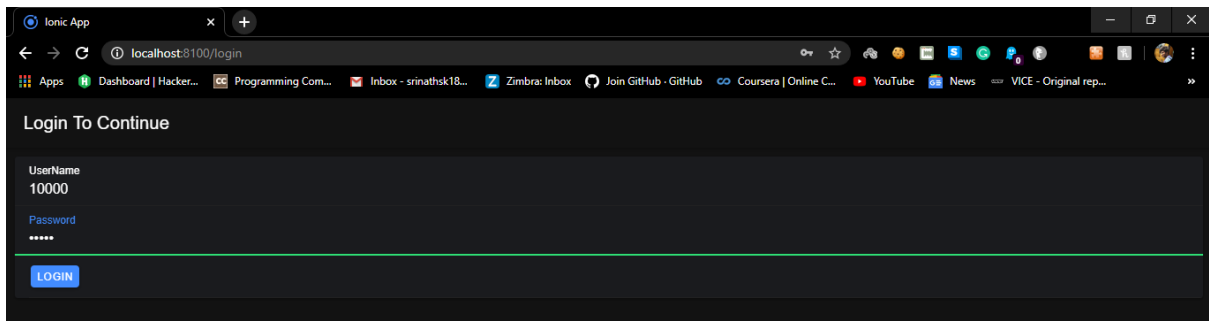
```
E:\WorkSpace\._DBMS_THE_BANK\NodeJS\server>node index.js
Server listening on port 3000!
|
```

The start-up of application

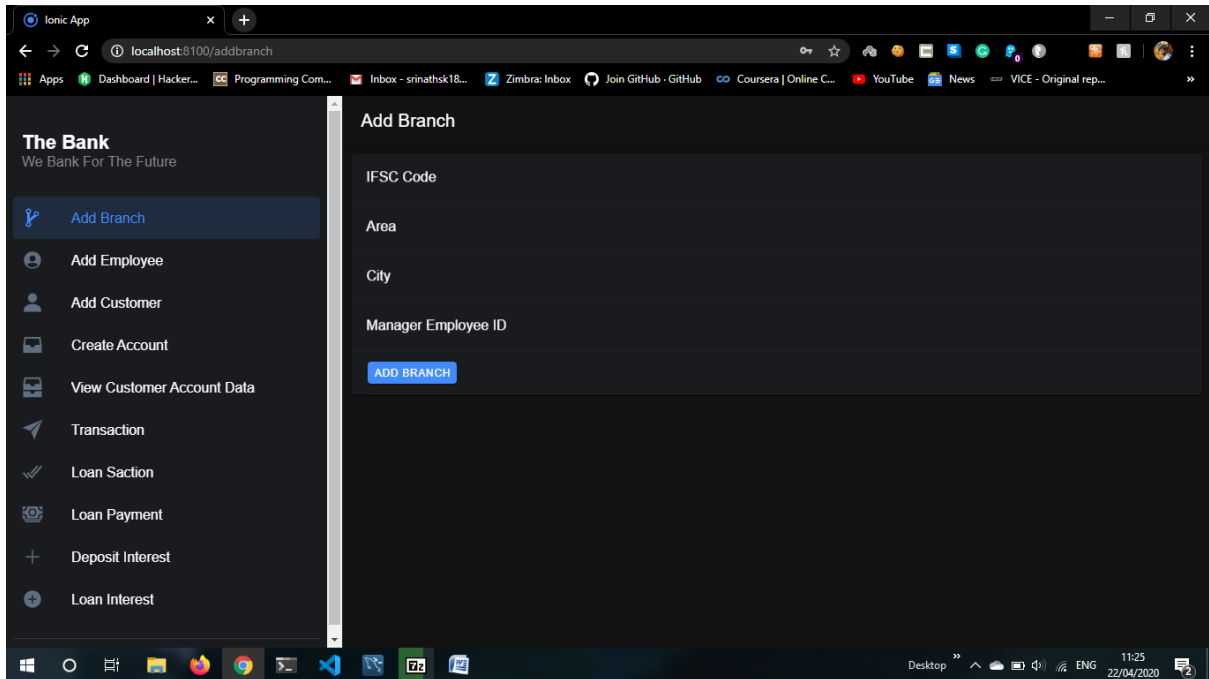


We created an employee with ID ‘10000’ with password ‘ADMIN’ while setting up the database. We have a branch ‘BANK0000001’. Now we login using the credentials ‘10000’ and ‘ADMIN’.

