Indian Institute of Information Technology, Guwahati

B Tech Computer Science

Software Engineering Project

Ambulance Tracker App

Group 5:

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Link to the project - https://github.com/chayan101/AmbulanceTrackerApp

Testing

The type of testing used in this project is **Black box Testing**.

It is a software testing method in which the functionalities of software applications are tested without having knowledge of internal code structure, implementation details and internal paths. Black Box Testing mainly focuses on input and output of software applications and it is entirely based on software requirements and specifications.

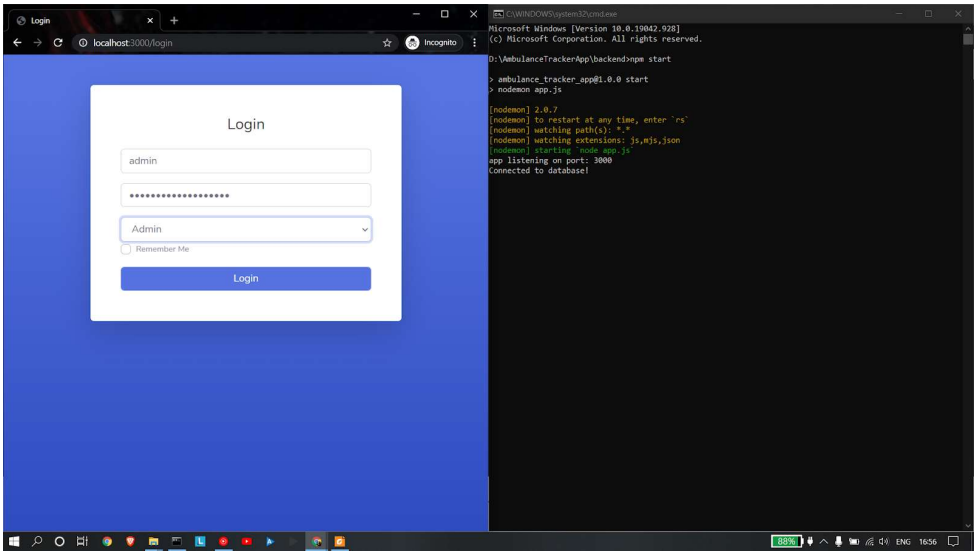
Functional Requirements-

1. **Users must have a valid User ID and password to login thus creating their individual profiles**

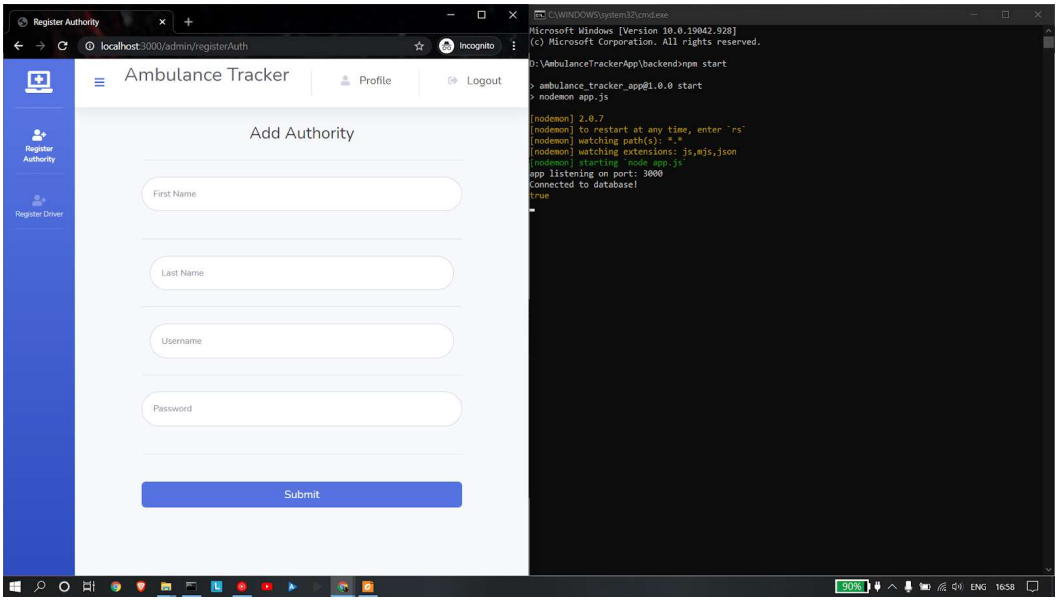
Login for Admin-

Case 1: Successful login of the admin

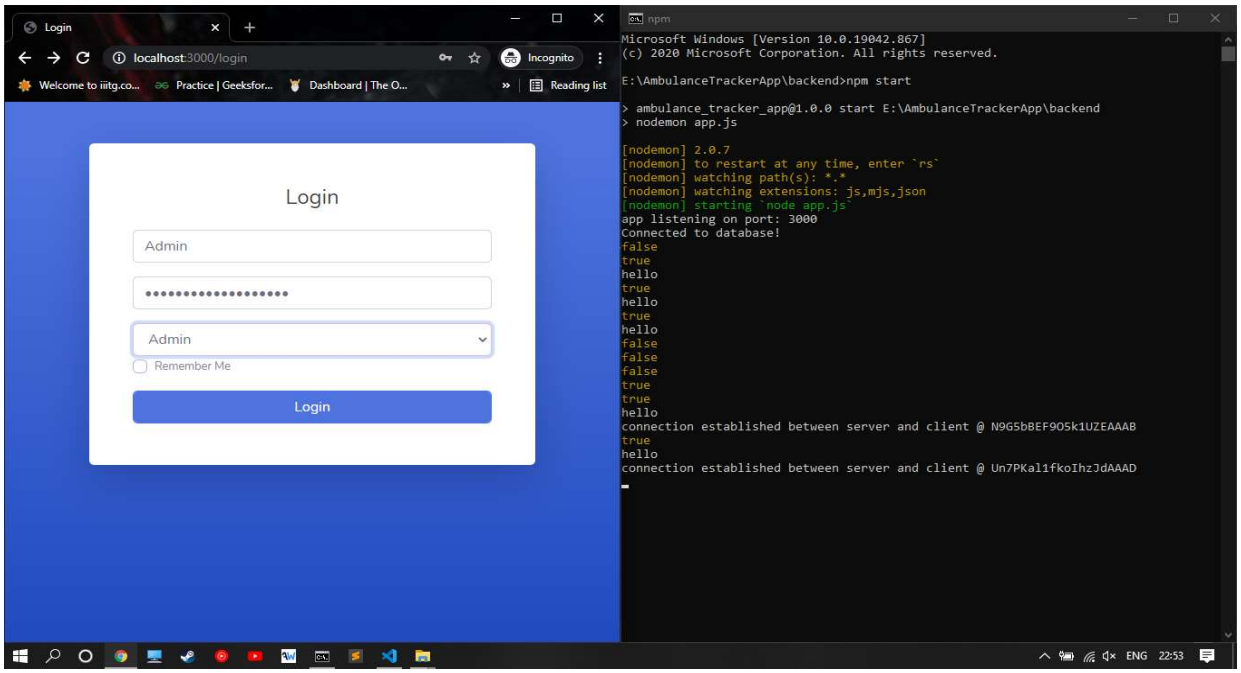
Username : admin
Expected o/p : Successful Login
Output :



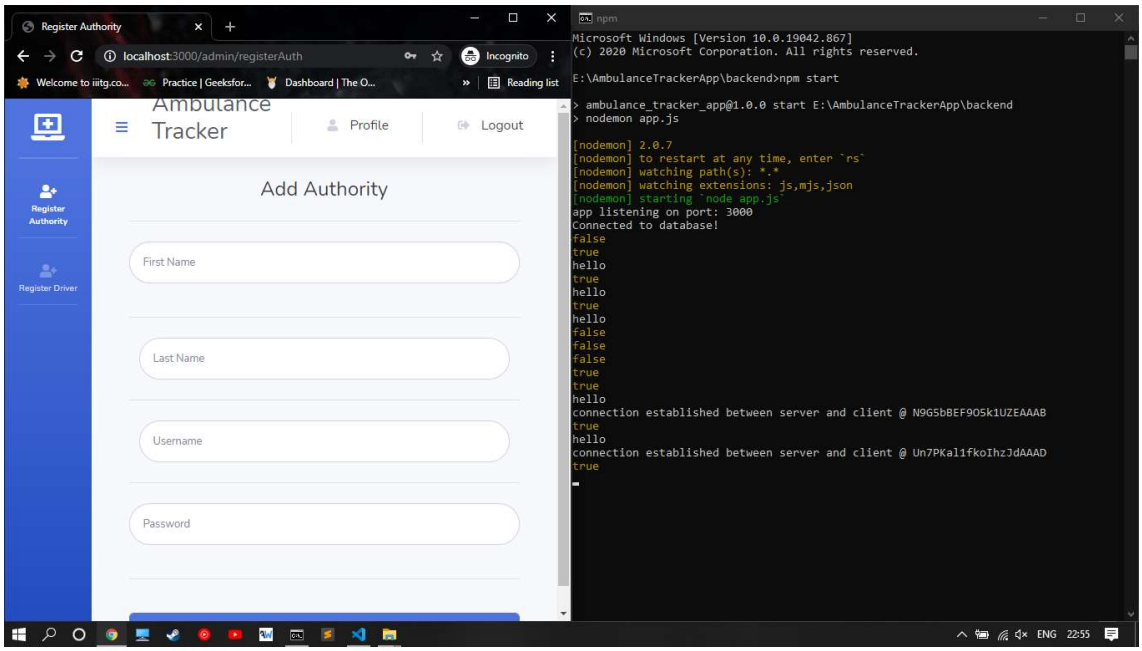
Successful Login :



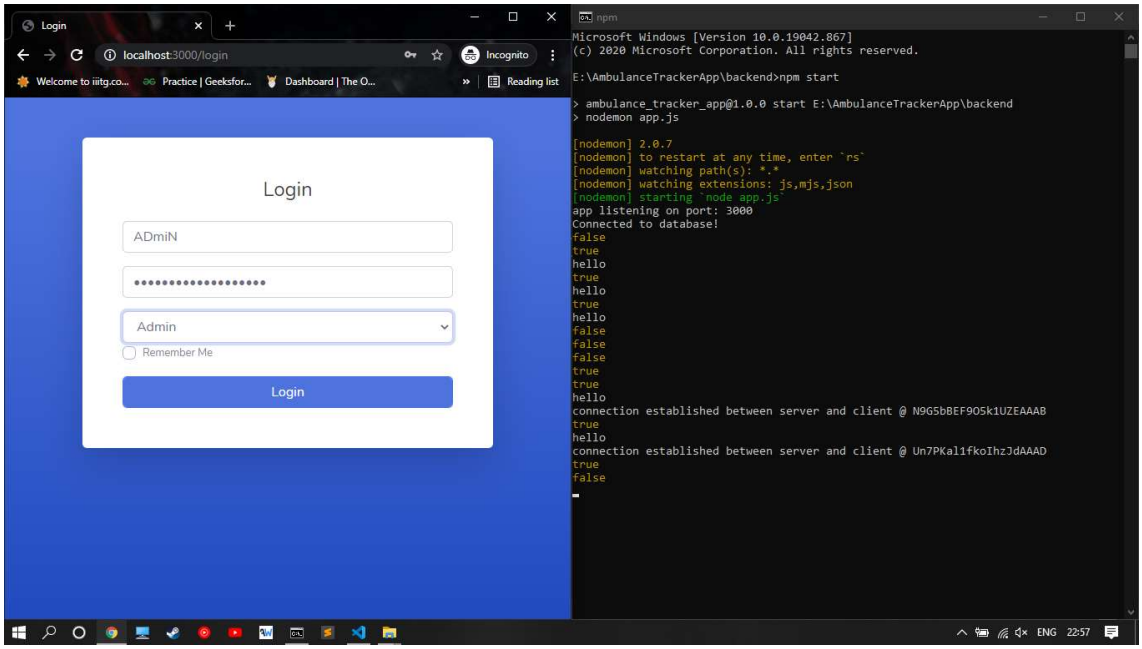
Username : Admin
Expected o/p : Successful Login
Output :



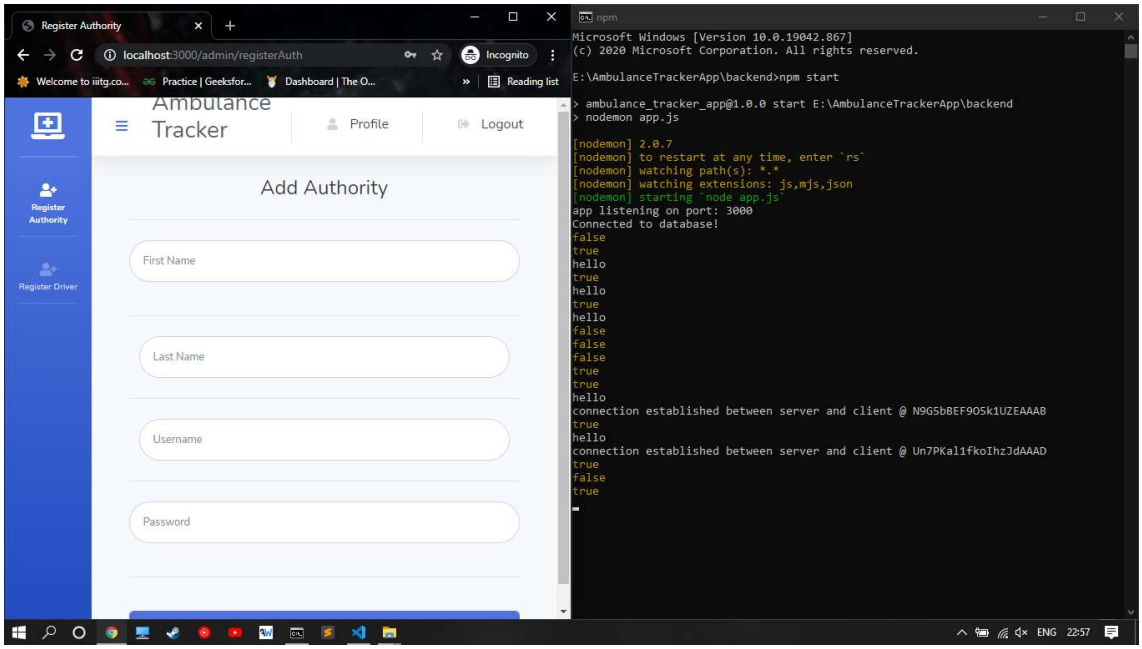
Successful Login :



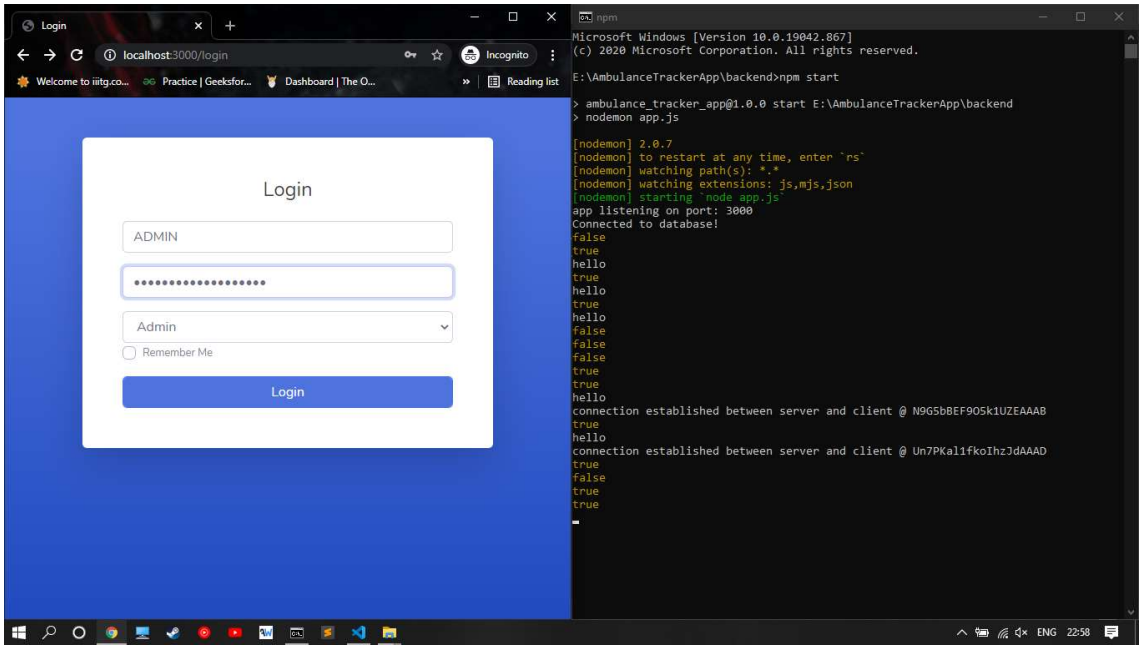
Username : ADmiN
Expected o/p : Successful Login
Output :



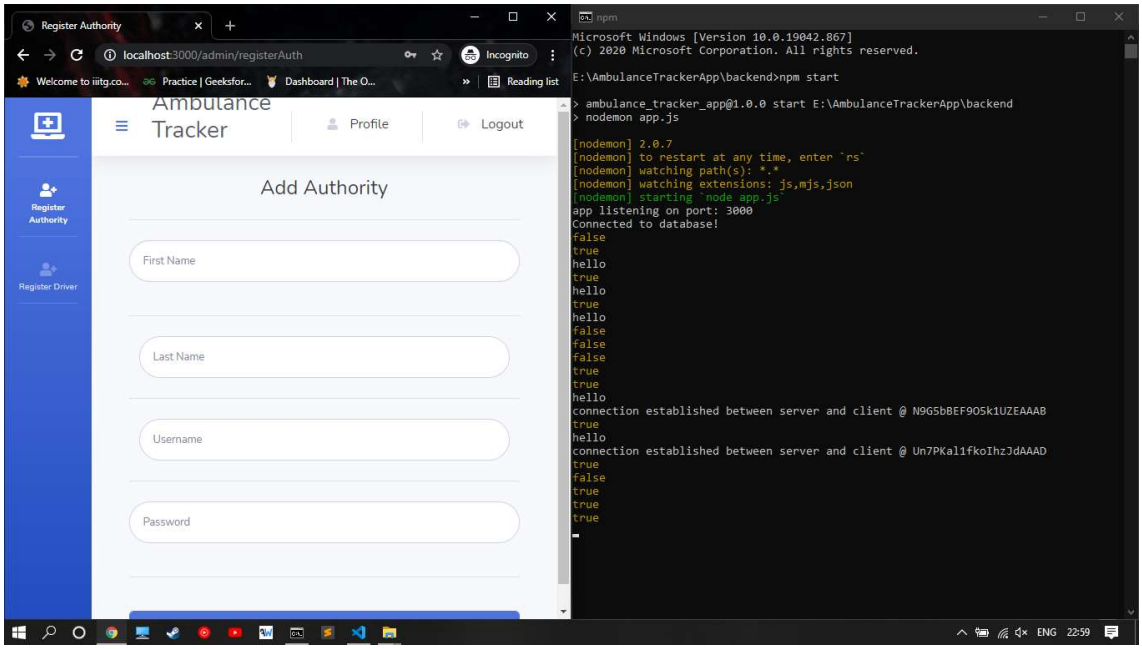
Successful Login :



Username : ADMIN
Expected o/p : Successful Login
Output :

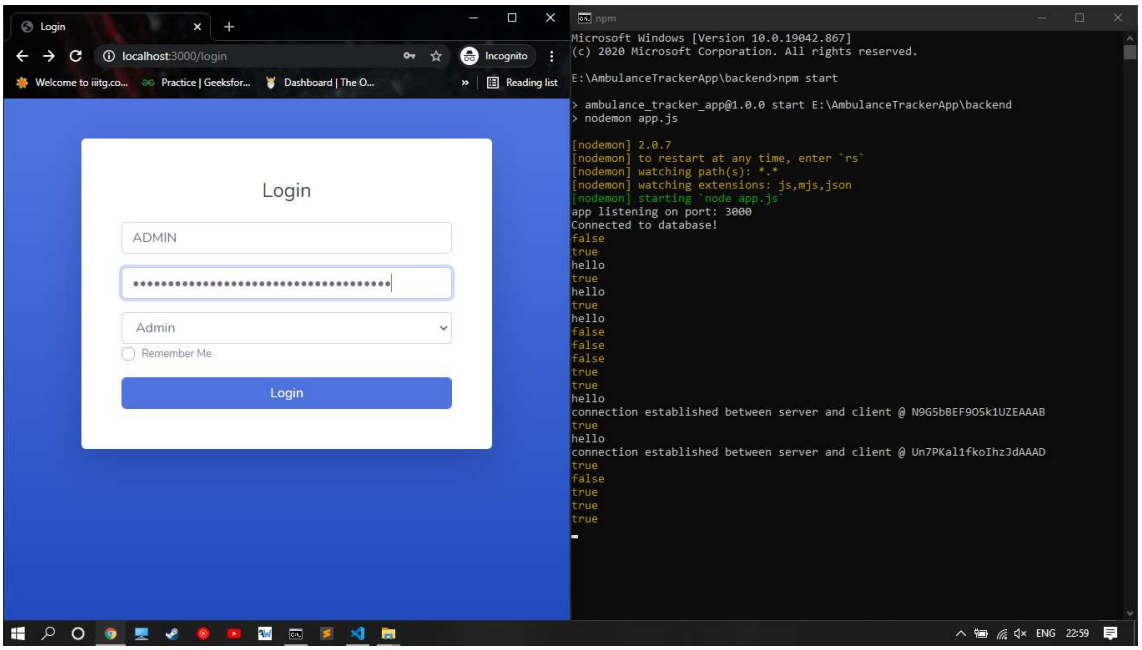


Successful Login :

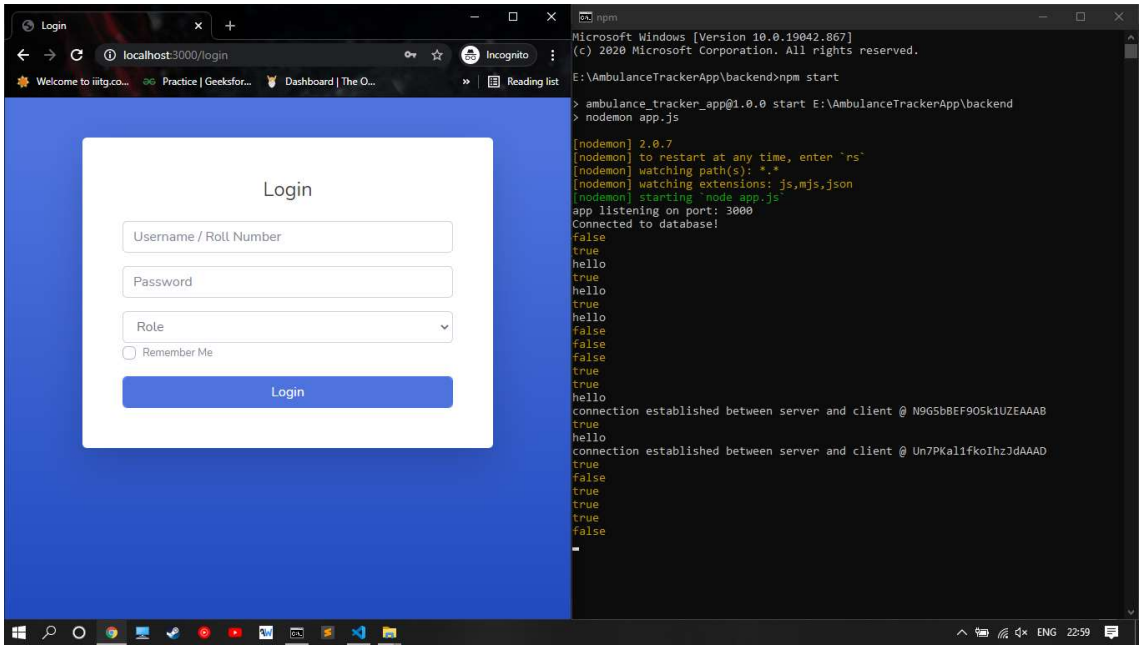


Case 2: Correct username, wrong password

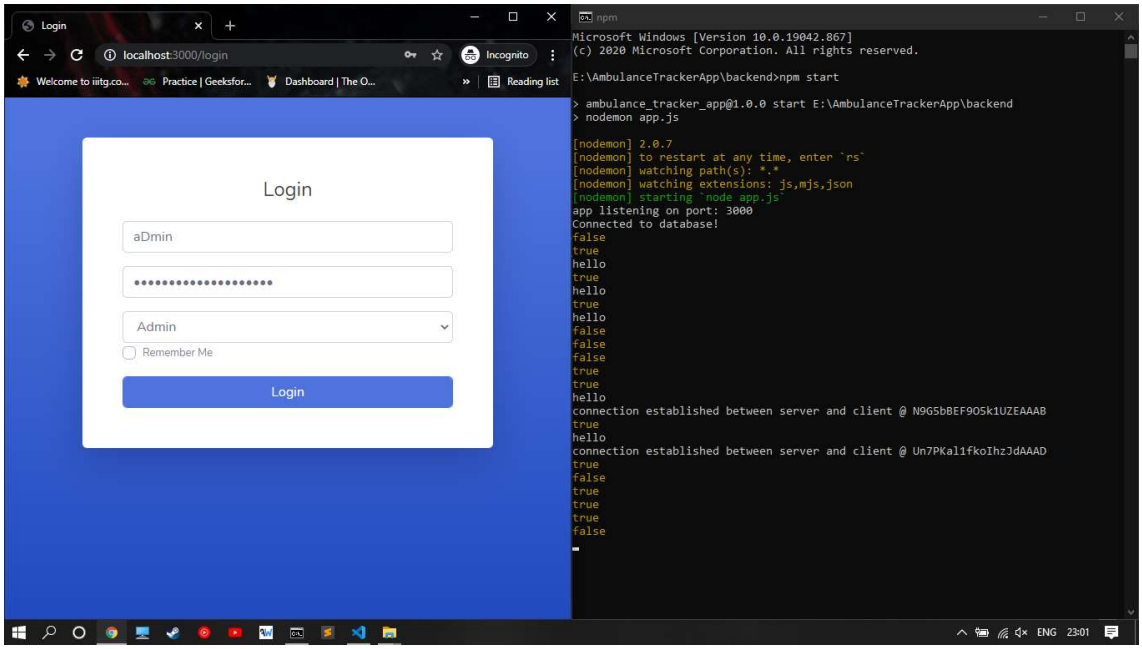
Username : ADMIN
Expected o/p : No Login
Output :



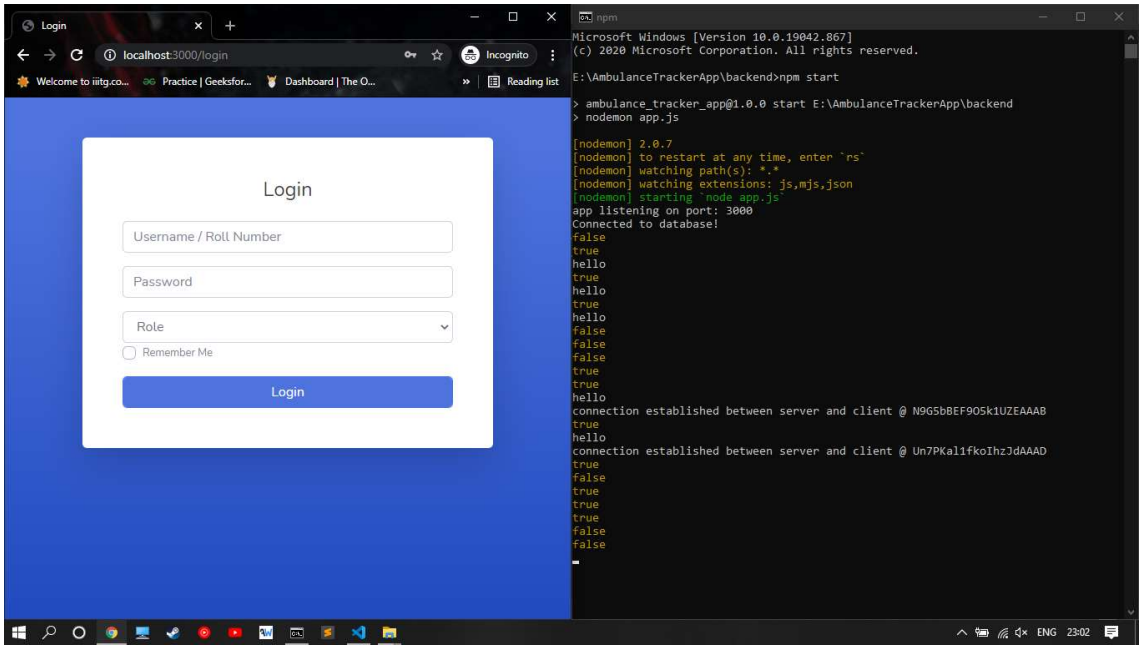
No Login :



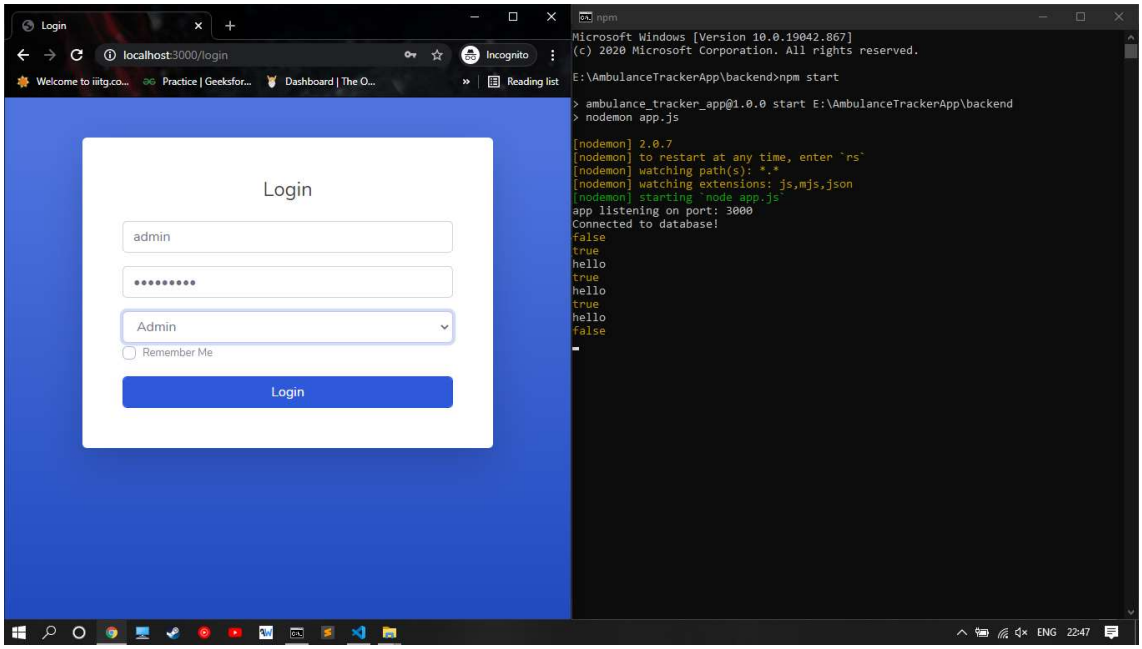
Username : aDmin
Expected o/p : No Login
Output :



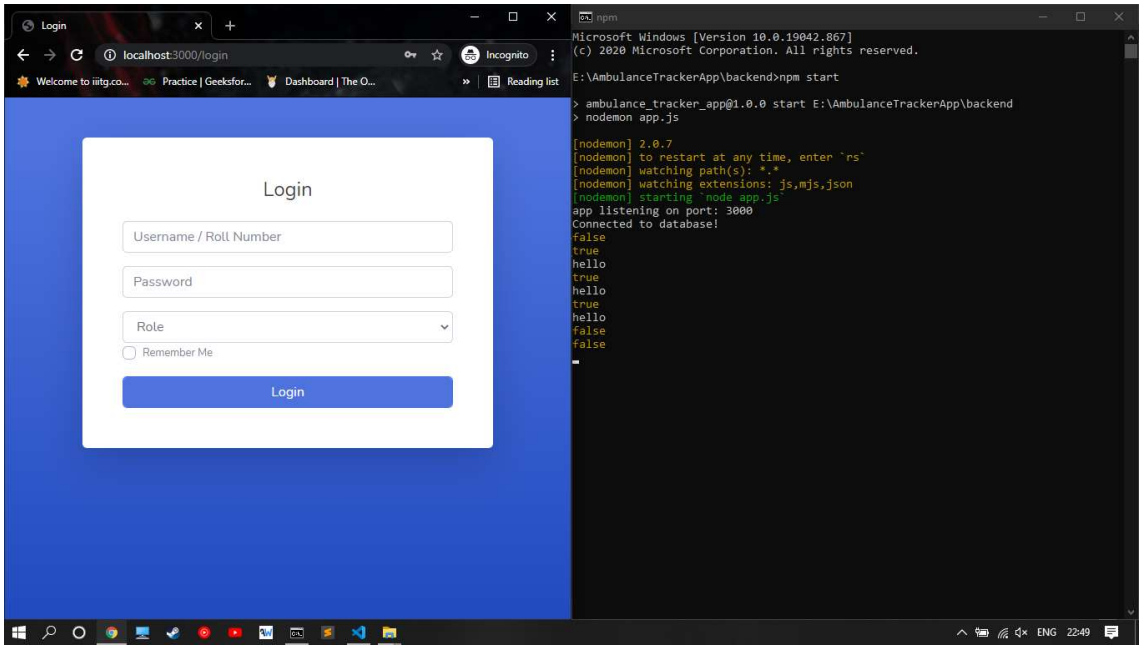
No Login :



Username : admin
Expected o/p : No Login
Output :

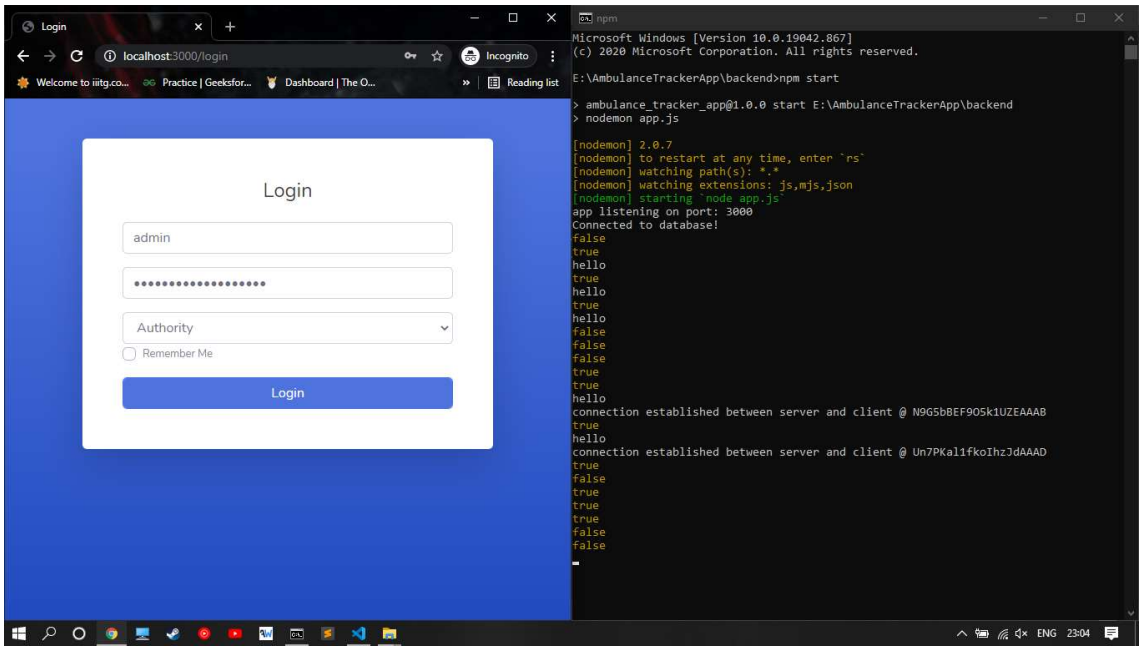


No Login :

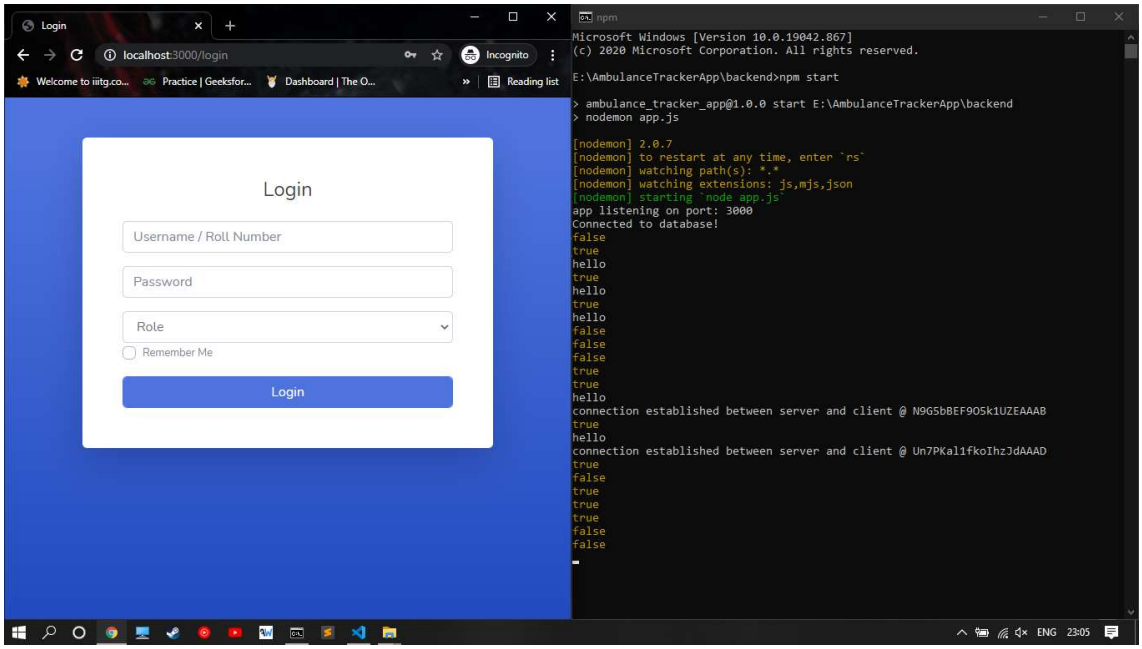


Case 3: Correct username, correct password, incorrect role

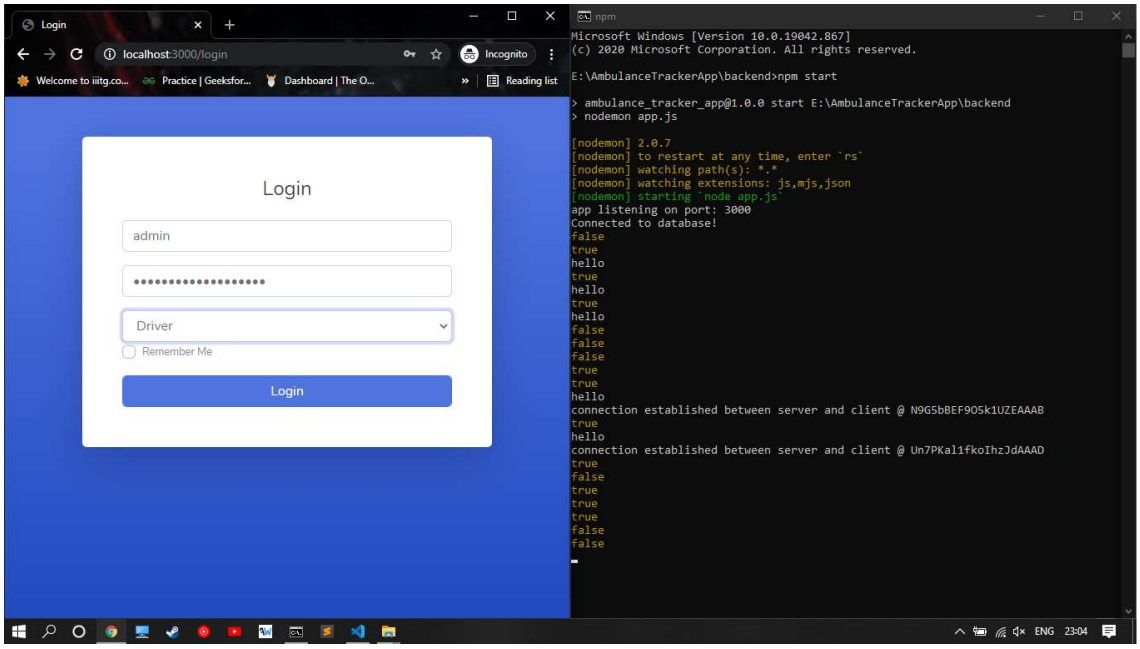
Username : admin
Role : Authority
Expected o/p : No Login
Output :



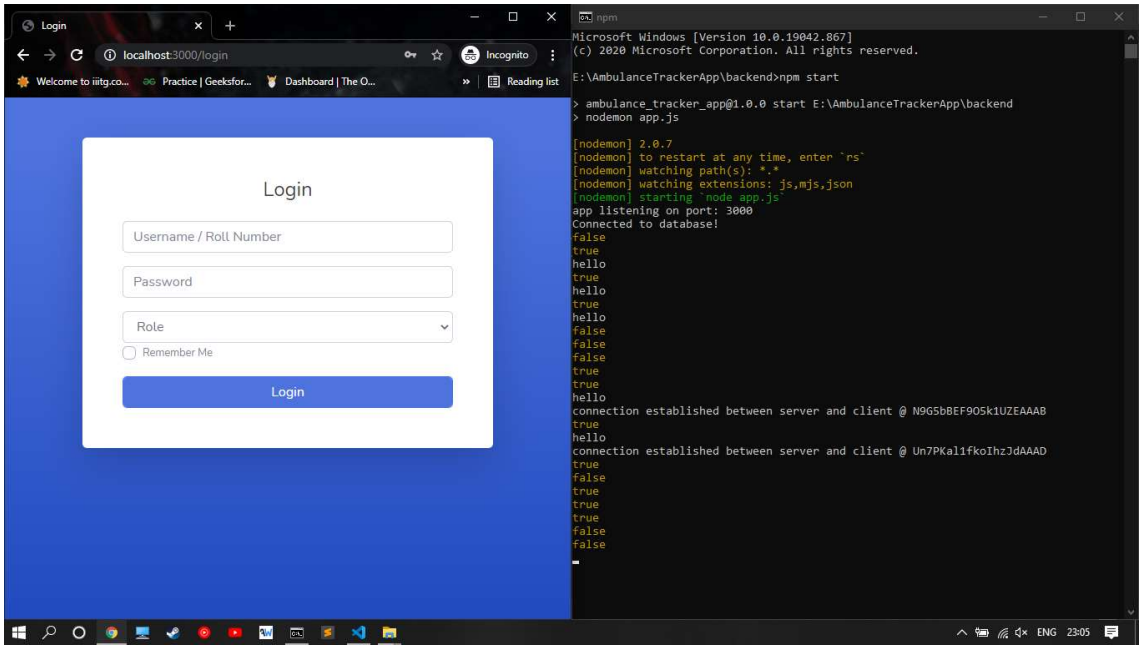
No Login :



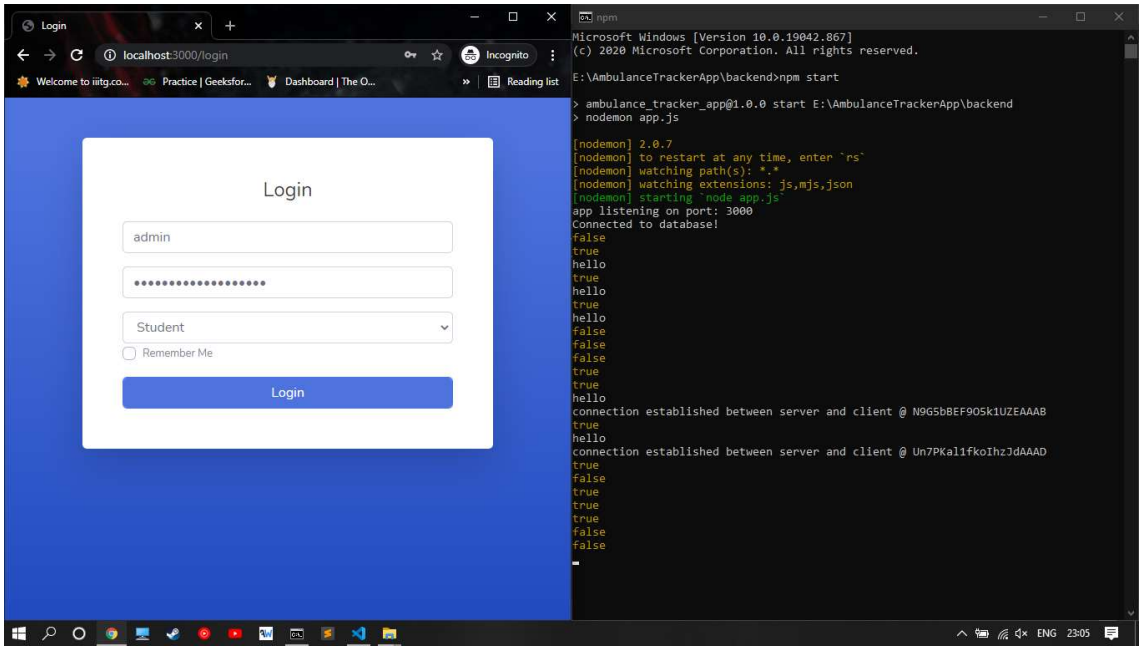
Username : admin
Role : Driver
Expected o/p : No Login
Output :



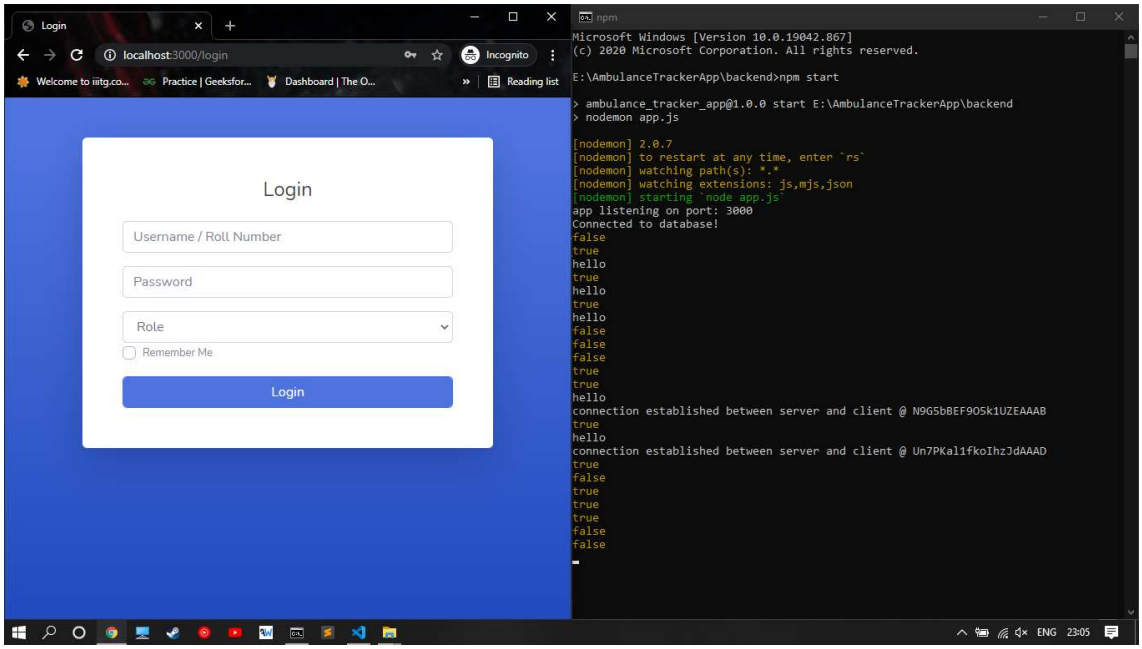
No Login :



Username : admin
Role : Student
Expected o/p : No Login
Output :



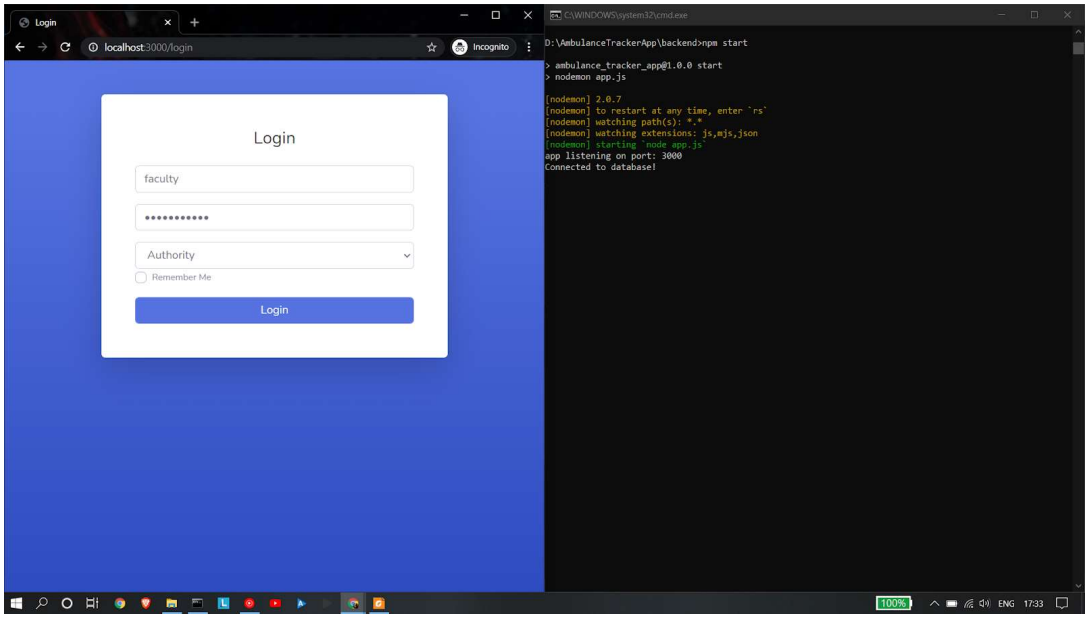
No Login :



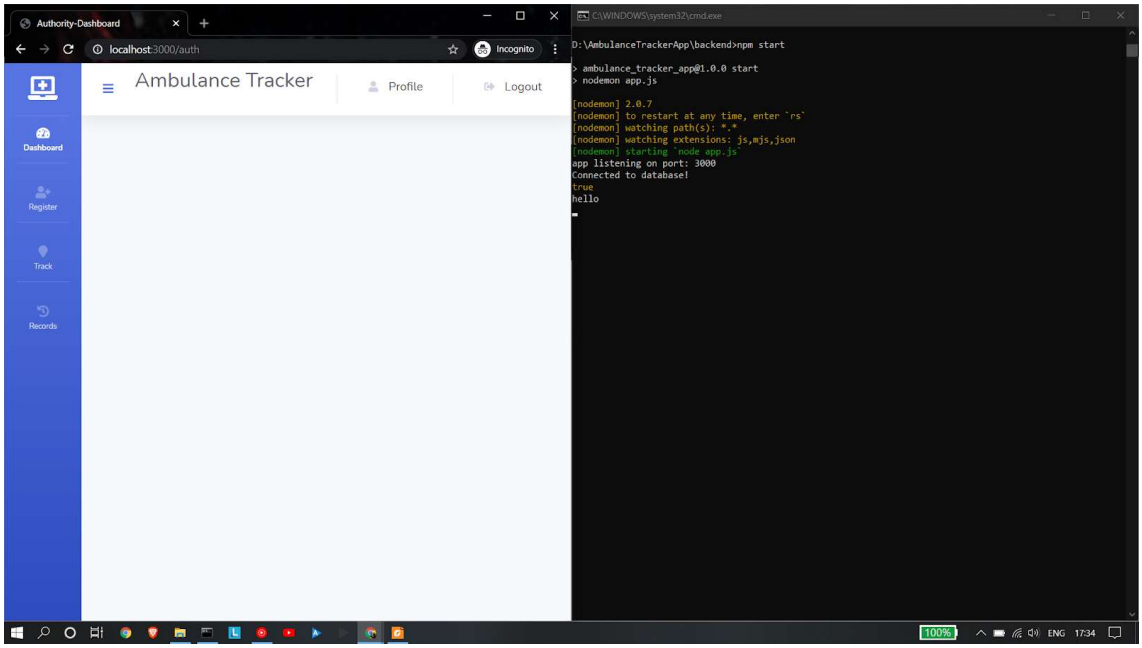
Login for Authority-

Case 1: Successful login of the authority

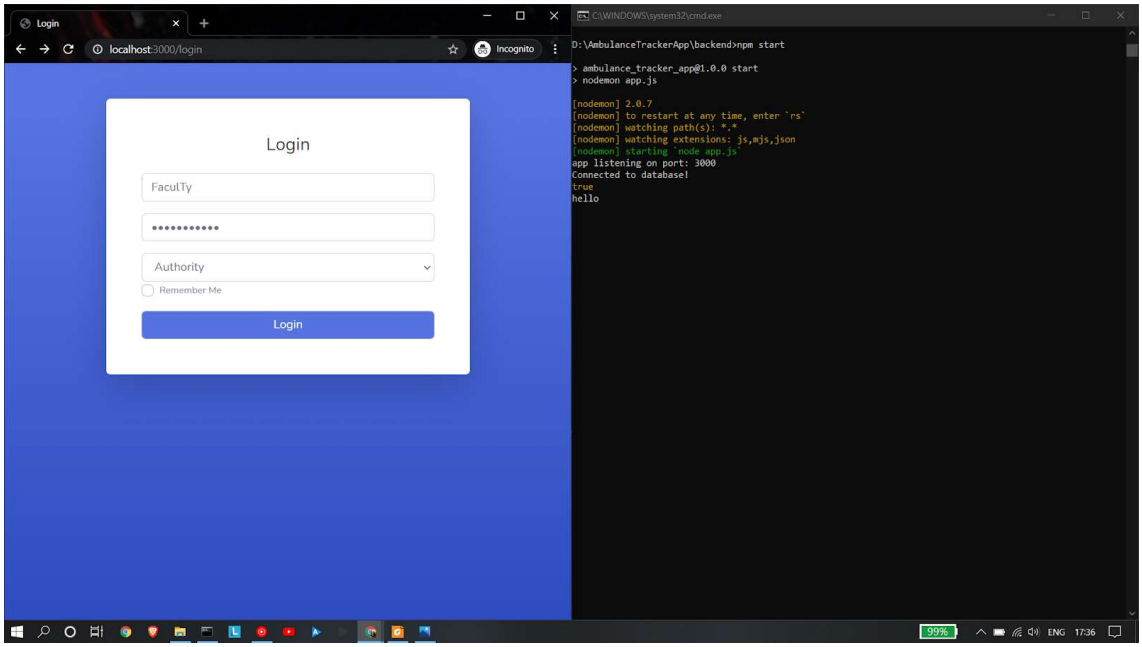
Username : faculty
Expected o/p : Successful Login
Output :