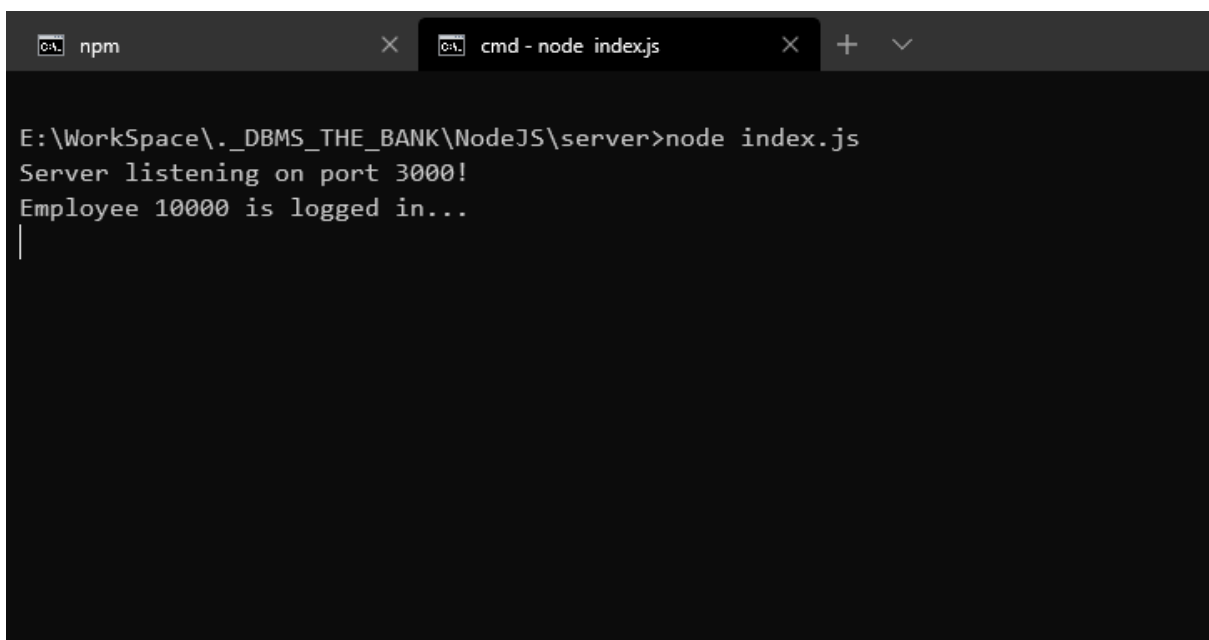
Once an employee clicks on login a request is sent to the Node server. Node server requests the database server for the hashed password for the given user. Then node verifies if the password string matches hash (Hashing algorithm used is SHA1). If it matches it directs the front end to the dashboard of application else alerts the user of bad credentials. Both valid and invalid attempts are logged in the console.



We now enter the dashboard of application after successful login.

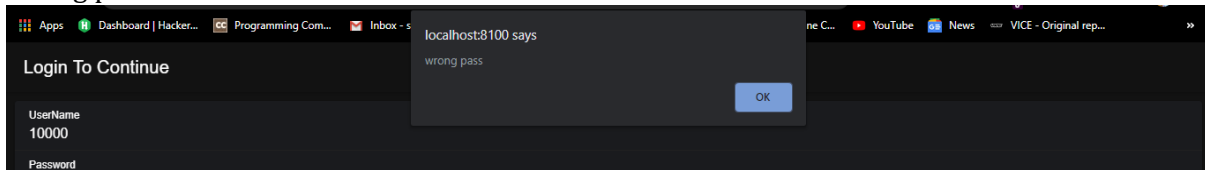


The console makes entry of the login of this employee.



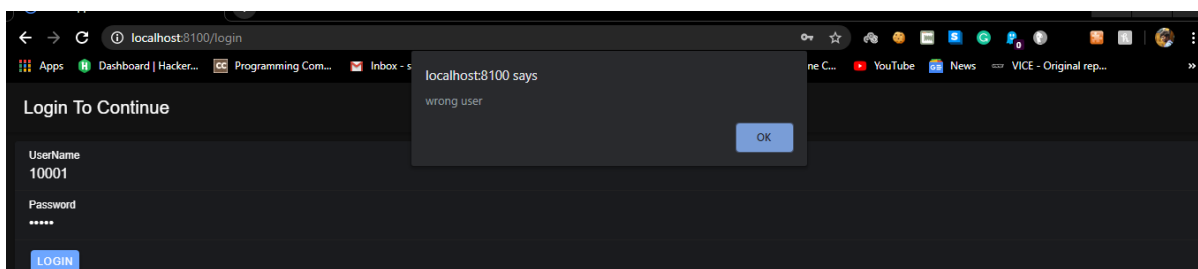
Now in case of wrong password or invalid username we get alert on the application as well as logged in the backend.

Wrong password



```
npm cmd - node index.js
E:\WorkSpace\._DBMS_THE_BANK\NodeJS\server>node index.js
Server listening on port 3000!
Failed login attempt of employee 10000...
```

Invalid user ID



```
npm cmd - node index.js
E:\WorkSpace\._DBMS_THE_BANK\NodeJS\server>node index.js
Server listening on port 3000!
Invalid employee ID 10001...
|
```