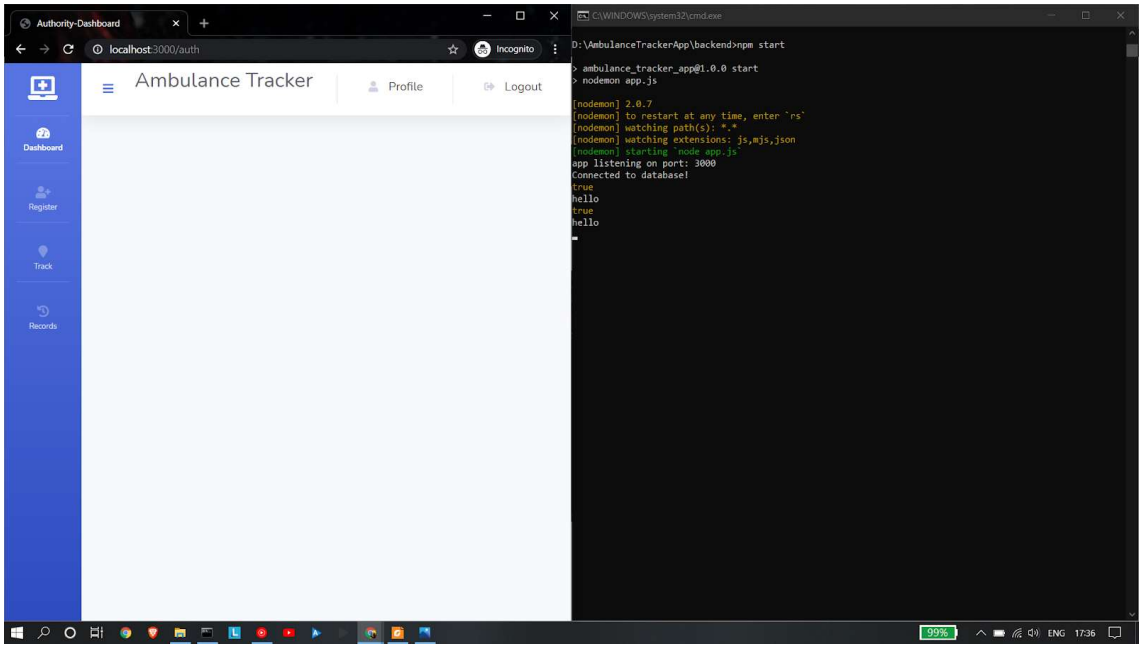
Successful Login :



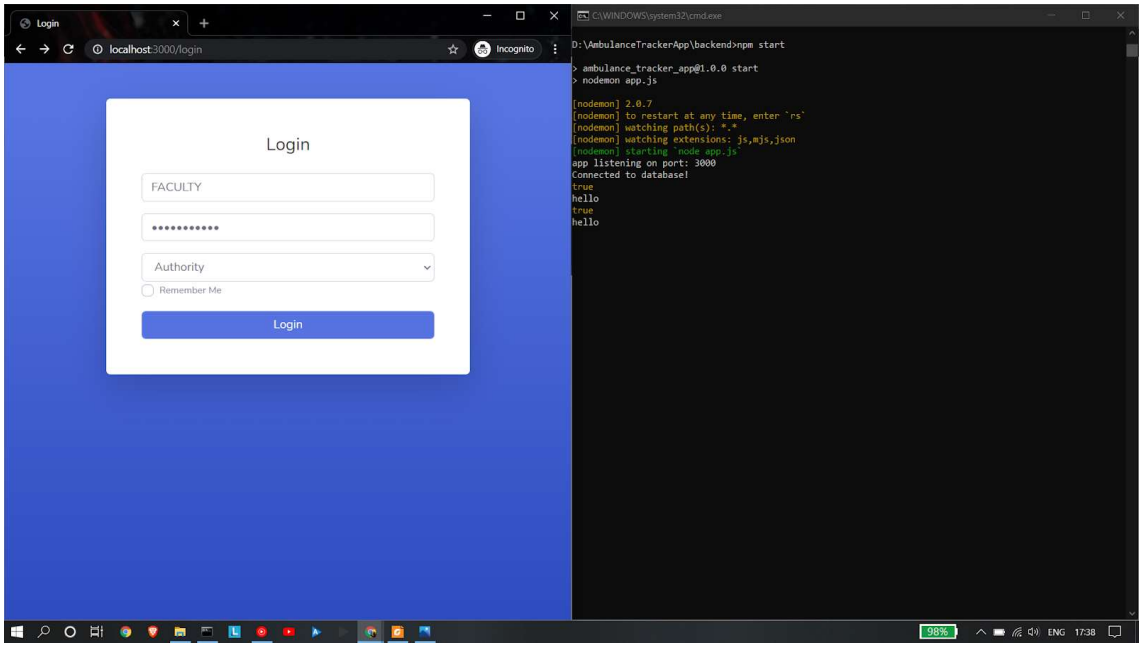
Username : FaculTy
Expected o/p : Successful Login
Output :



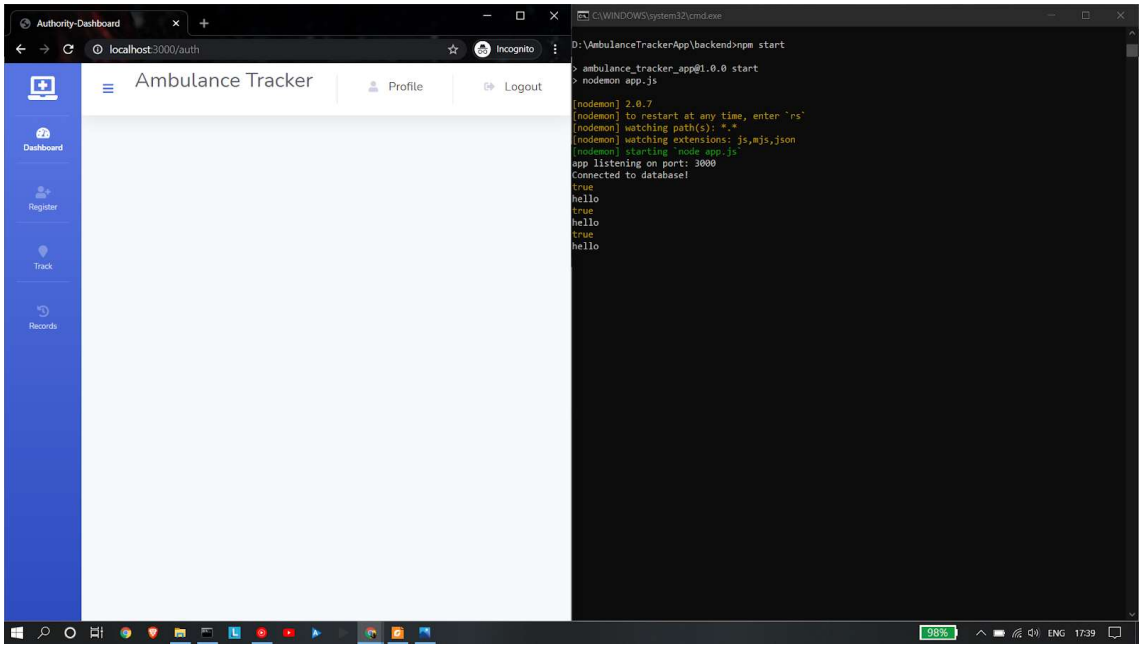
Successful Login :



Username : FACULTY
Expected o/p : Successful Login
Output :

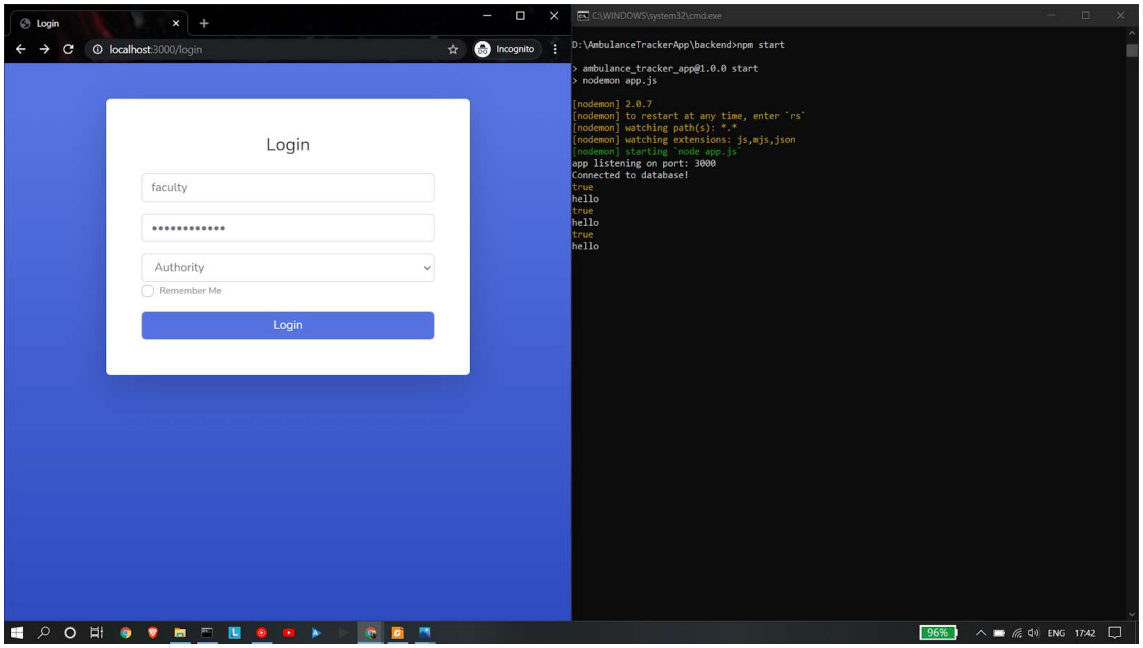


Successful Login :

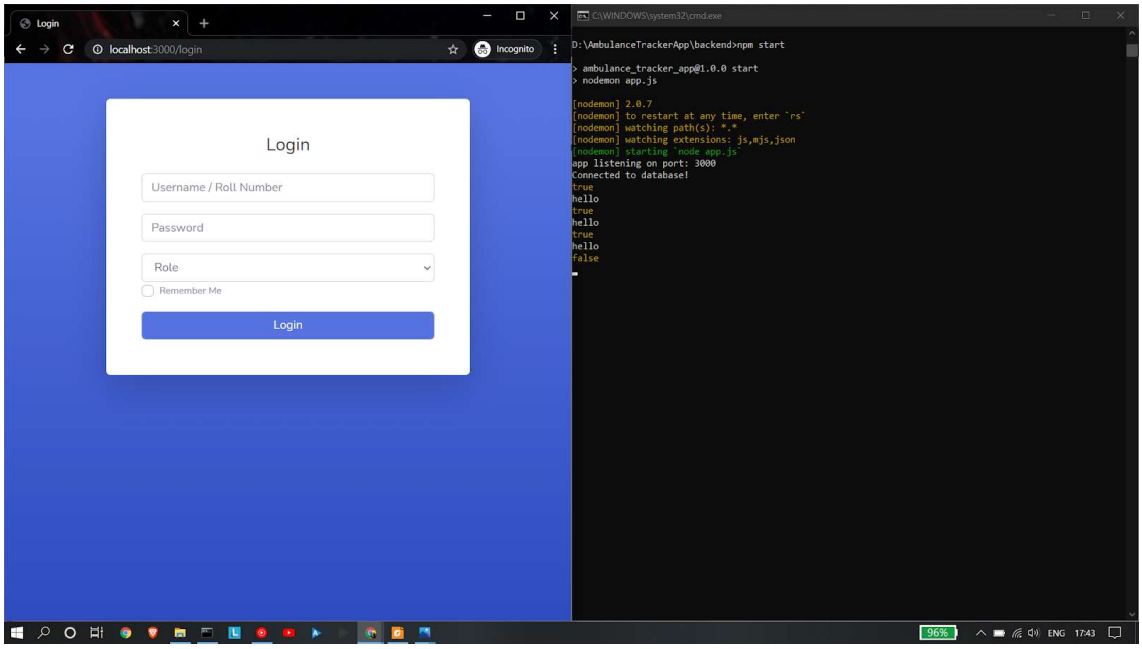


Case 2: Correct username, wrong password

Username : faculty
Expected o/p : NoLogin
Output :

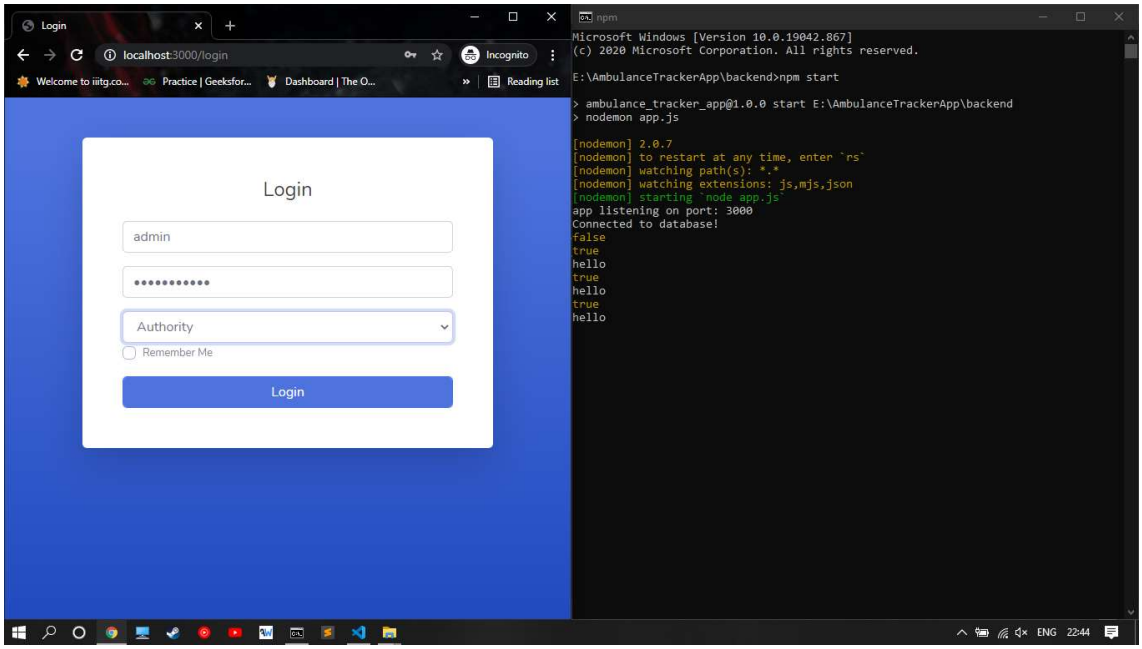


No Login :

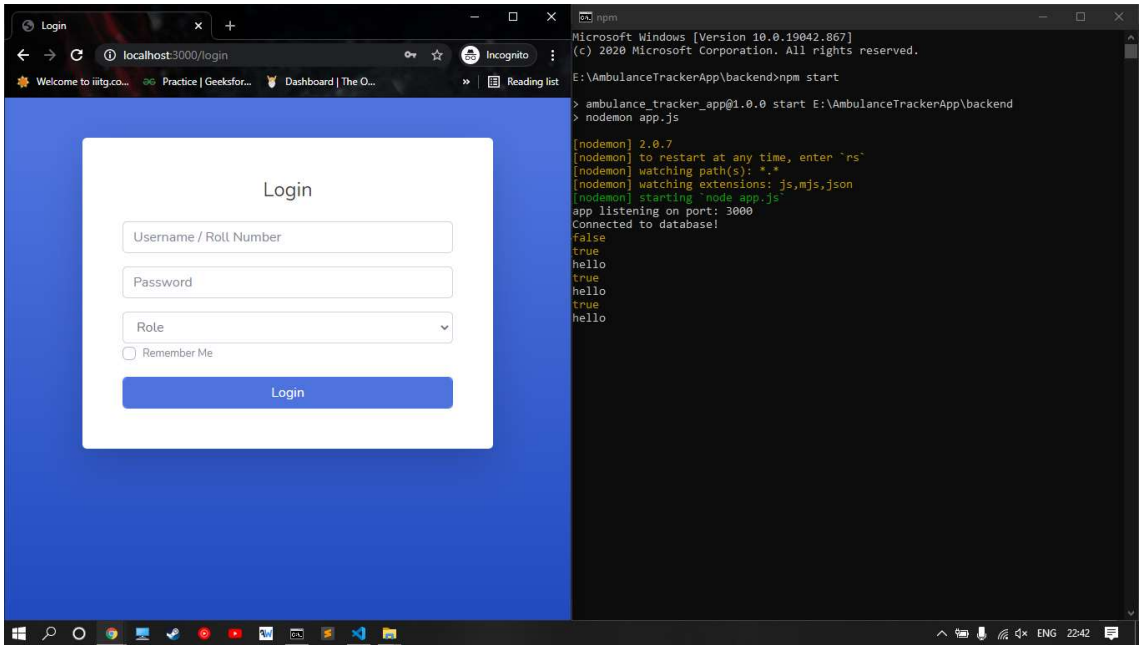


Case 3: Incorrect username, correct password and role

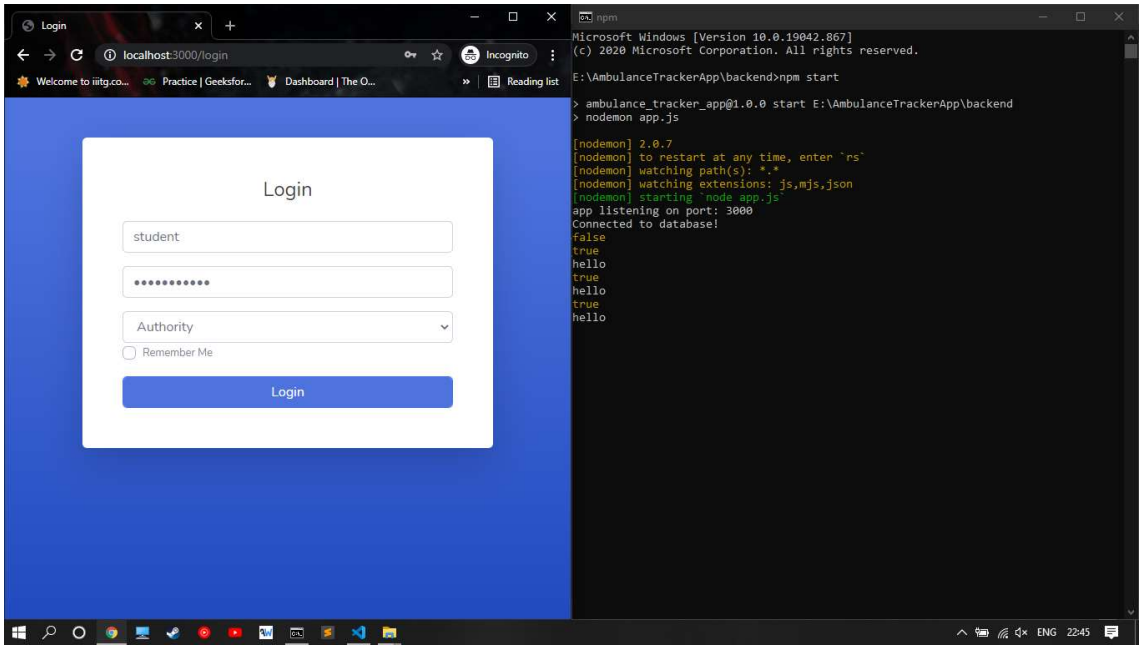
Username : admin
Expected o/p : No Login
Output :



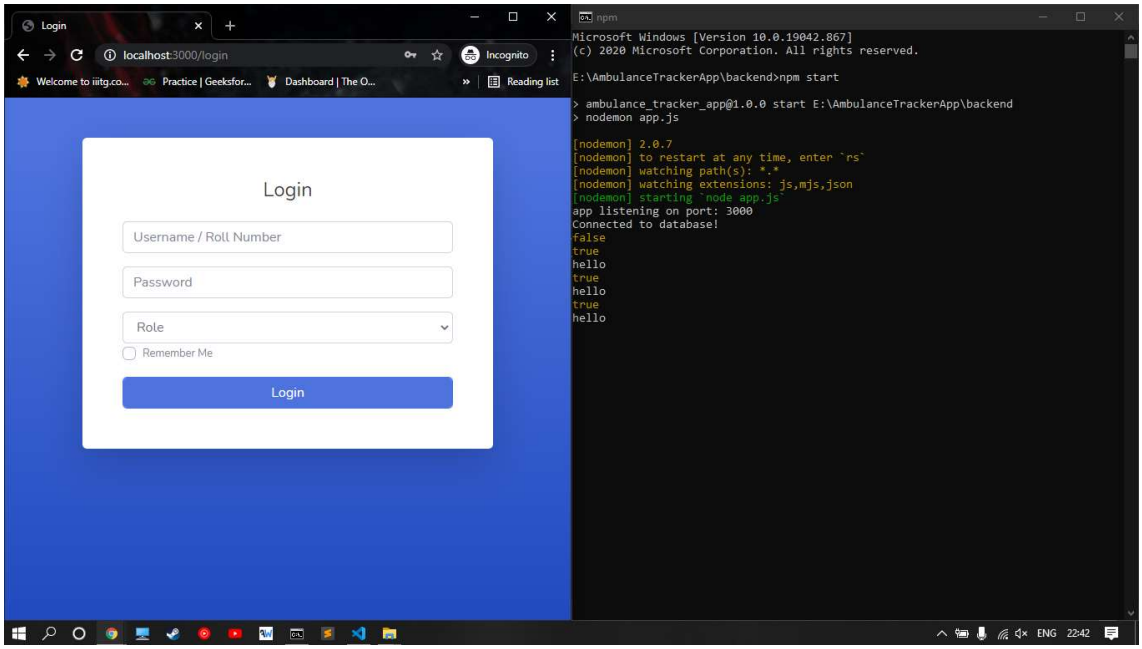
No Login :



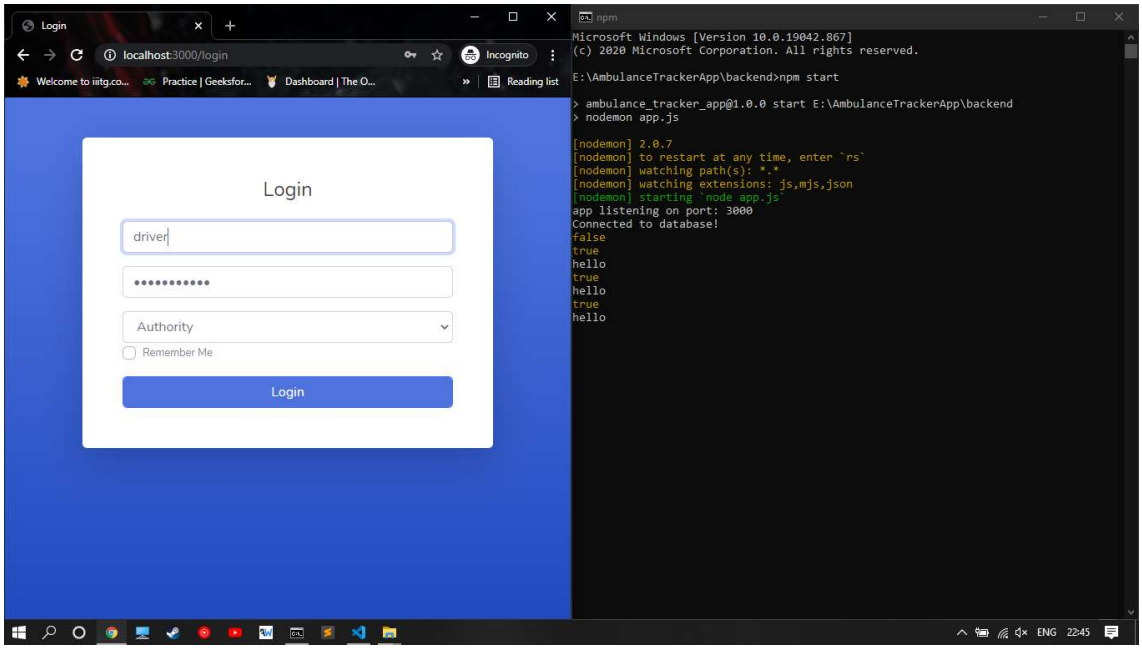
Username : student
Expected o/p : No Login
Output :



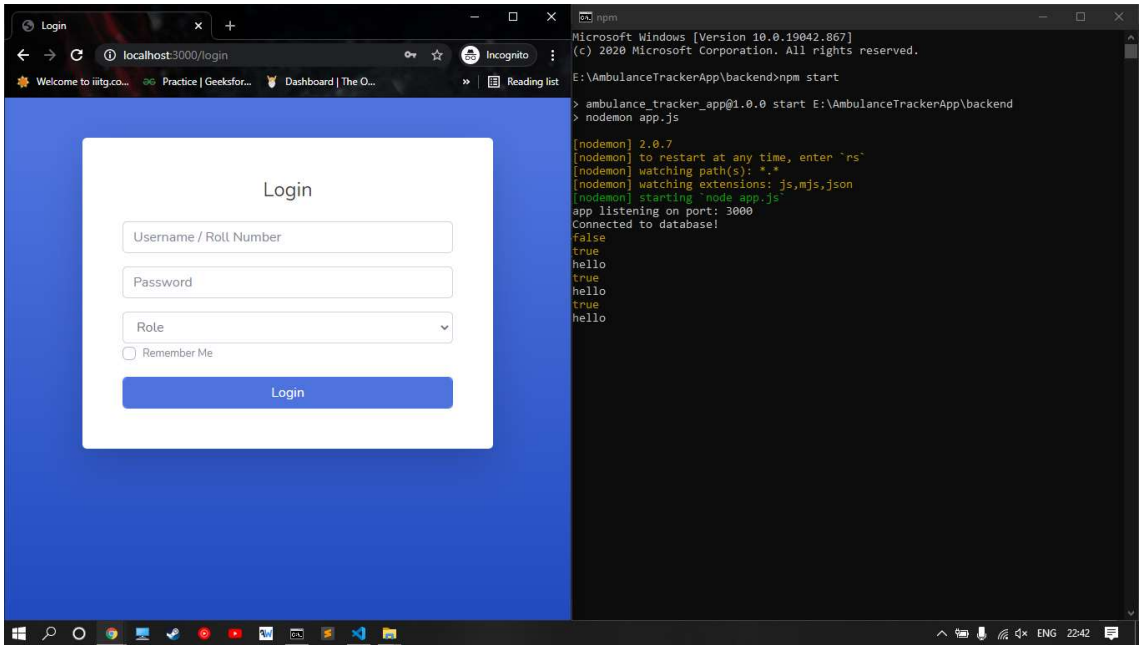
No Login :



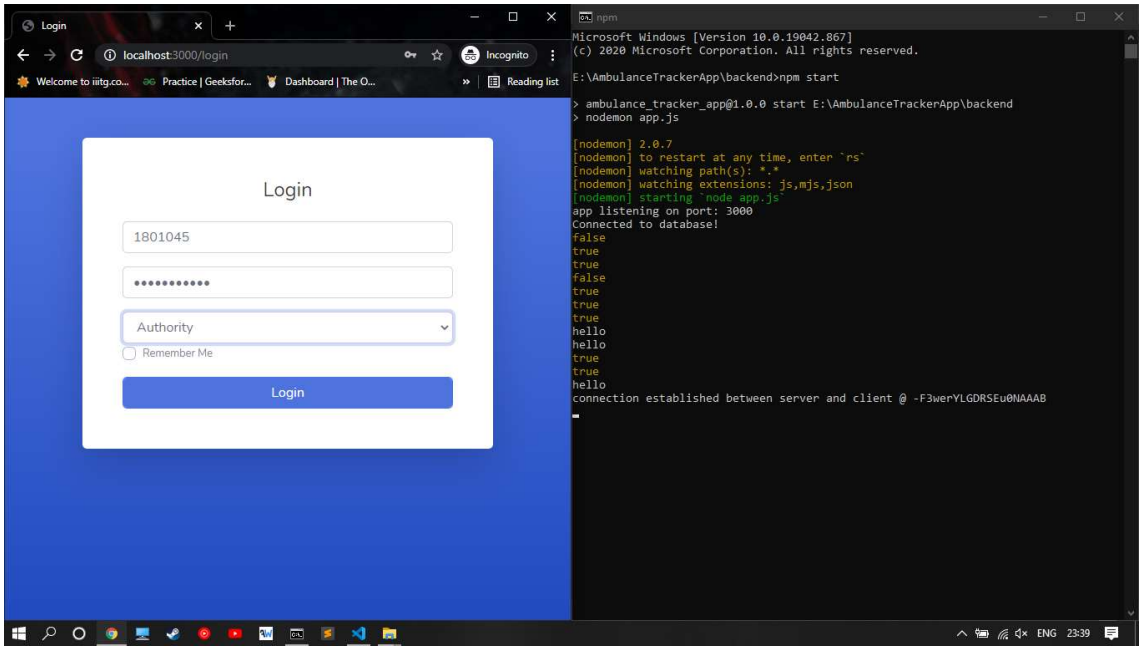
Username : driver
Expected o/p : No Login
Output :



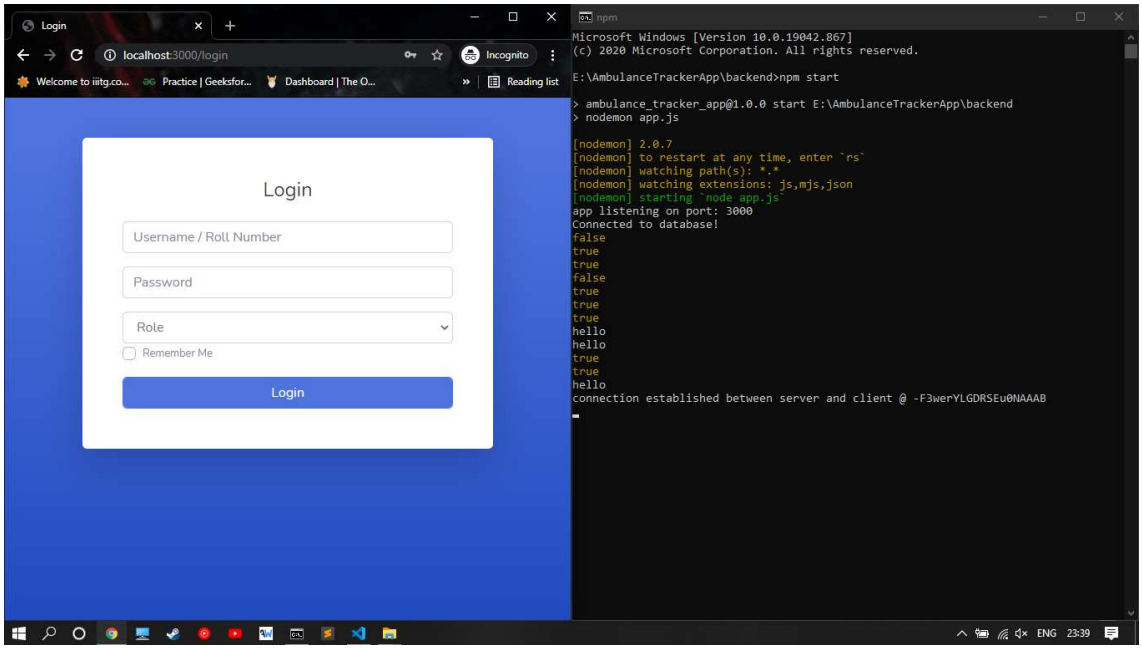
No Login :



Username / Roll number : 1801045
Expected o/p : No Login
Output :

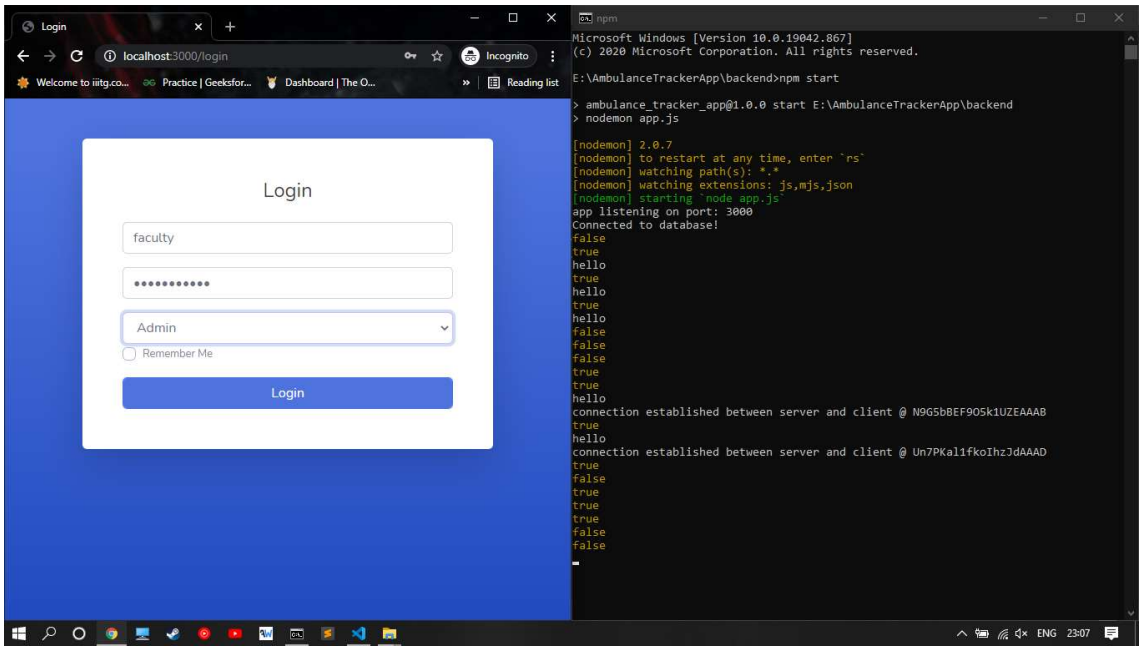


No Login :

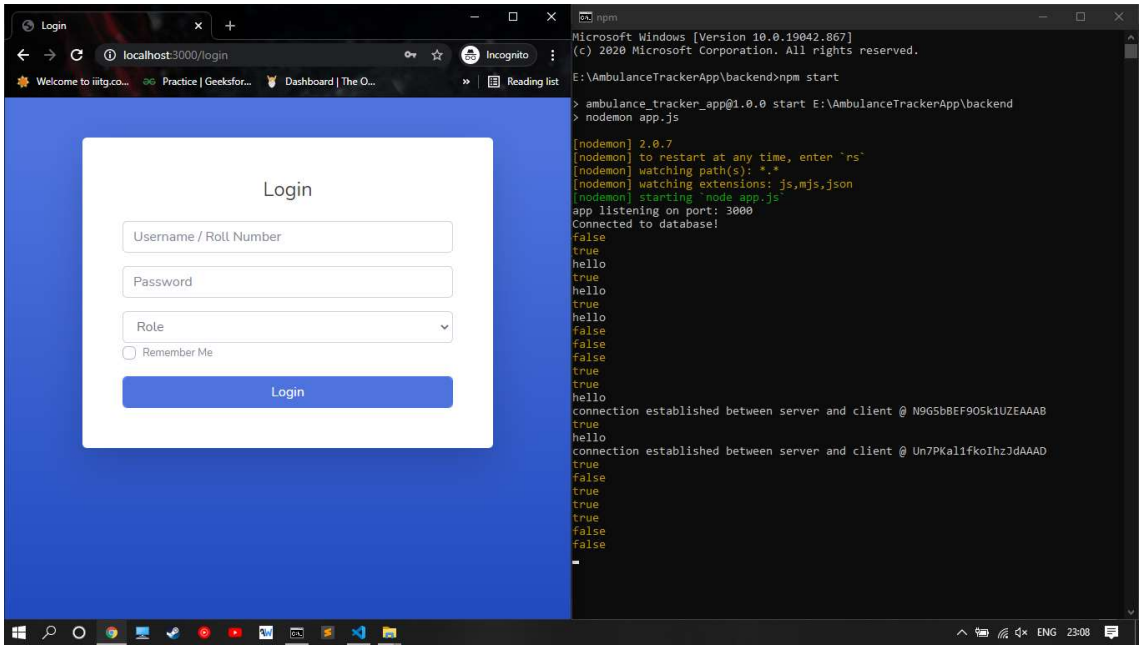


Case 4: Correct username, correct password but Incorrect role

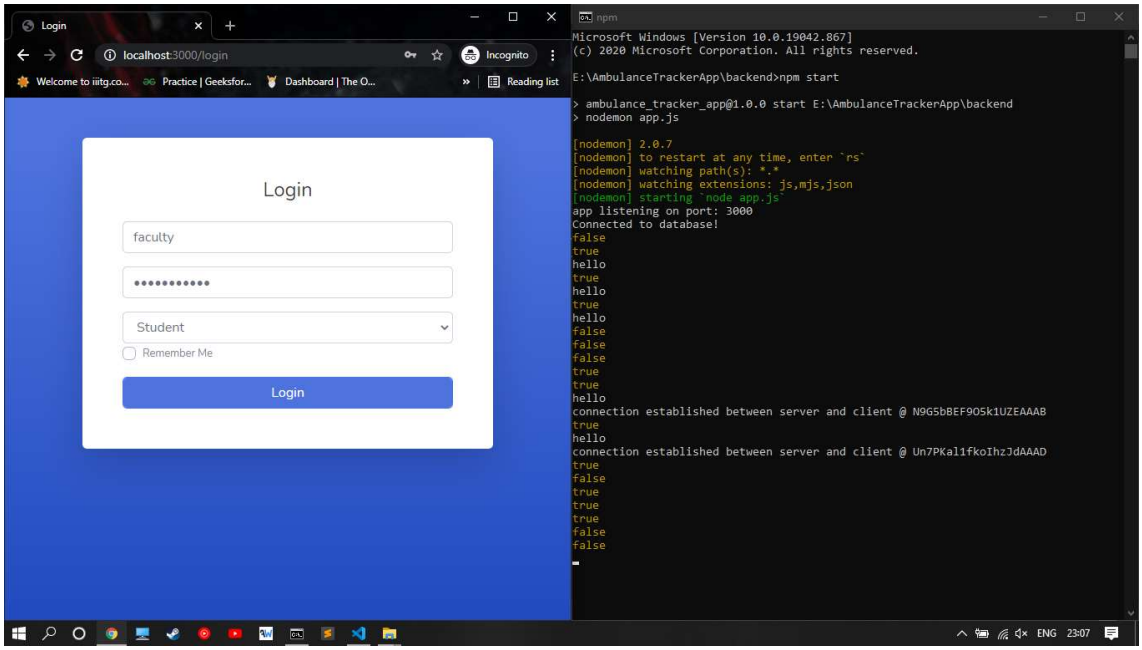
Username : faculty
Role : Admin
Expected o/p : No Login
Output :



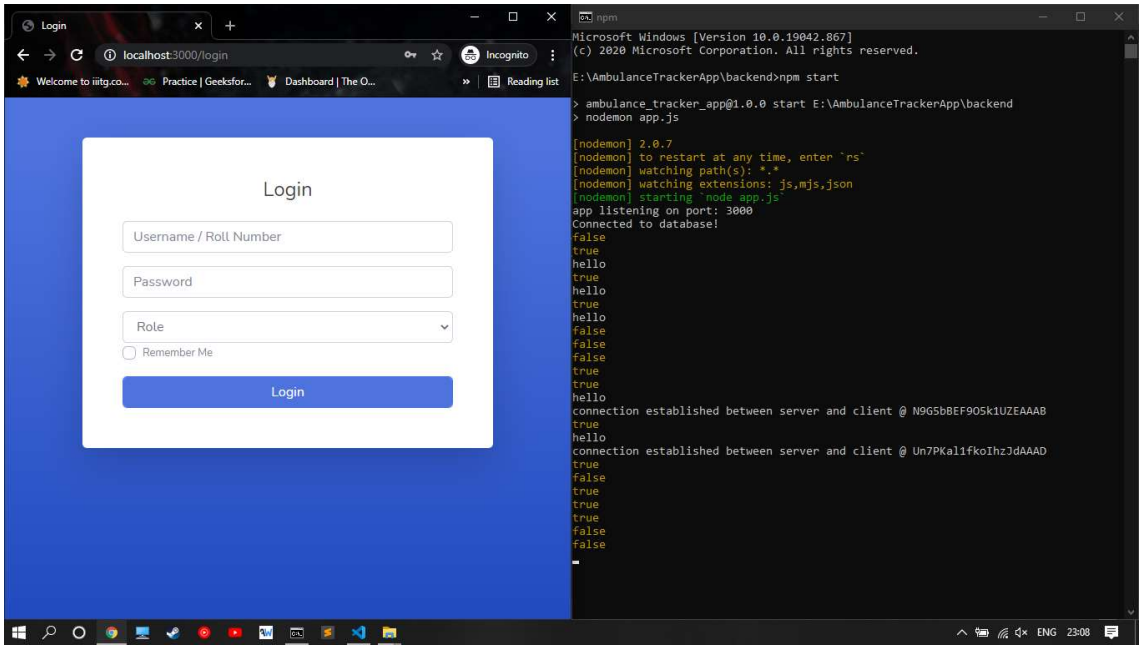
No Login :



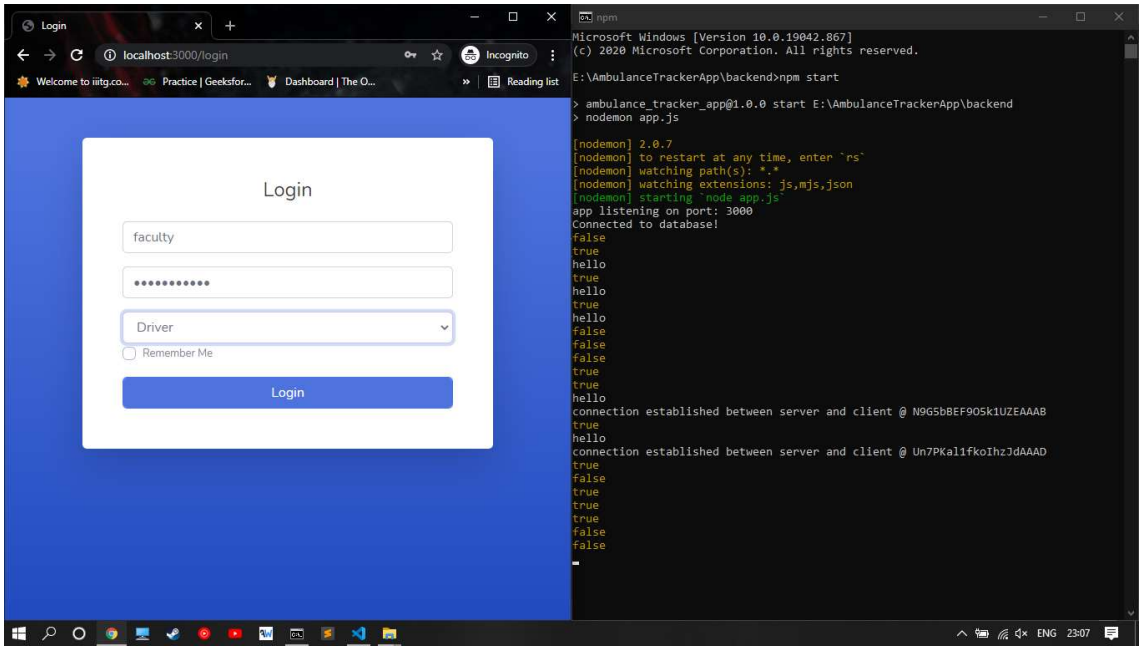
Username : faculty
Role : Student
Expected o/p : No Login
Output :



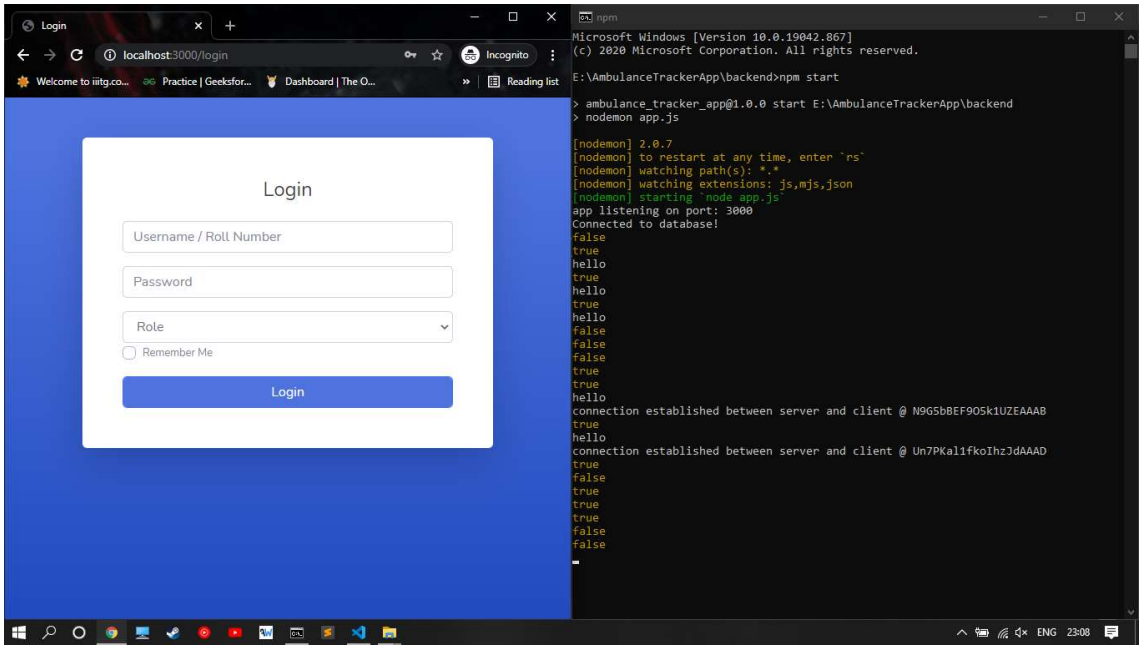
No Login :



Username : faculty
Role : Driver
Expected o/p : No Login
Output :



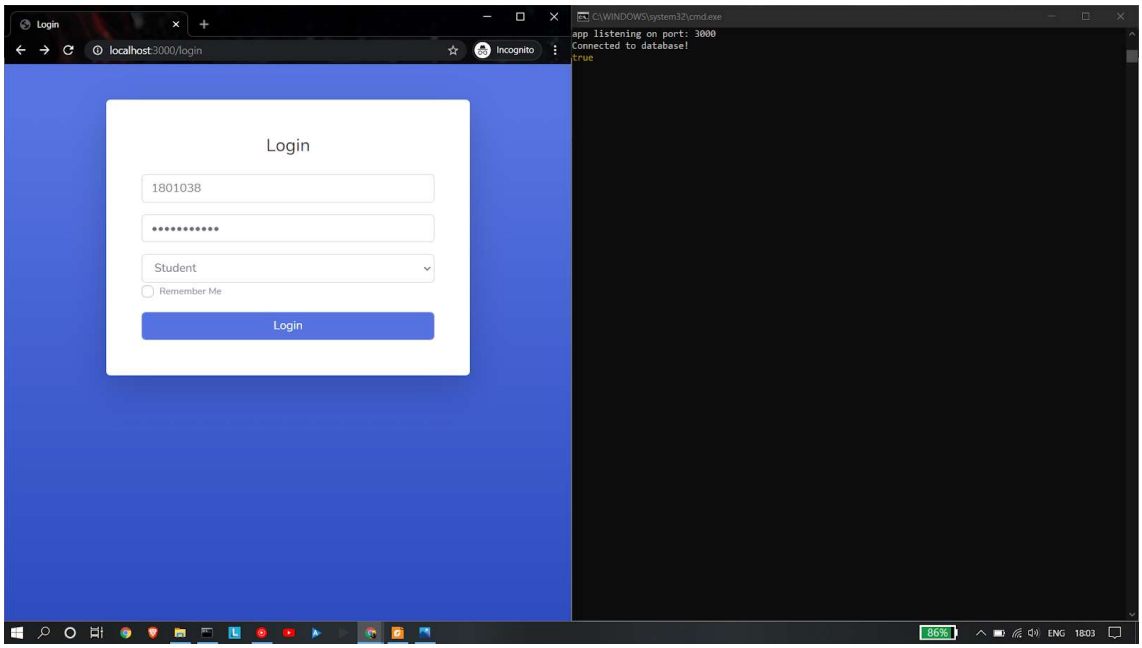
No Login :



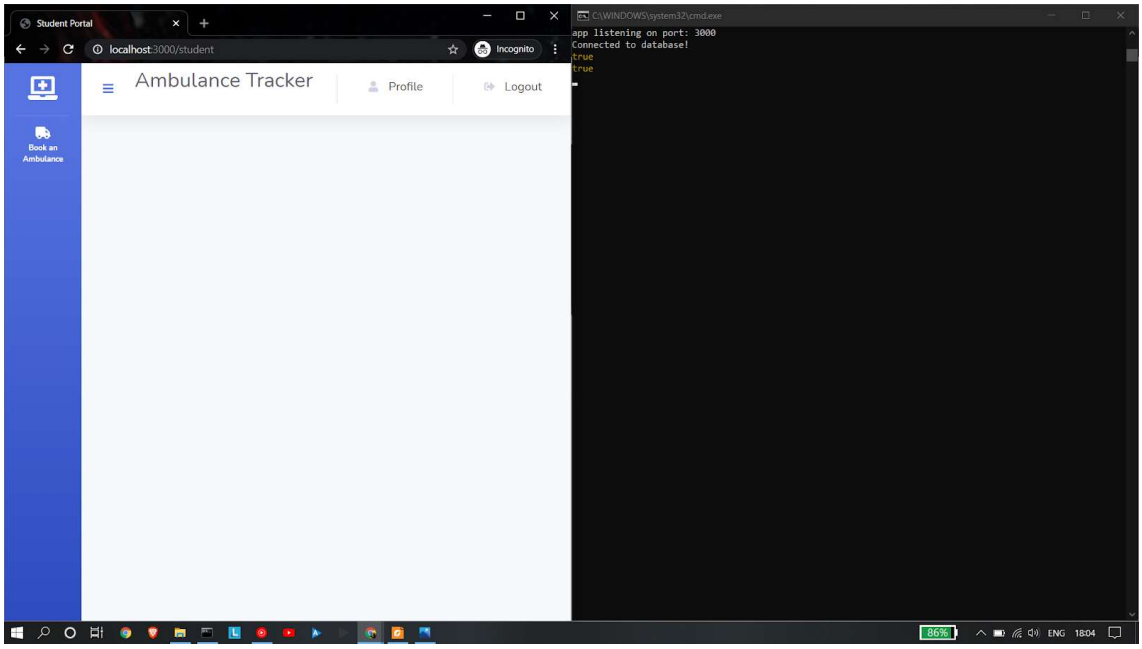
Login for Student-

Case 1: Successful login of the student

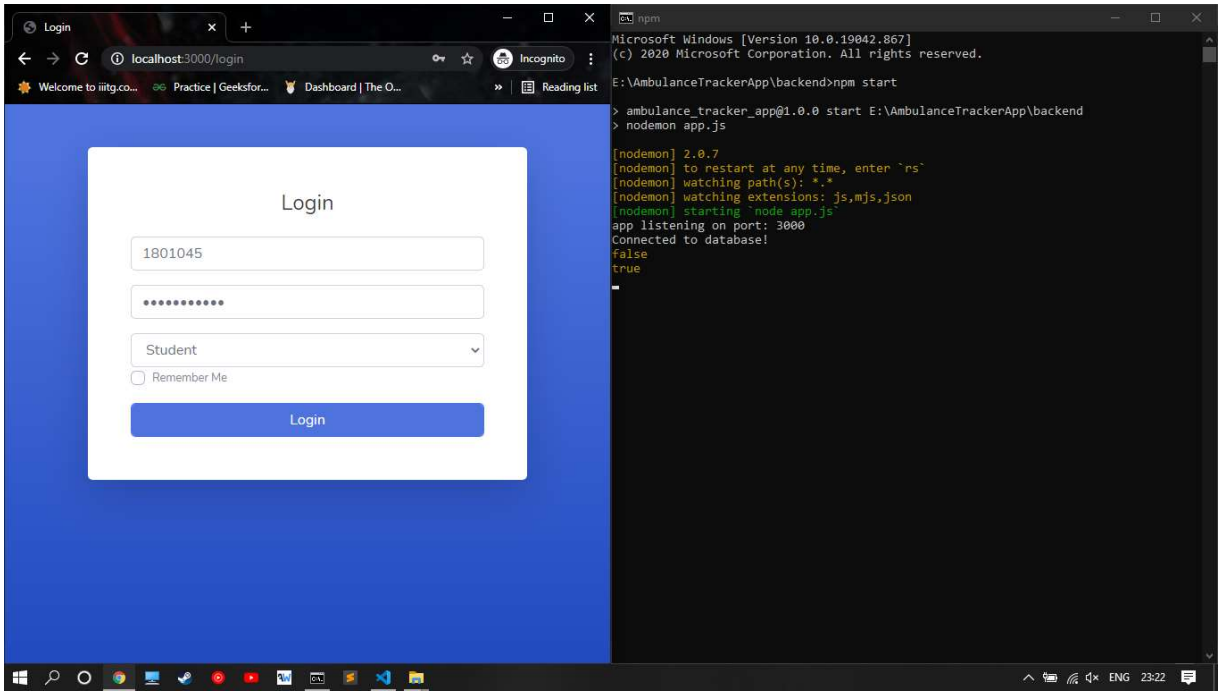
Username / Roll Number : 1801038
Expected o/p : Successful Login
Output :



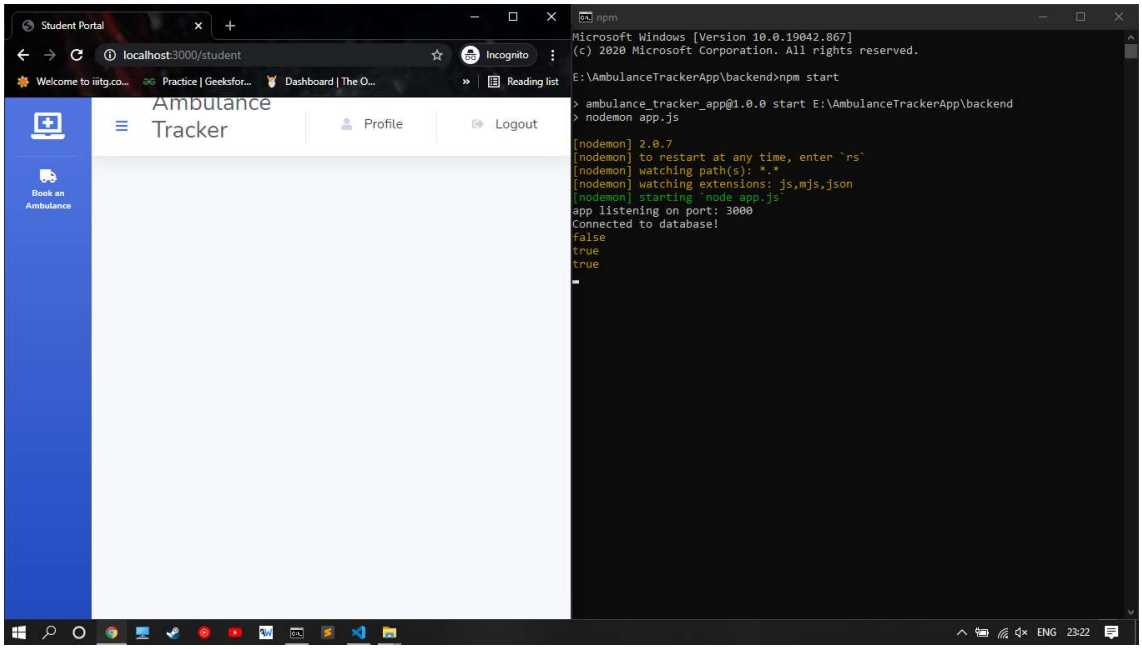
Successful Login :



Username / Roll Number : 1801045
Expected o/p : Successful Login
Output :

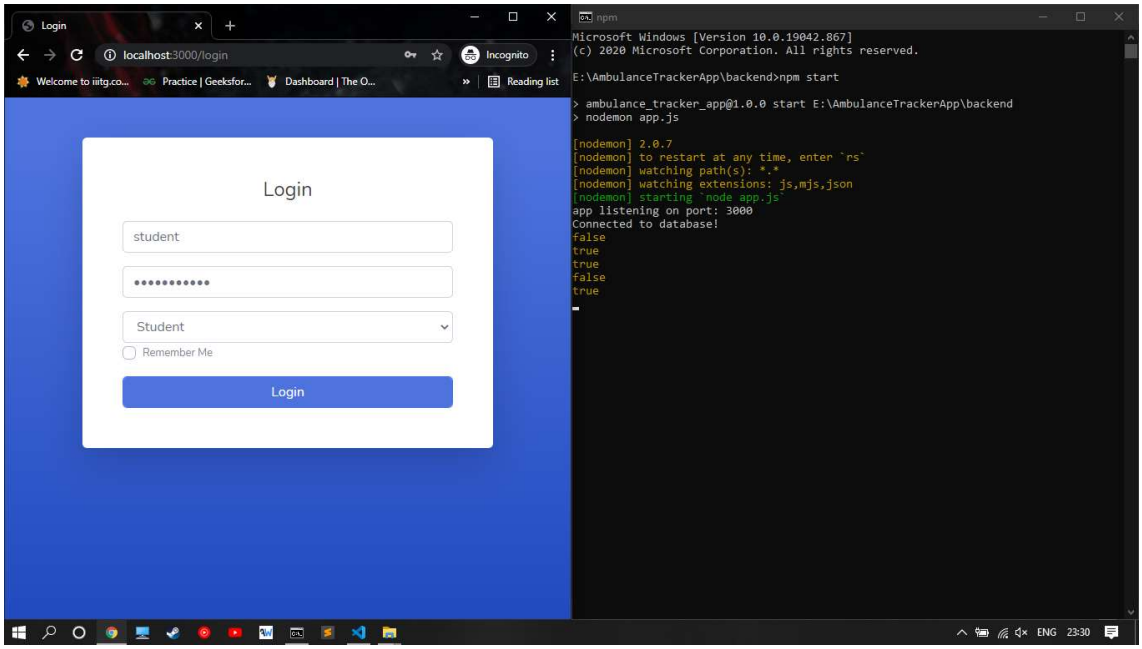


Successful Login :

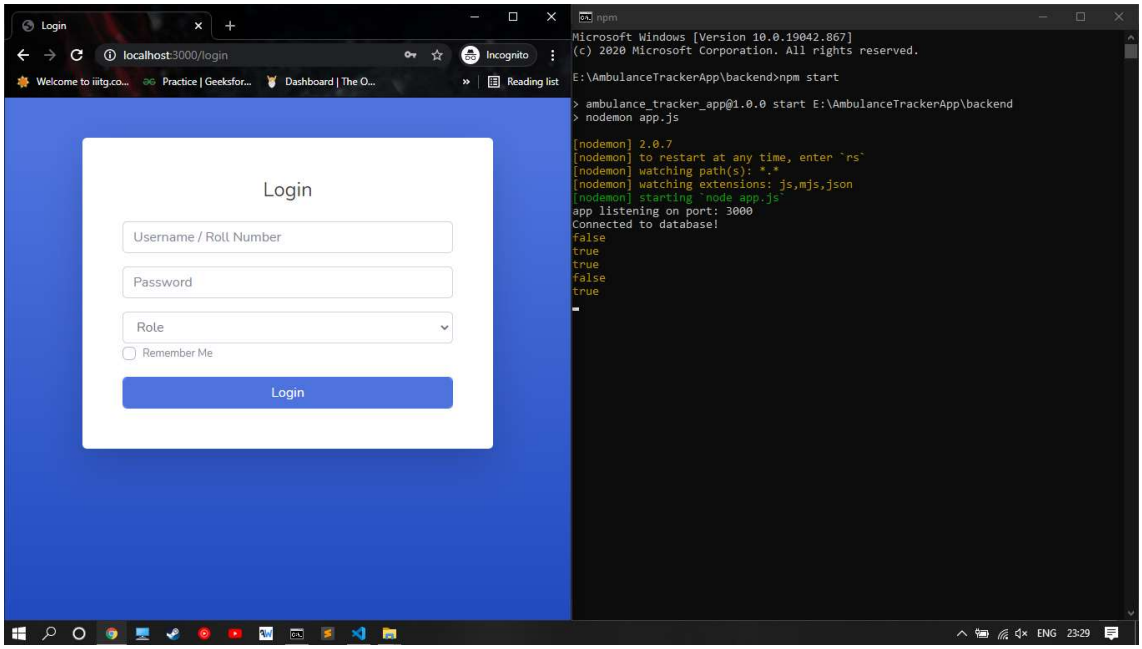


Case 2: Wrong Username / Roll Number, correct password and role

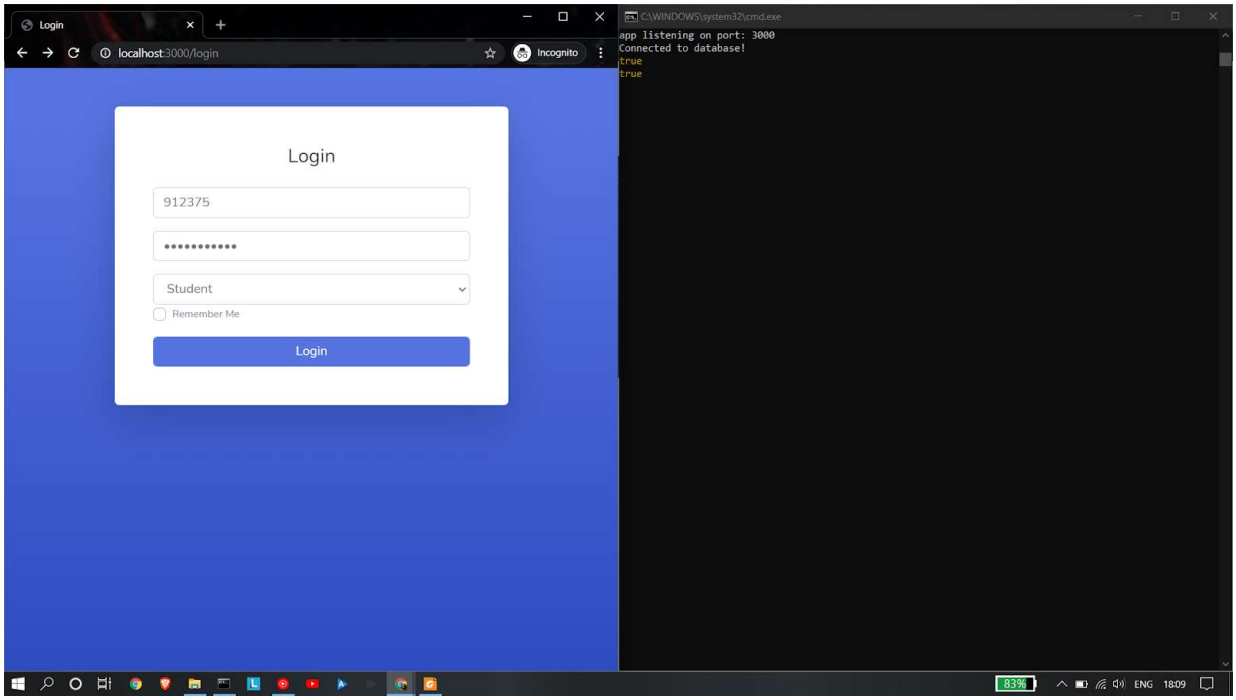
Username / Roll Number : student
Expected o/p : No Login
Output :



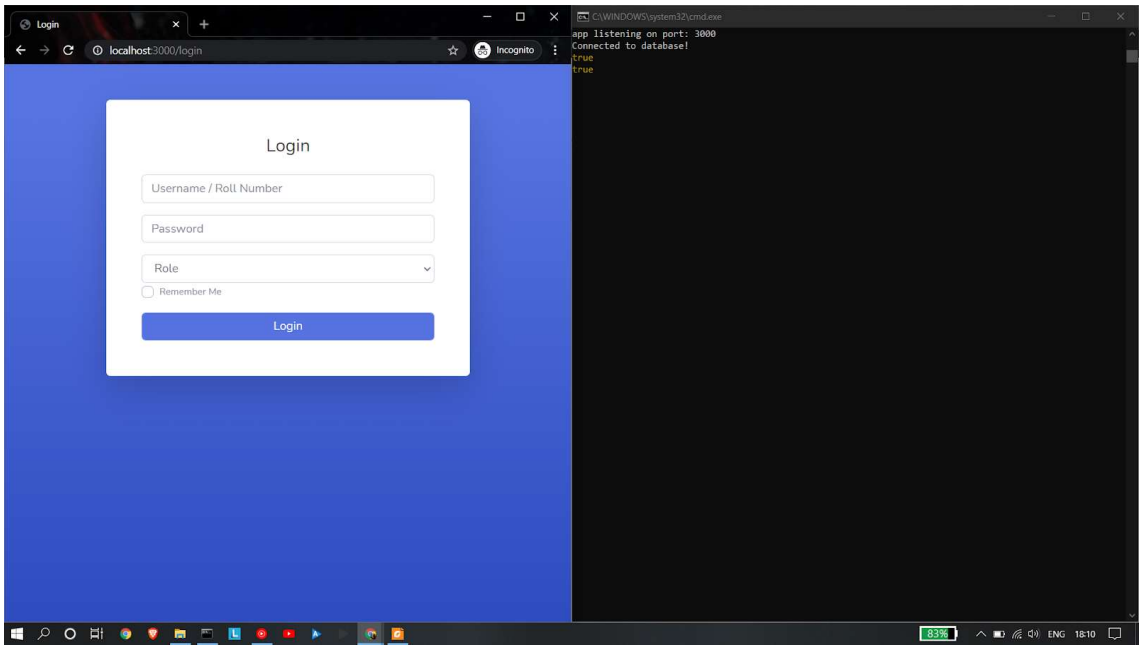
No Login :



Username / Roll Number : 912375
Expected o/p : No Login
Output :

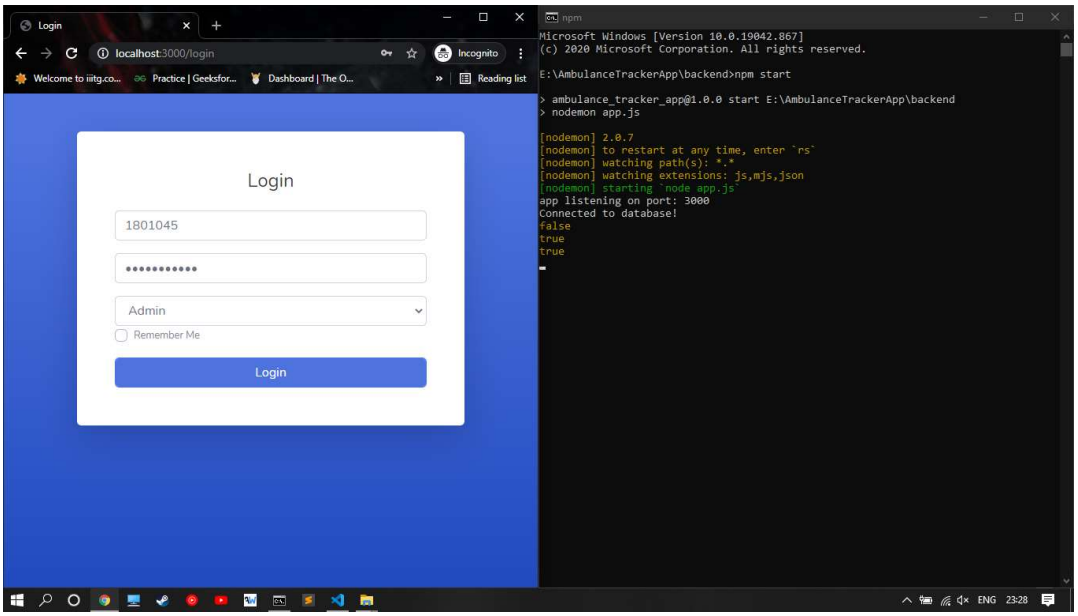


No Login :

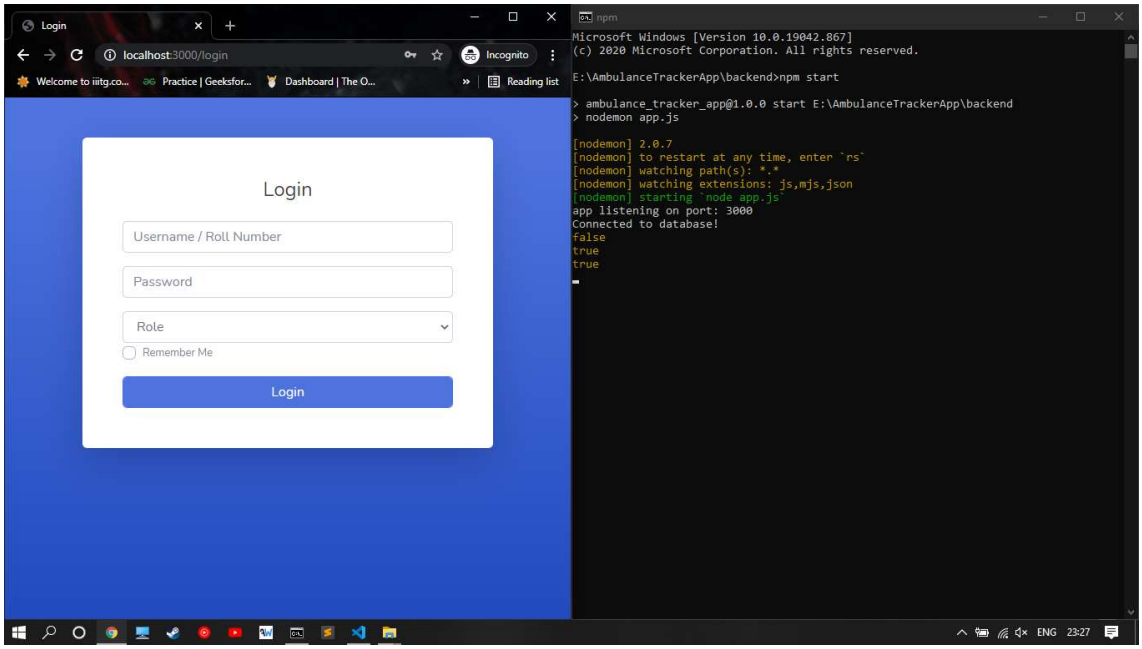


Case 3: Correct Username / Roll Number, Correct password but Incorrect role

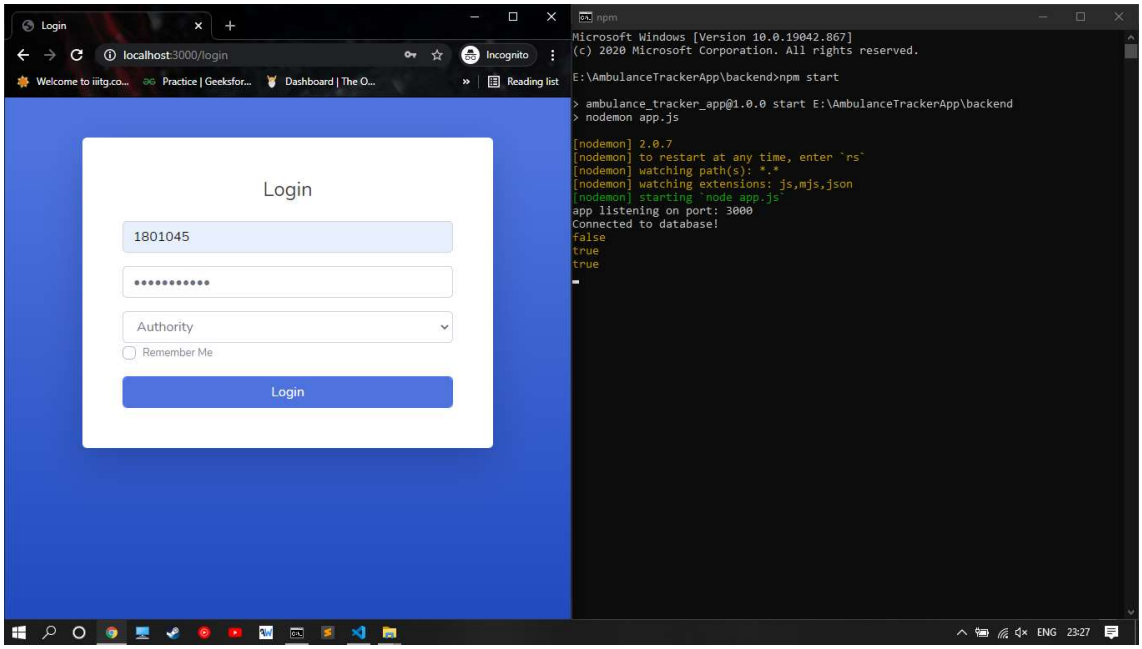
Username / Roll Number : 1801045
Role : Admin
Expected o/p : No Login
Output :



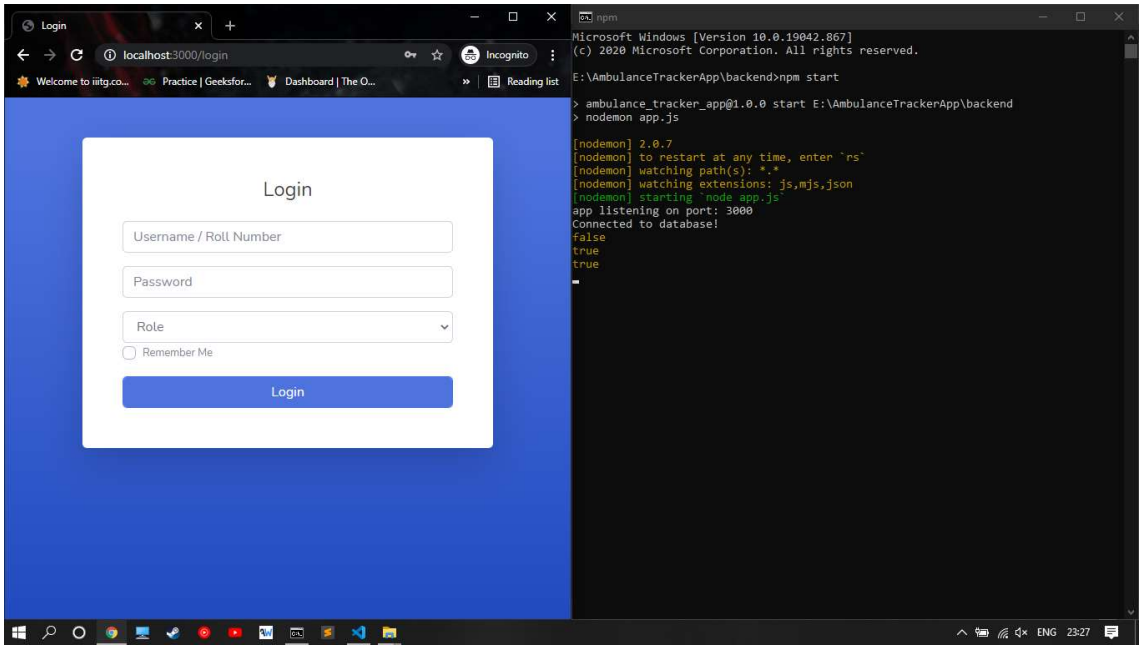
No Login :



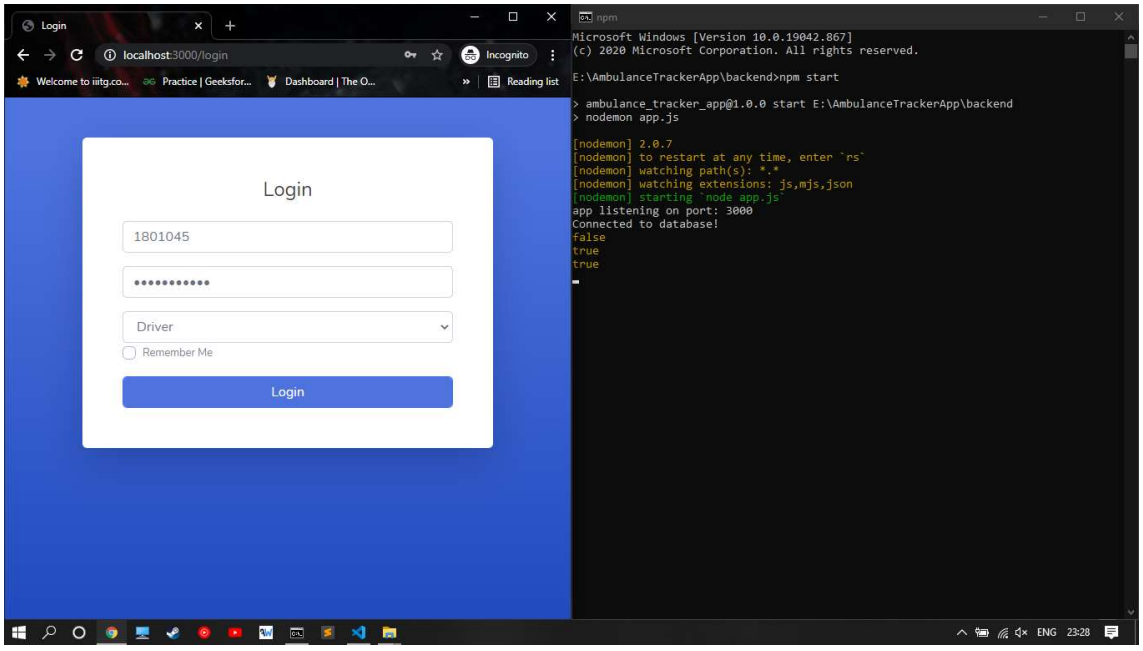
Username / Roll Number : 1801045
Role : Authority
Expected o/p : No Login
Output :



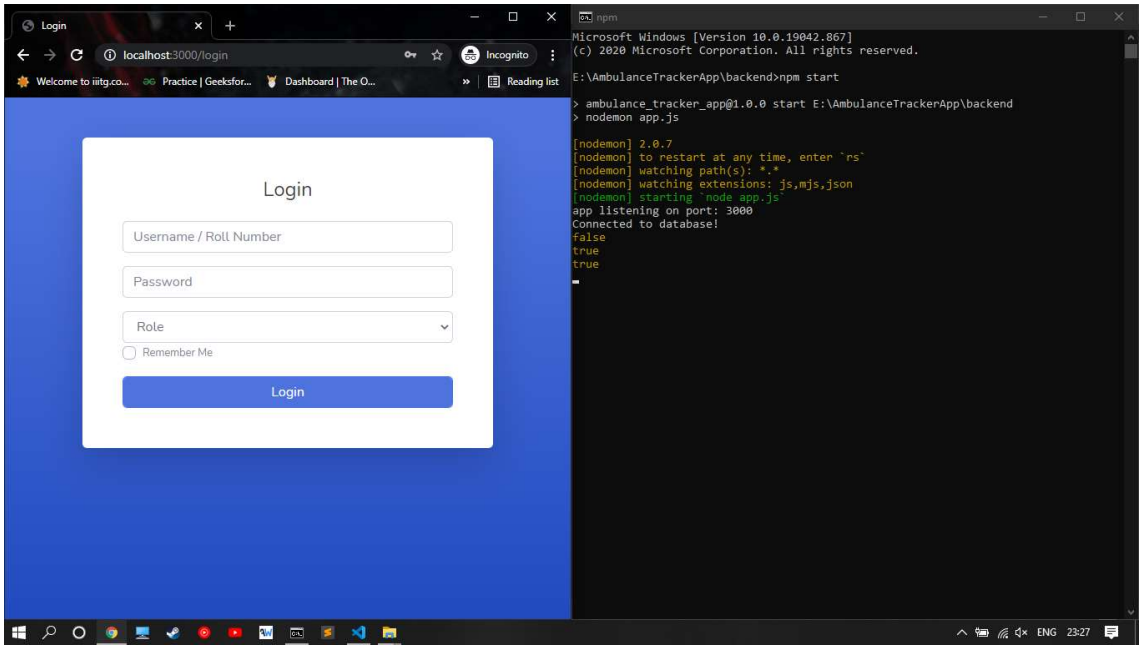
No Login :



Username / Roll Number : 1801045
Role : Driver
Expected o/p : No Login
Output :

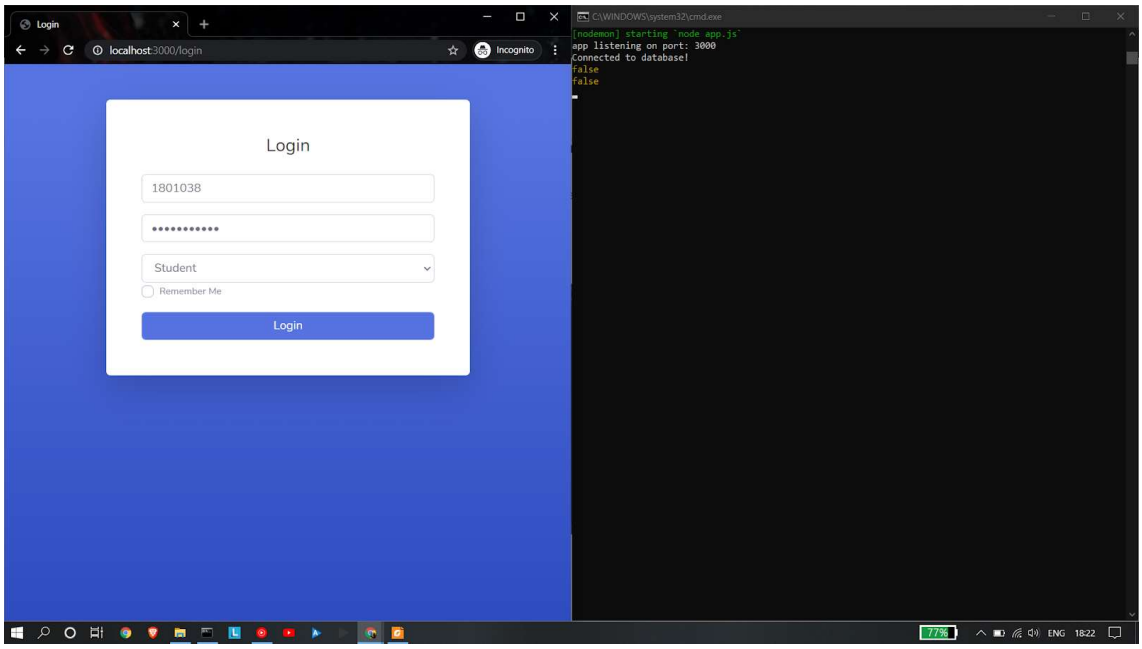


No Login :

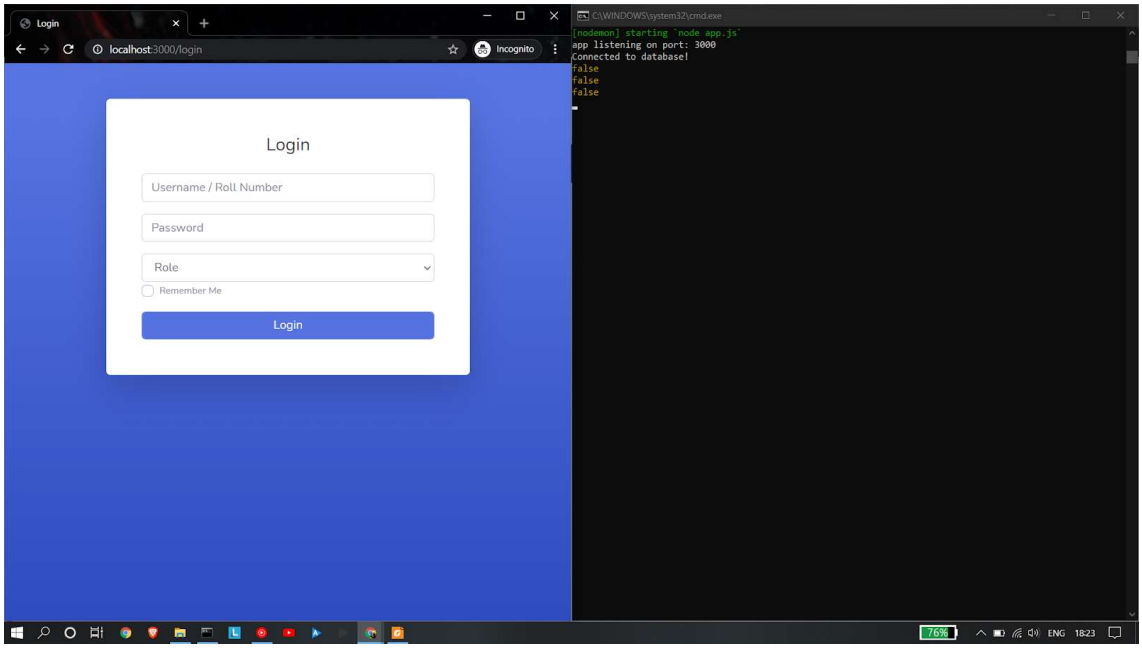


Case 4: Correct Username / Roll Number, Incorrect password

Username / Roll Number : 1801038
Expected o/p : No Login
Output :

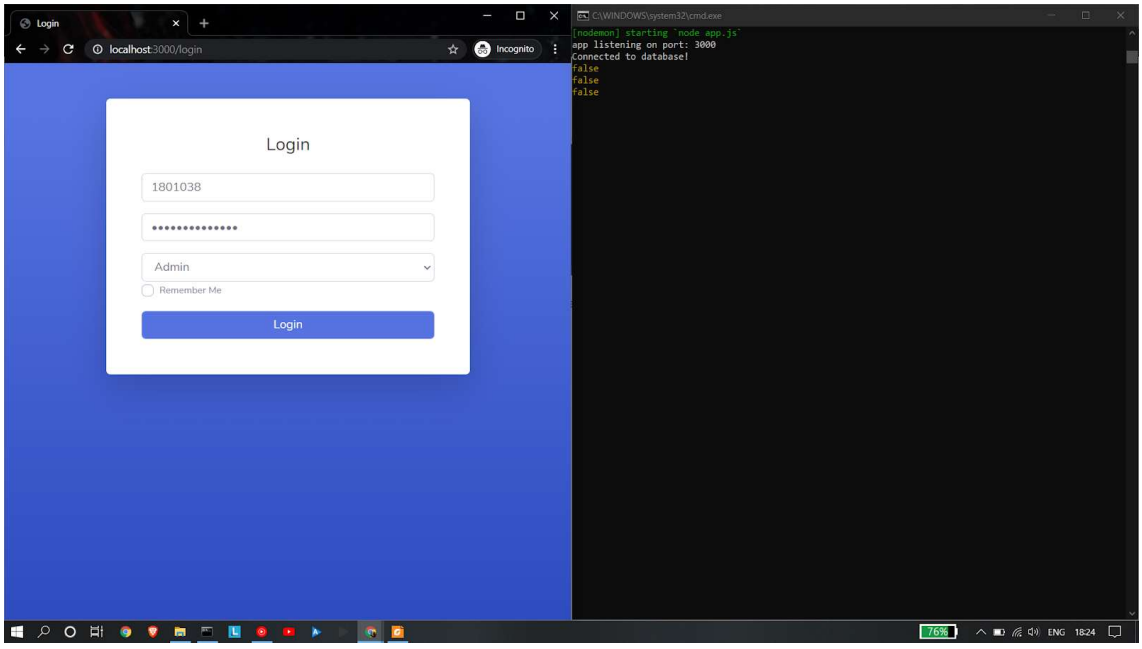


No Login :

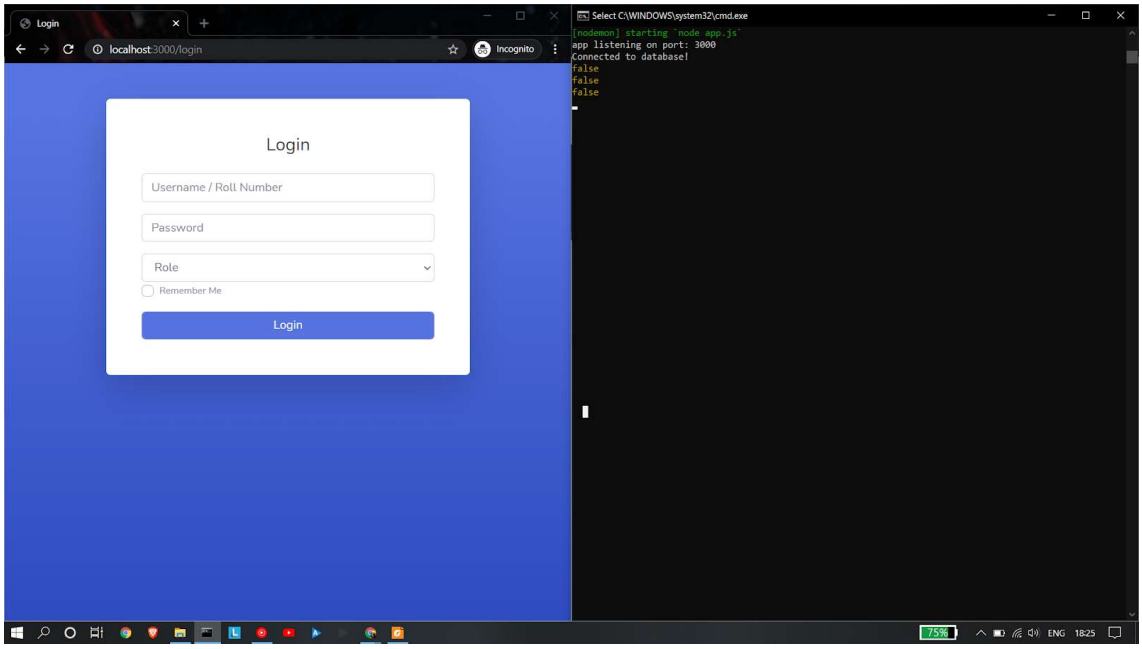


Case 4: Correct Username / Roll Number, Incorrect password and role

Username / Roll Number : 1801038
Role : Admin
Expected o/p : No Login
Output :



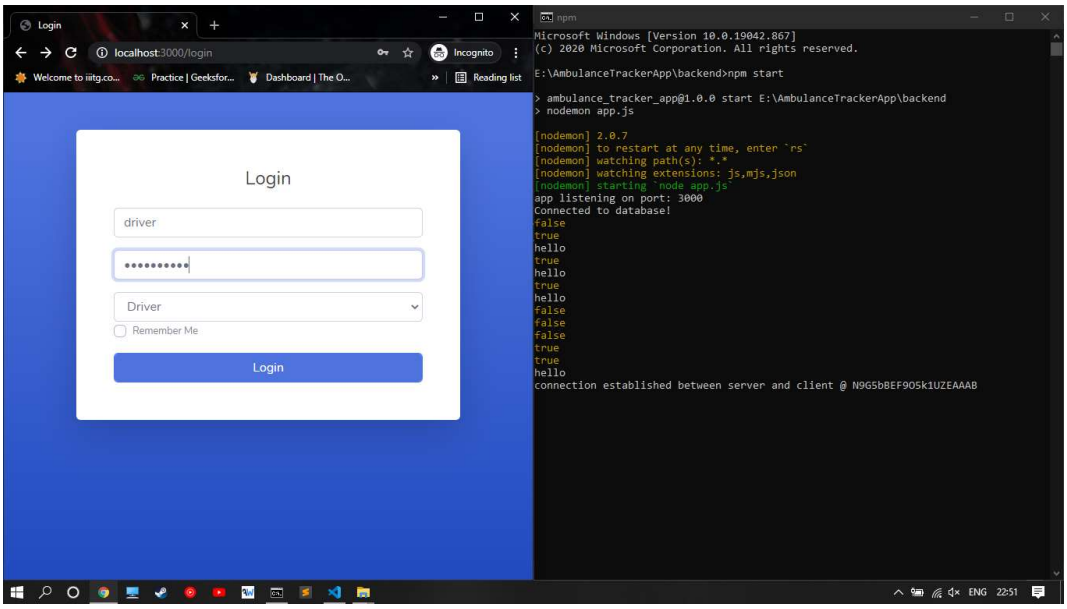
No Login :



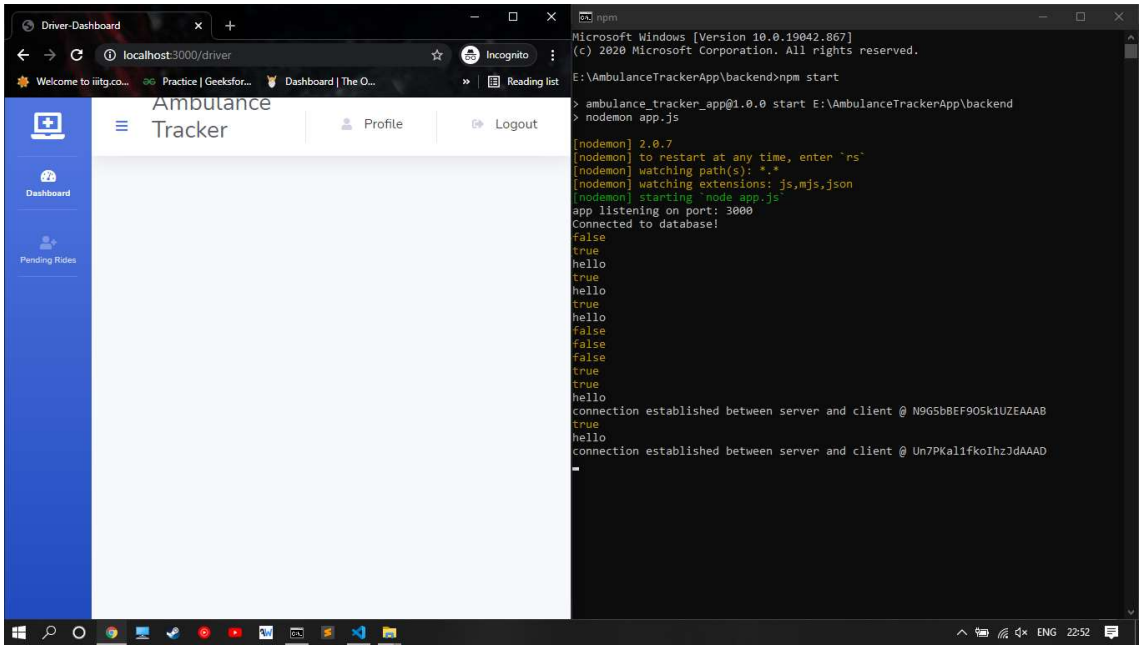
Login for Driver-

Case 1: Successful login of the driver

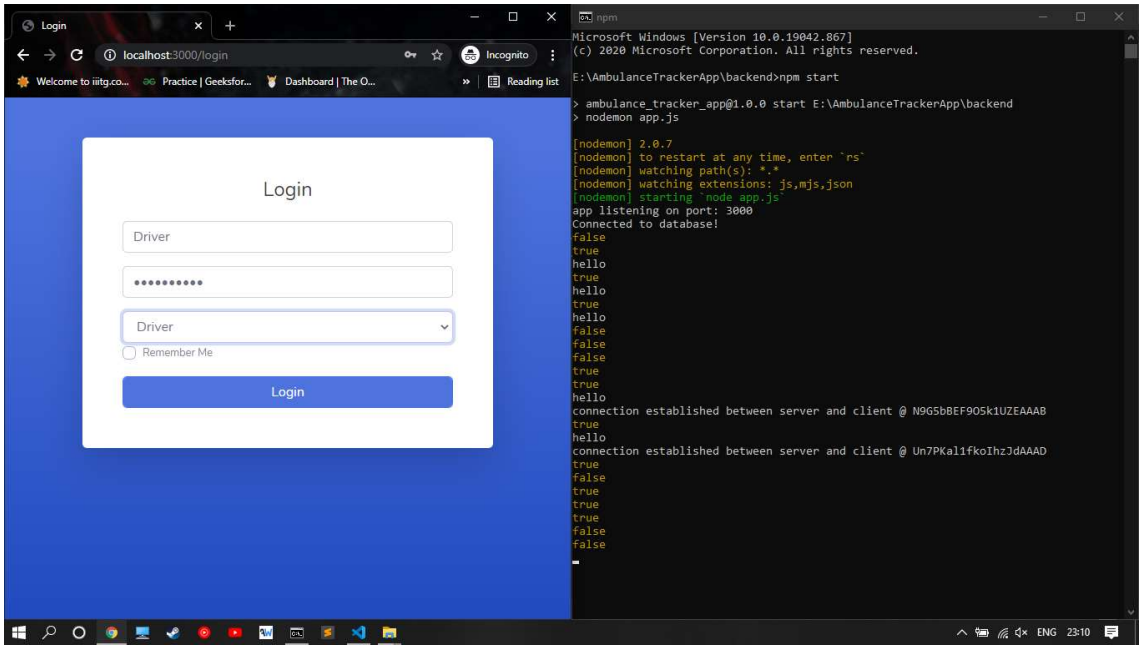
Username : driver
Expected o/p : Successful Login
Output :



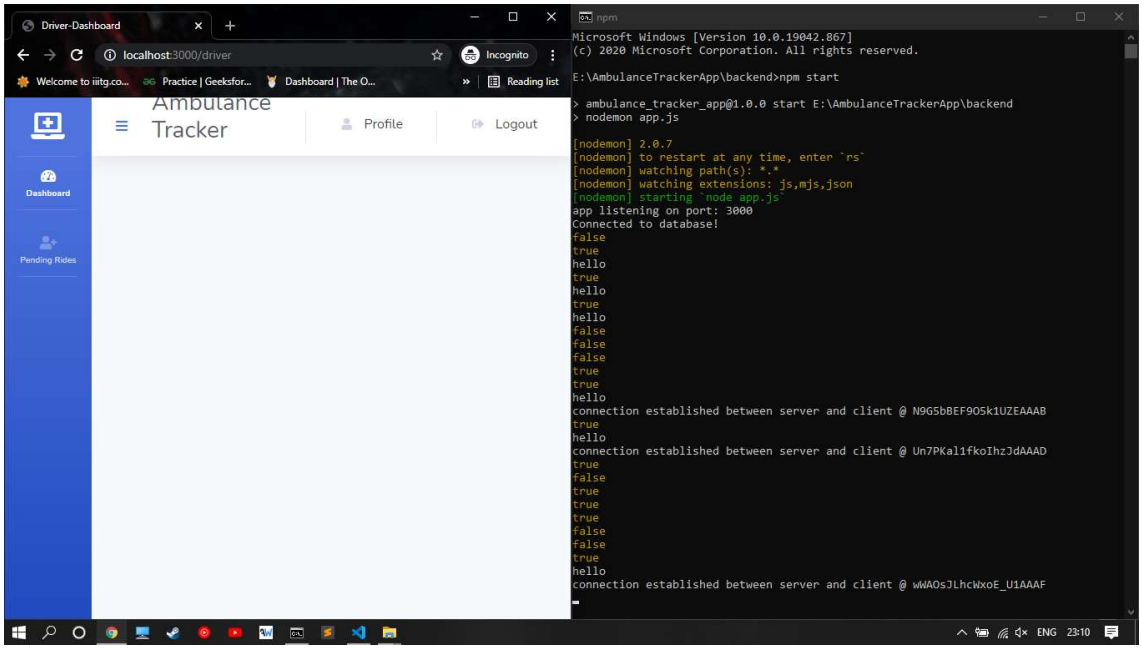
Successful Login :



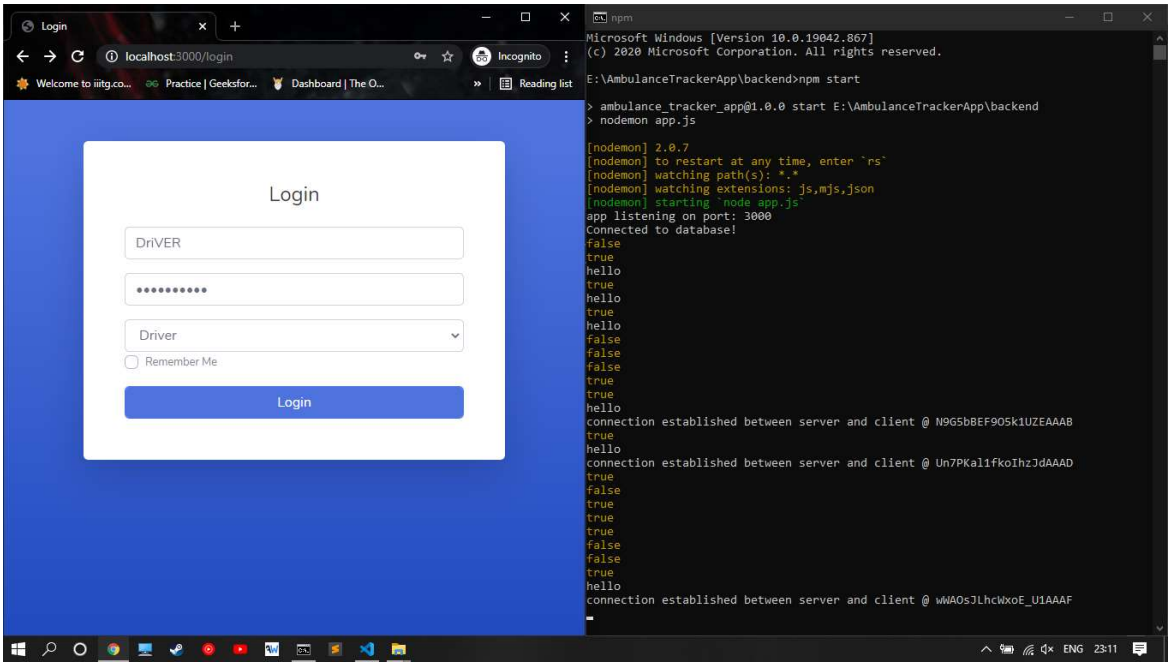
Username : Driver
Expected o/p : Successful Login
Output :



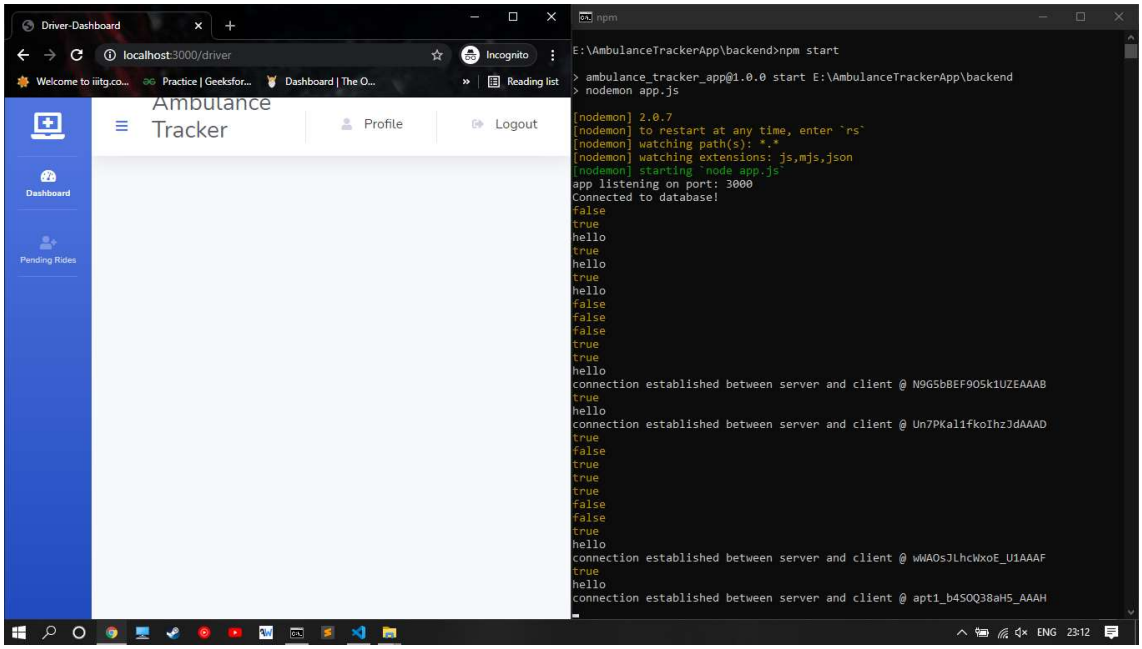
Successful Login :



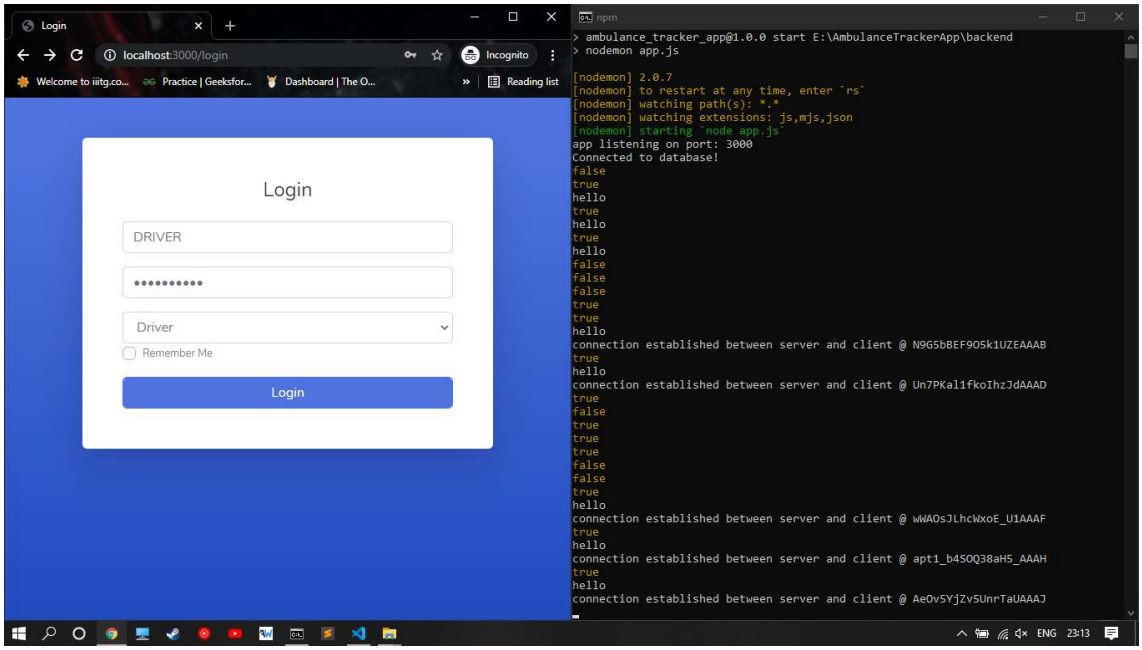
Username : DriVER
Expected o/p : Successful Login
Output :



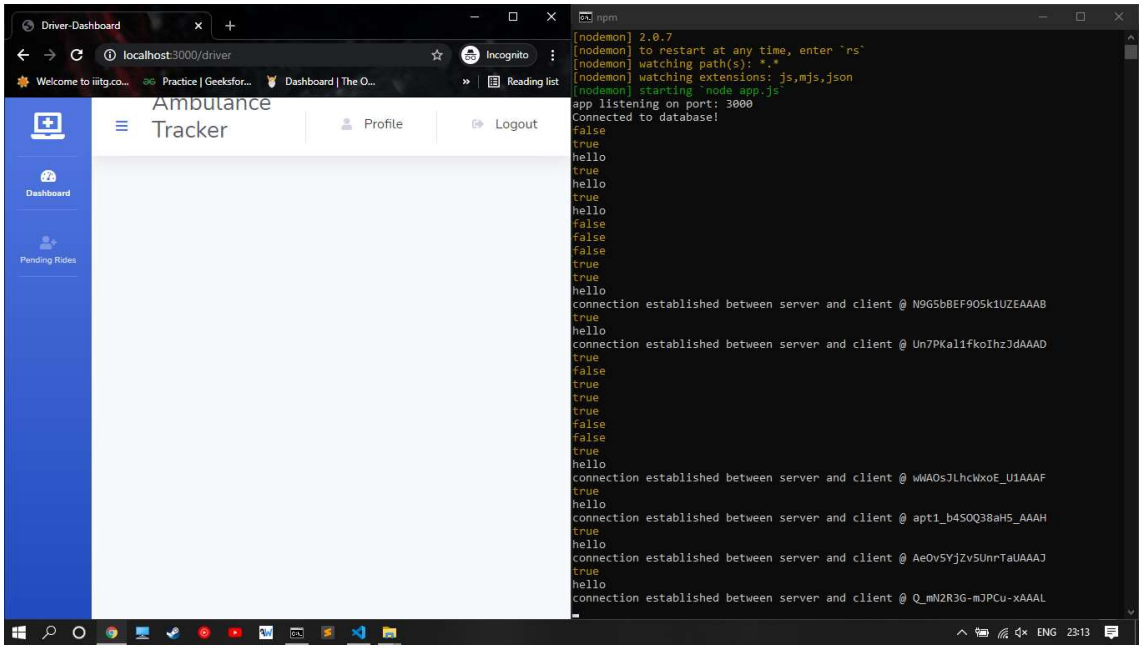
Successful Login :



Username : DRIVER
Expected o/p : Successful Login
Output :

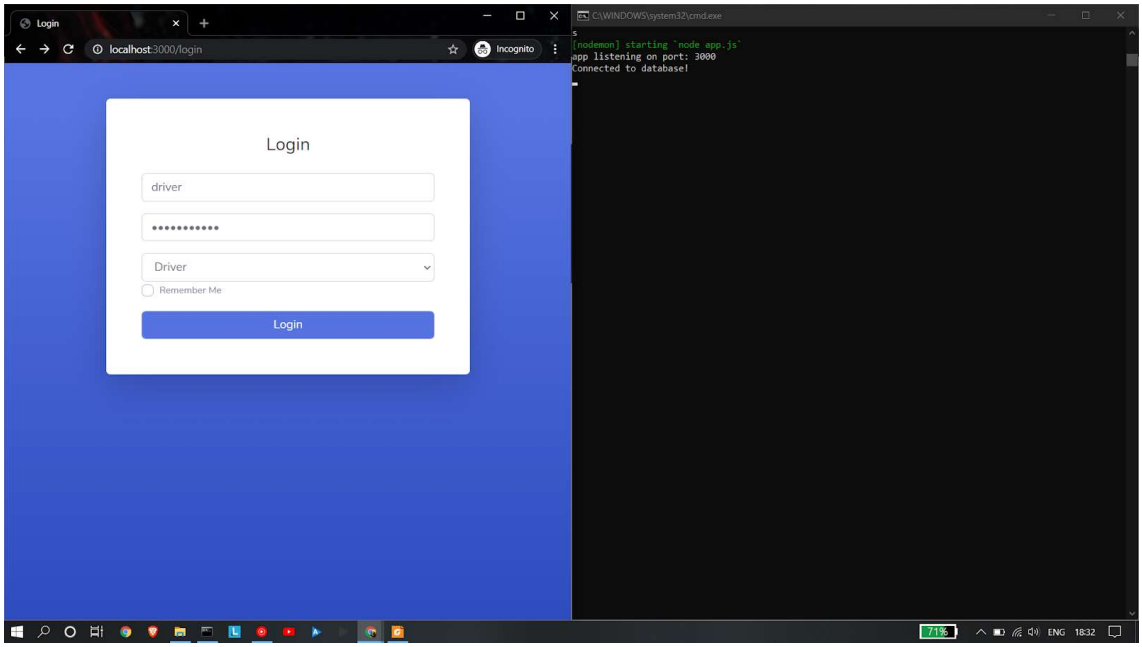


Successful Login :

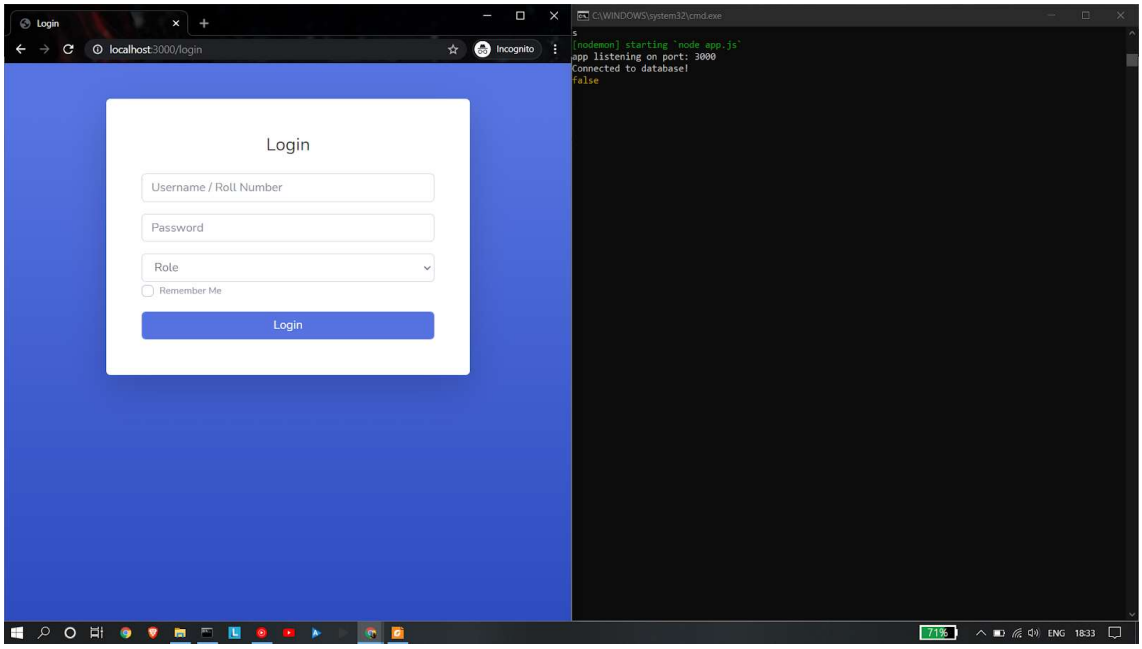


Case 2: Correct Username, wrong password

Username : driver
Expected o/p : No Login
Output :

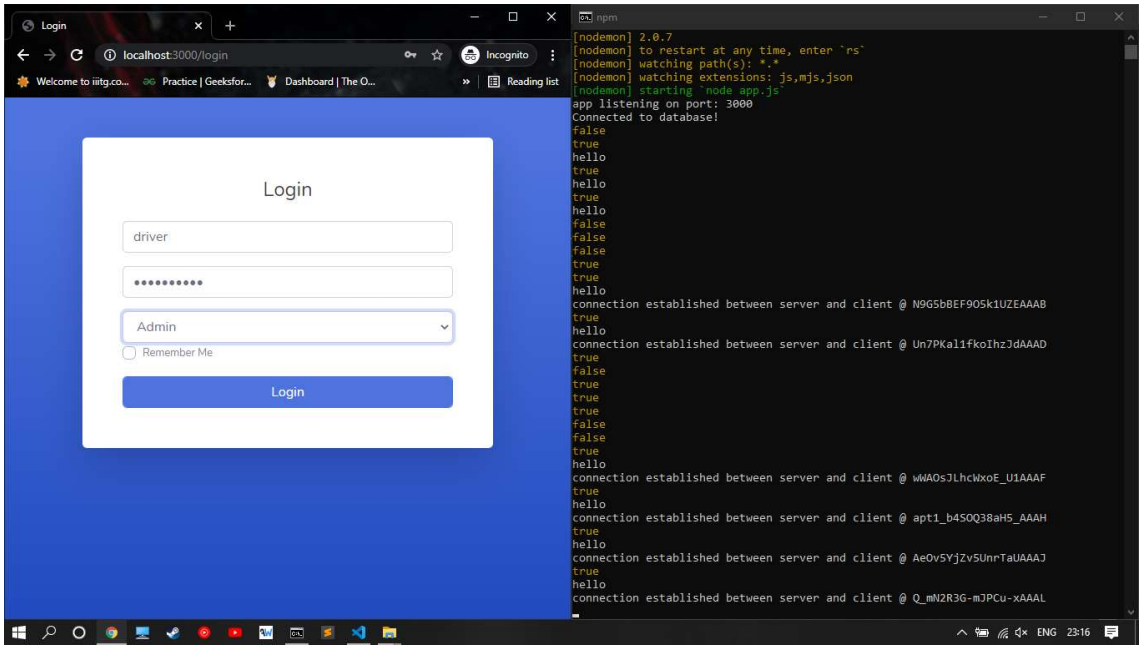


No Login :

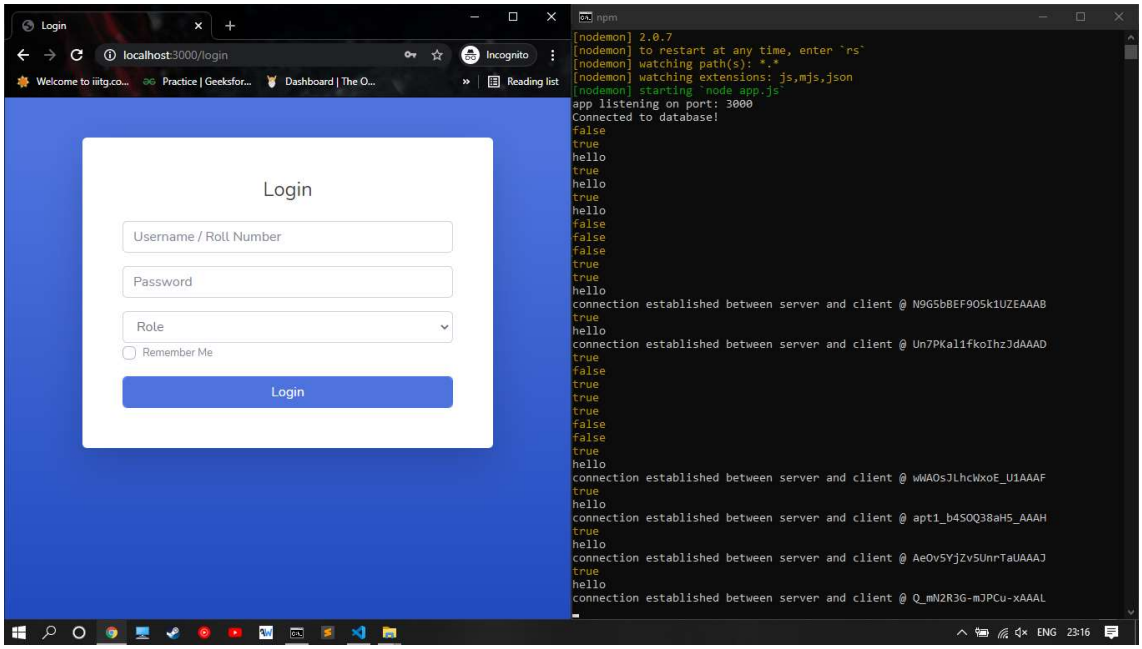


Case 3: Correct Username and password but Incorrect role

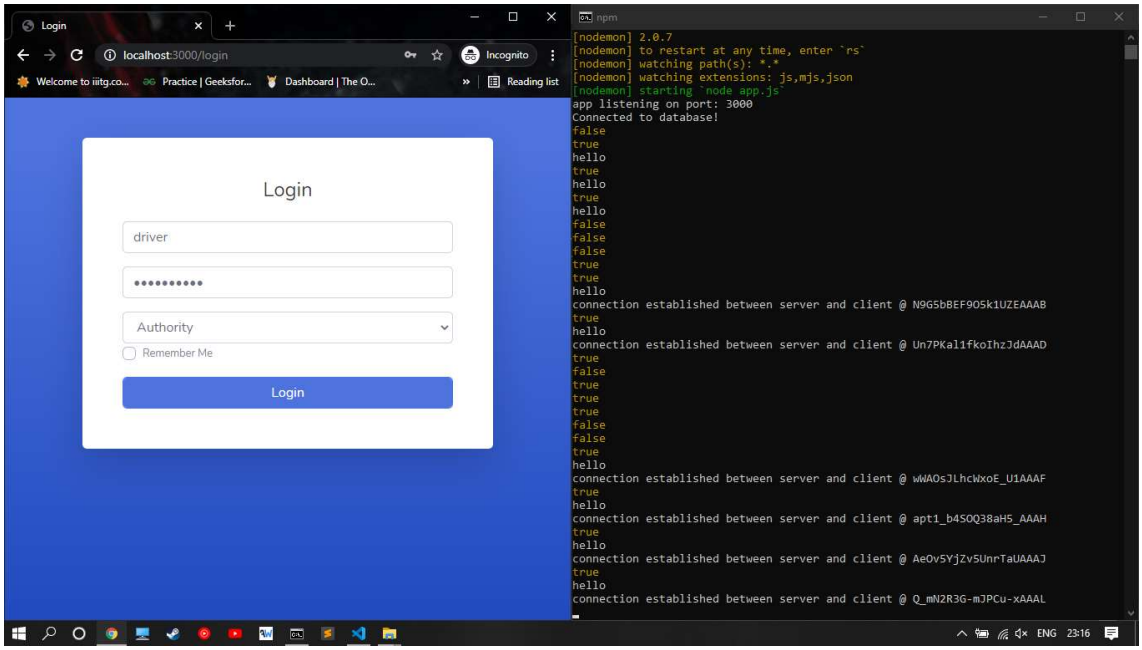
Username : driver
Role : Admin
Expected o/p : No Login
Output :



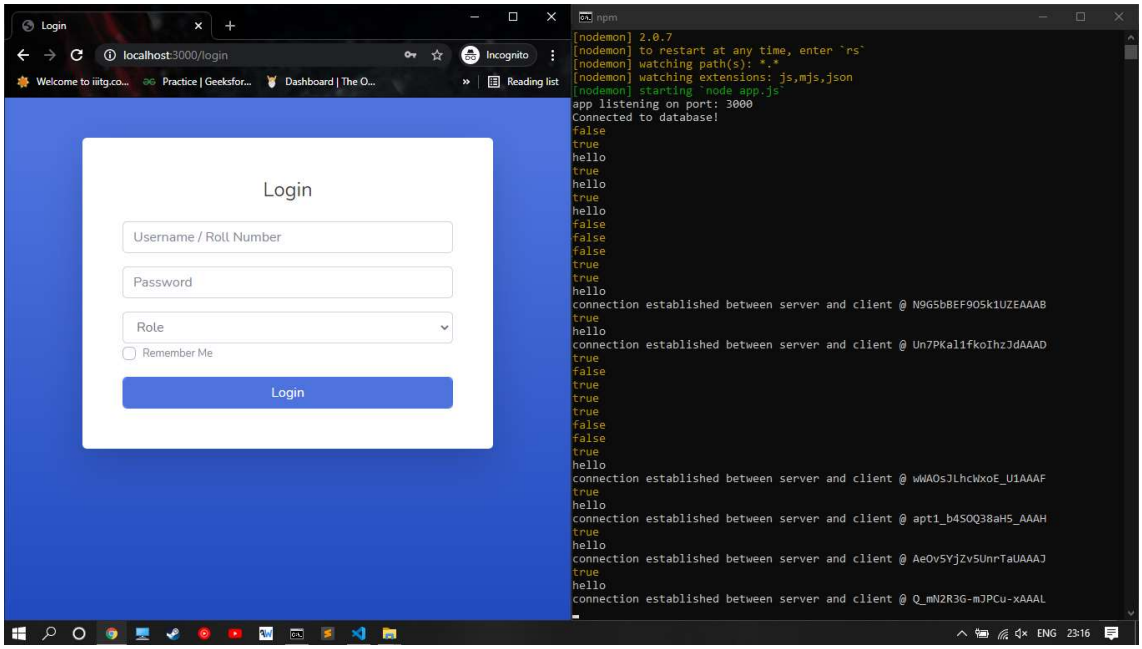
No Login :



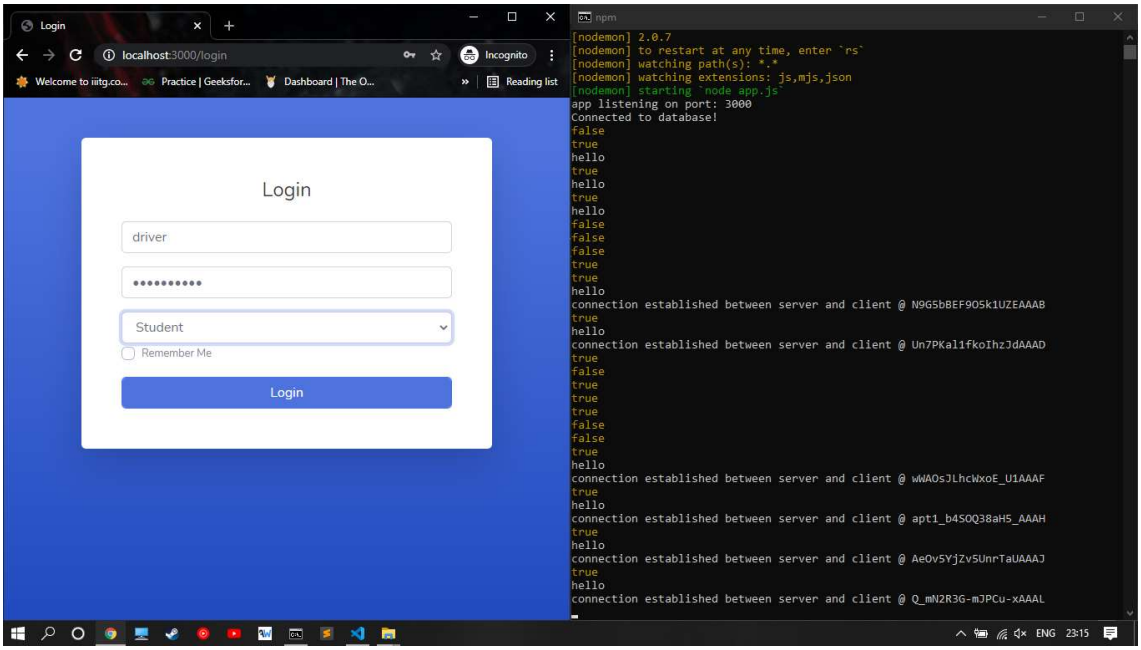
Username : driver
Role : Authority
Expected o/p : No Login
Output :



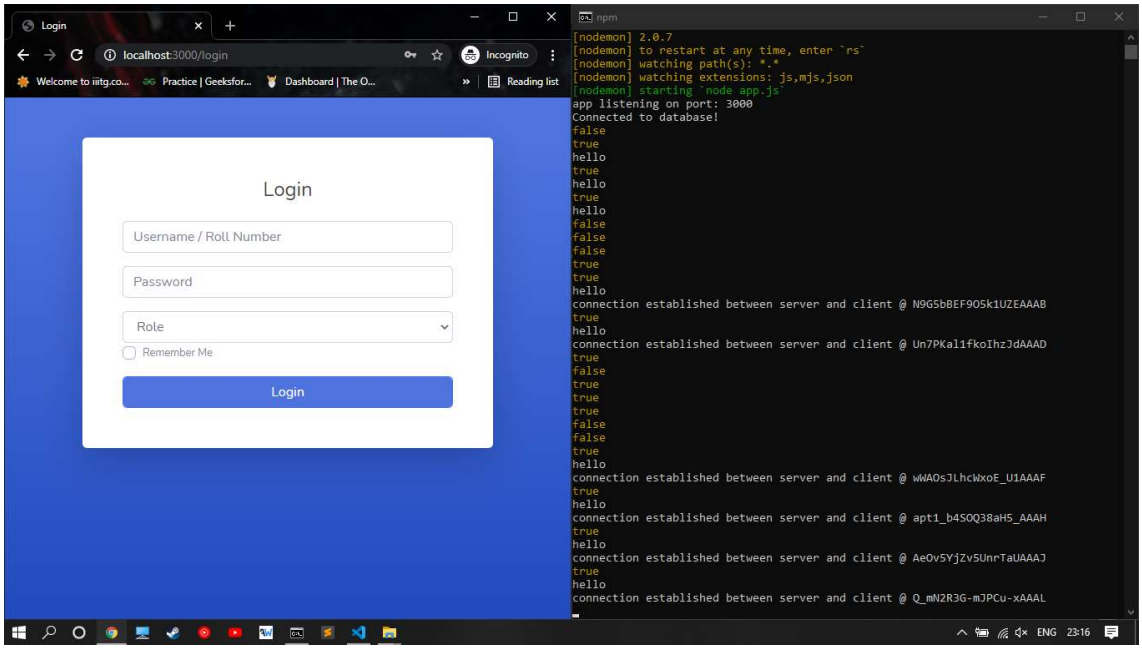
No Login :



Username : driver
Role : Student
Expected o/p : No Login
Output :

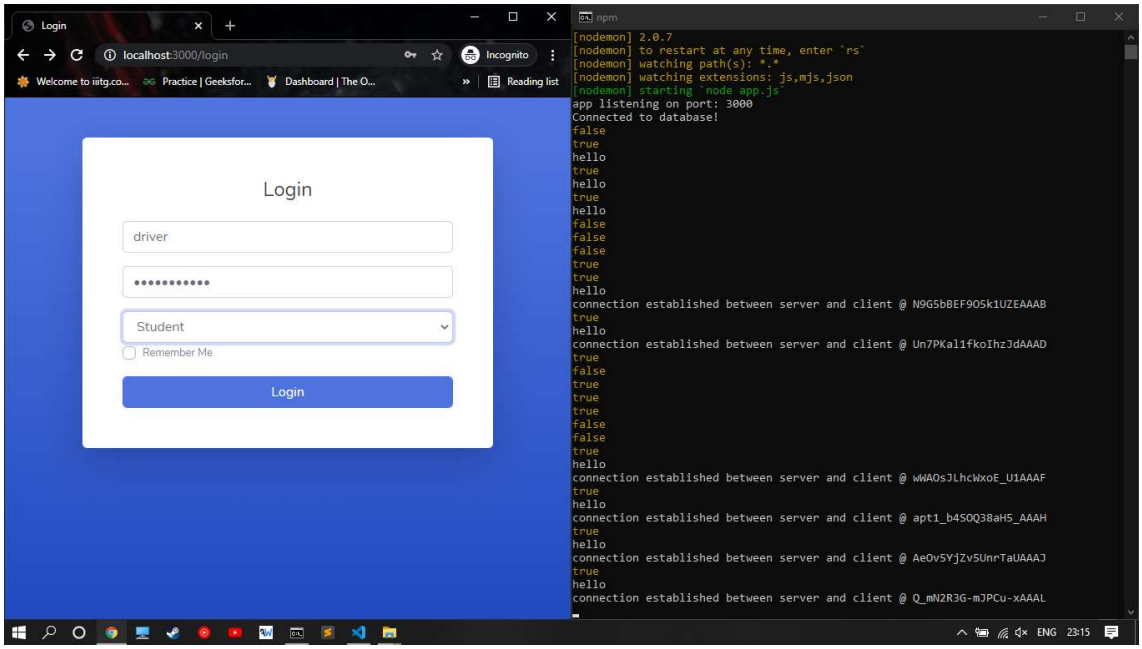


No Login :

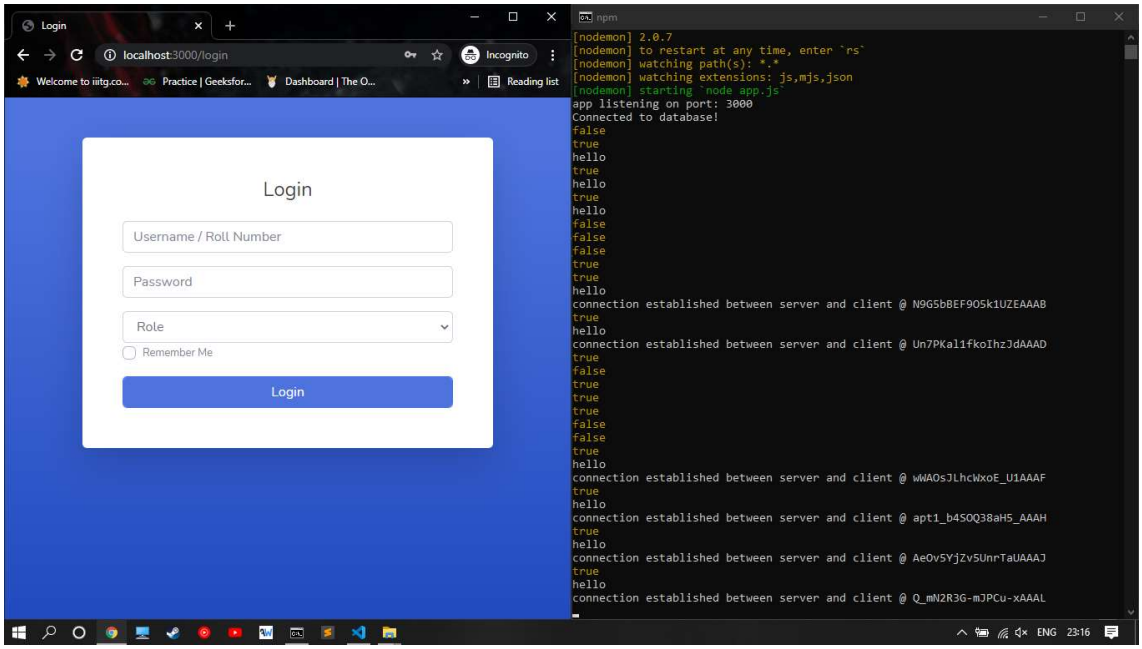


Case 3: Correct Username but Incorrect password and role

Username : driver
Role : Student
Expected o/p : No Login
Output :

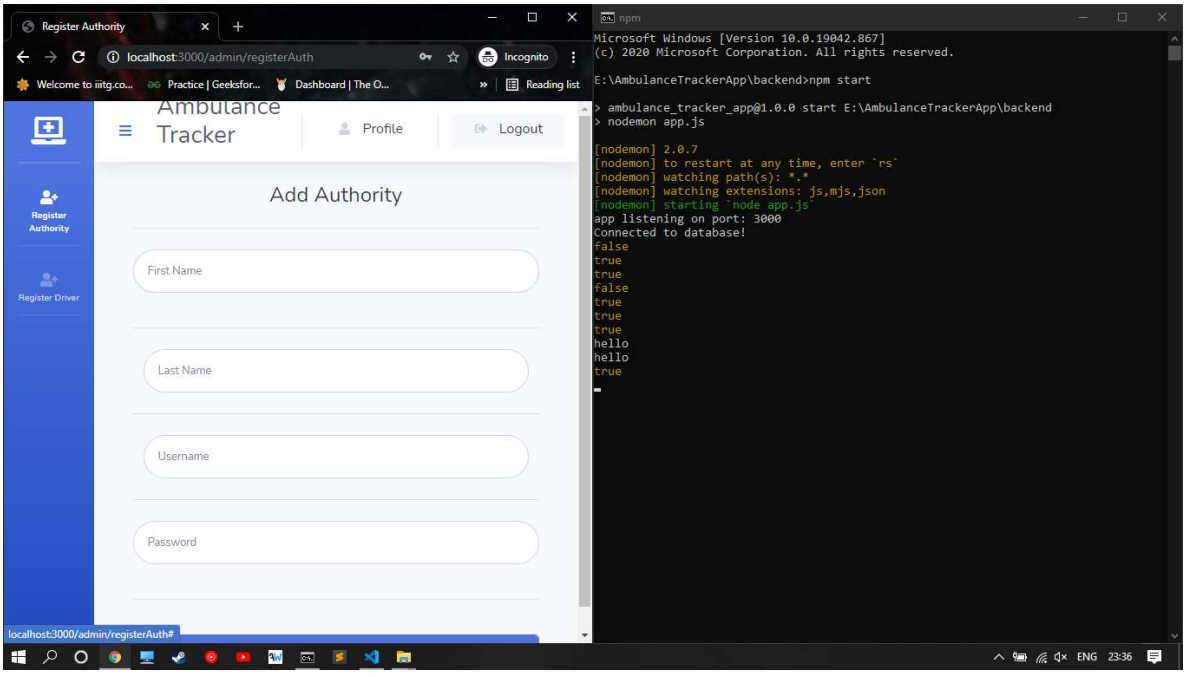


No Login :

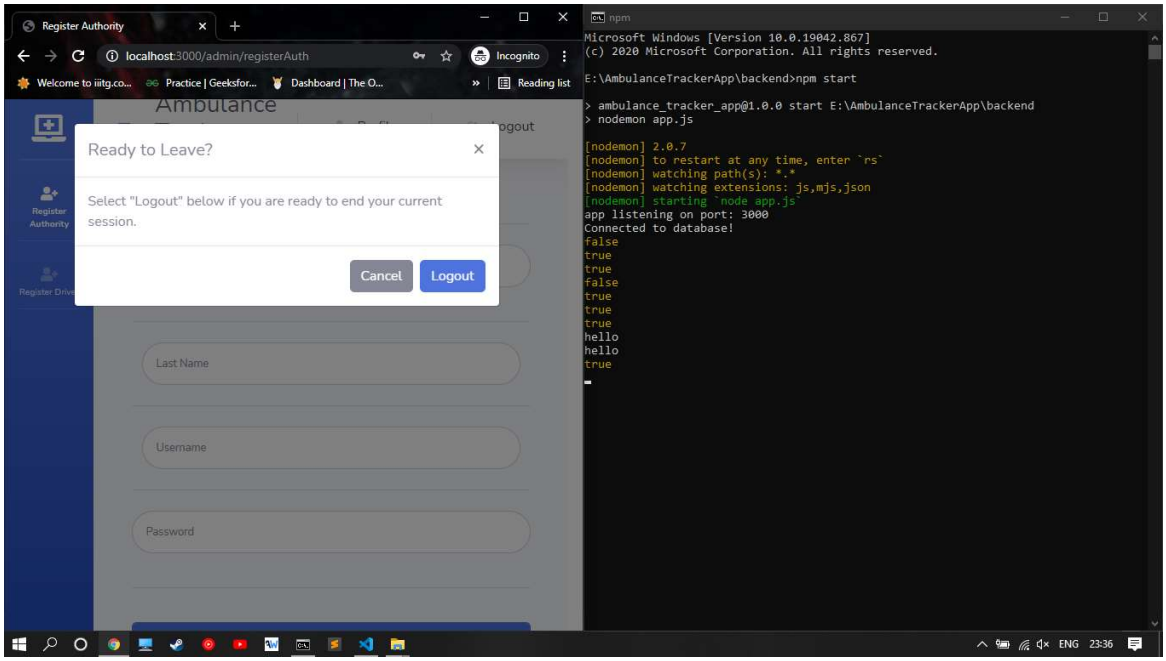


Logout -

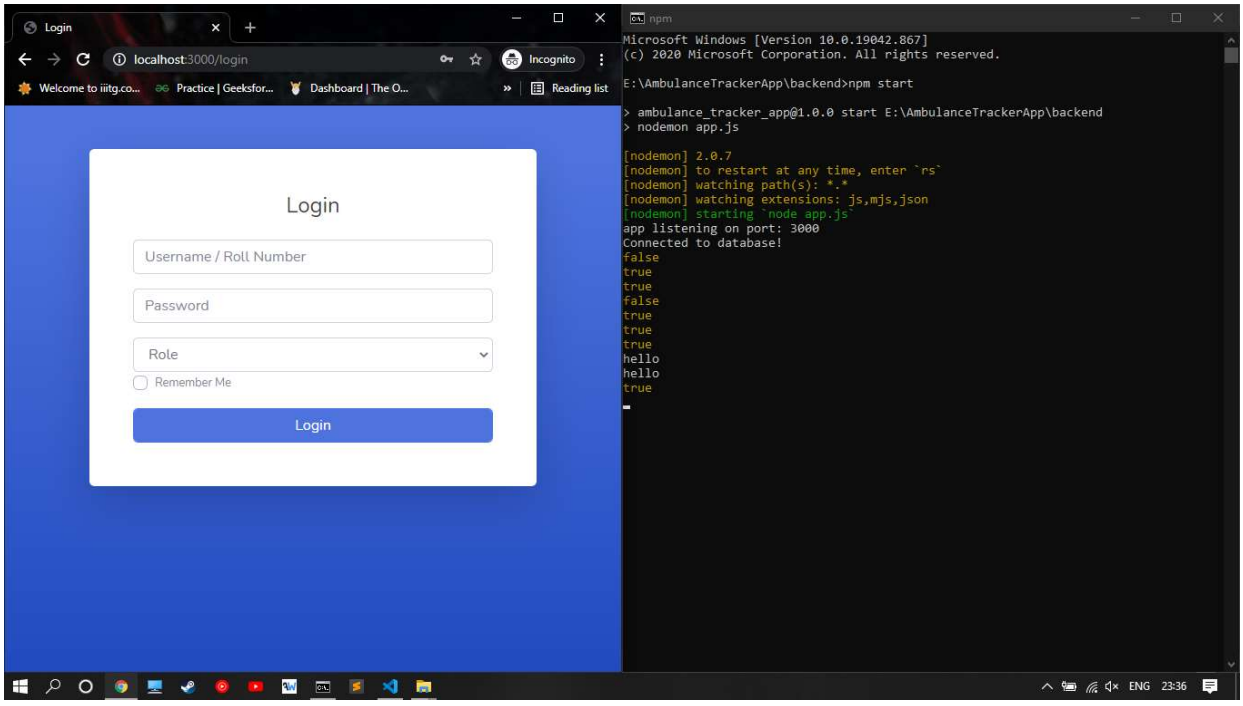
Logout of Admin :



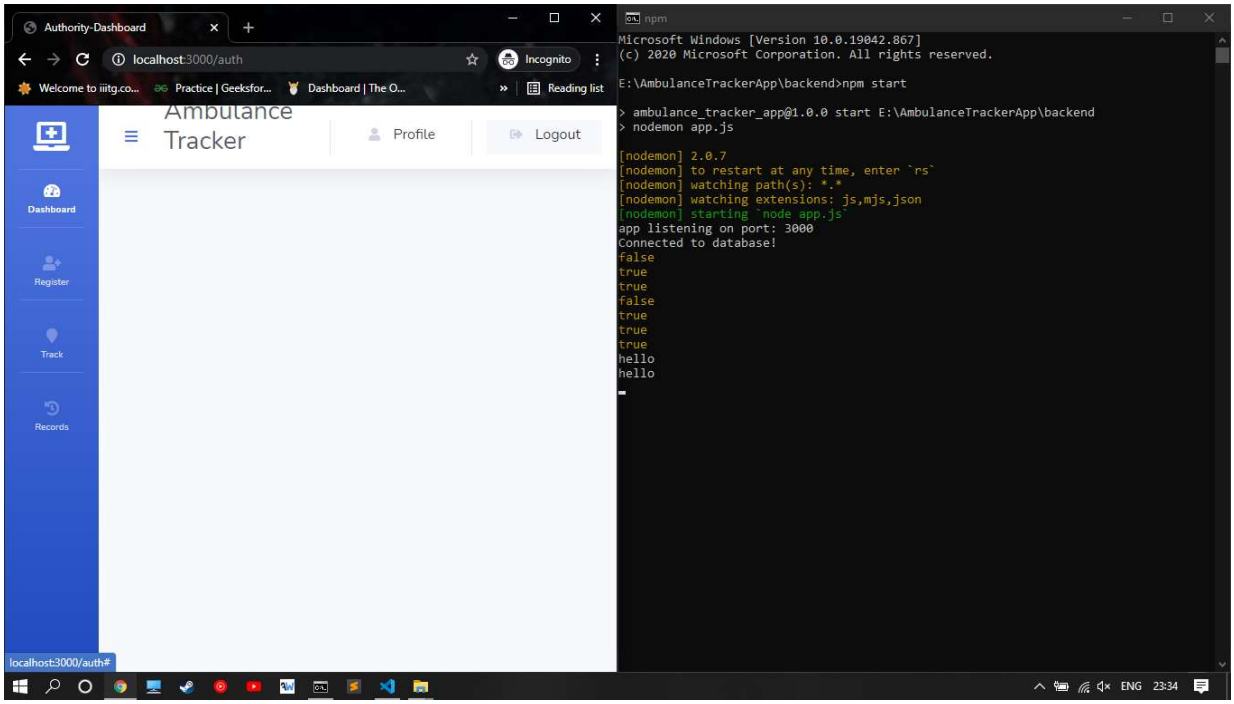
Logout Popup :



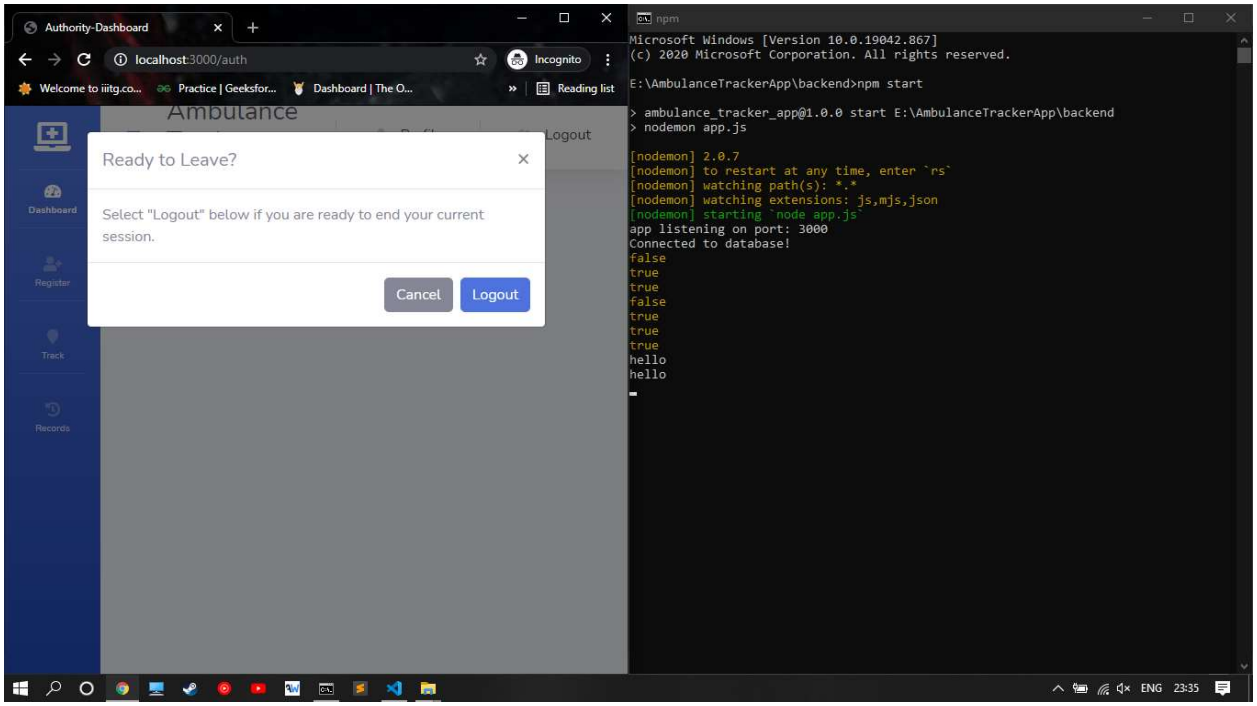
Successfully Logged Out :



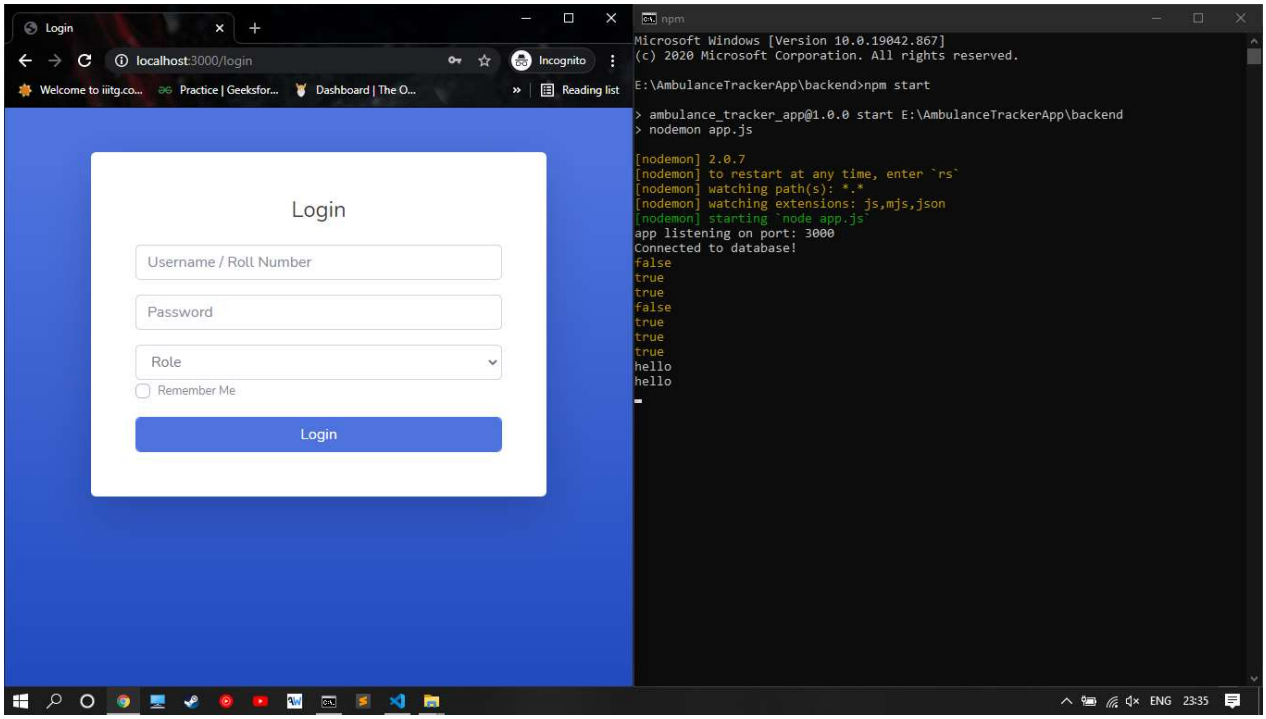
Logout of Authority :



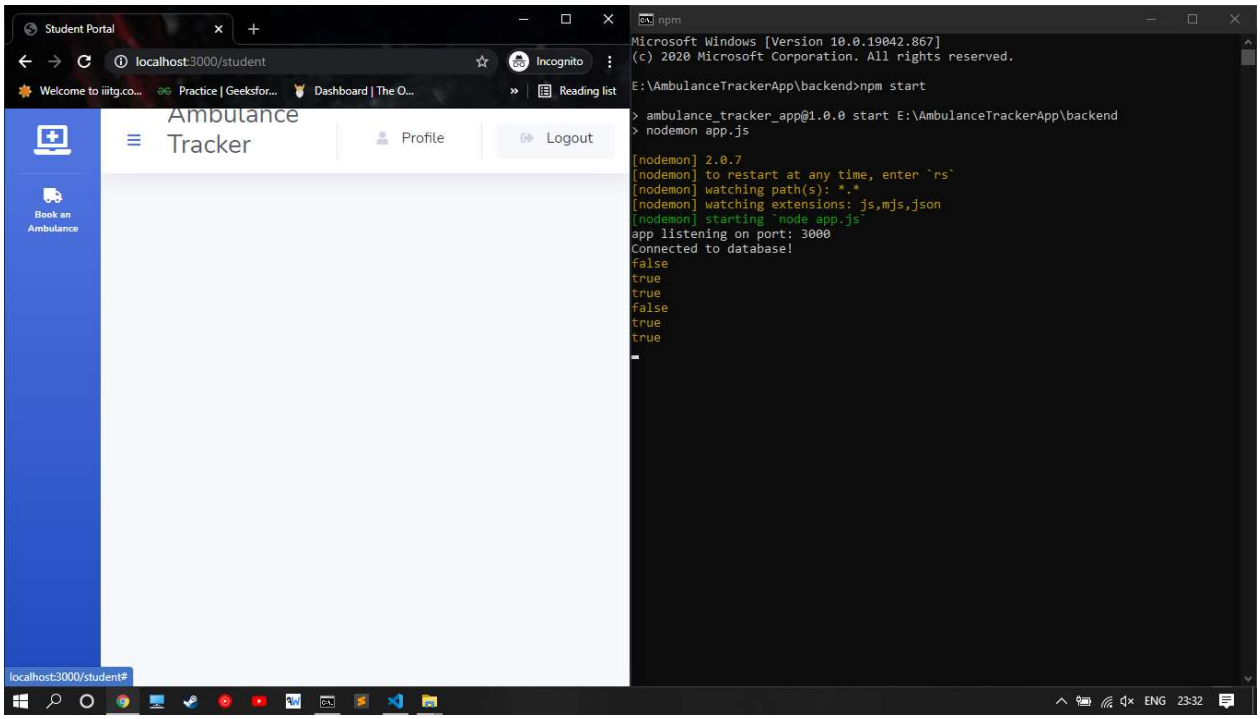
Logout Popup :



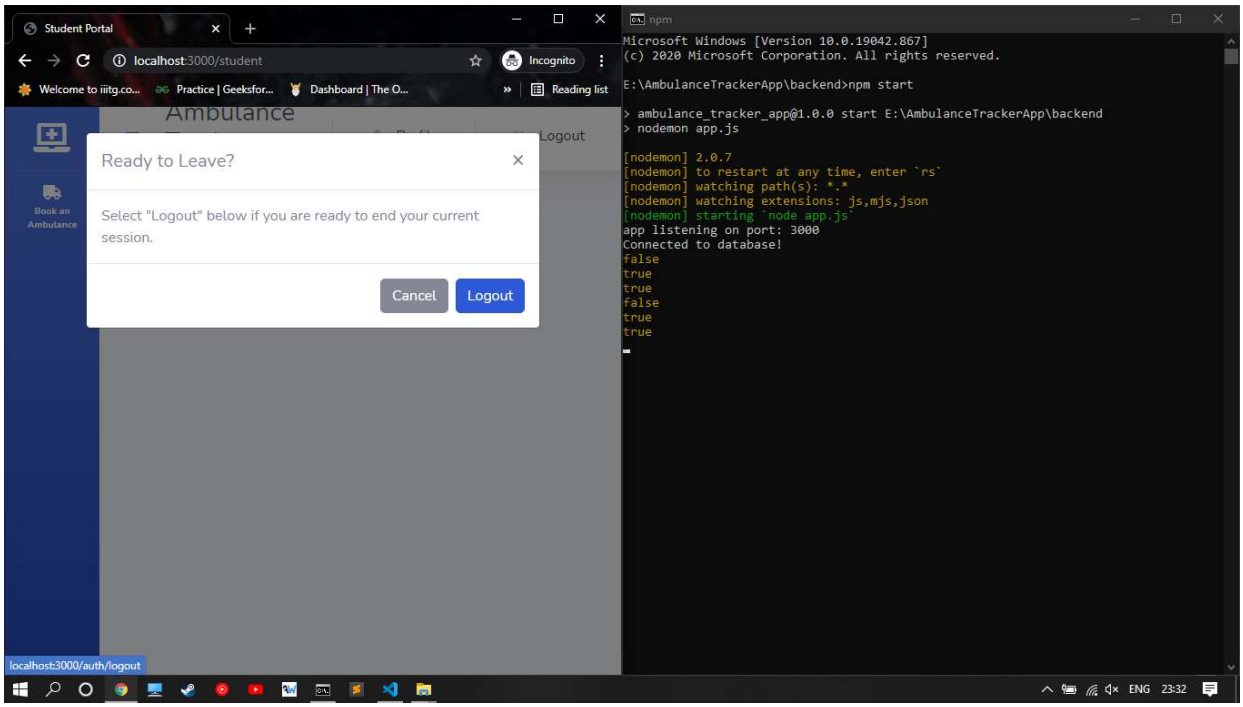
Successfully Logged Out :



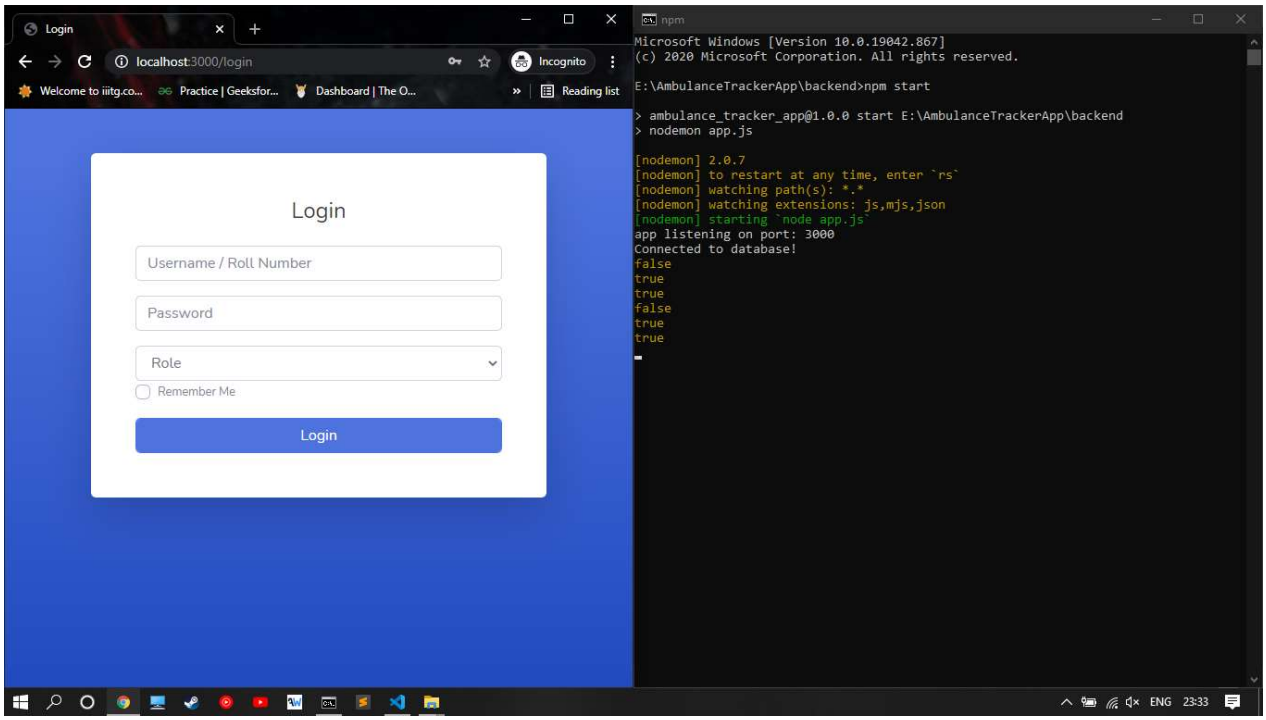
Logout of Student :



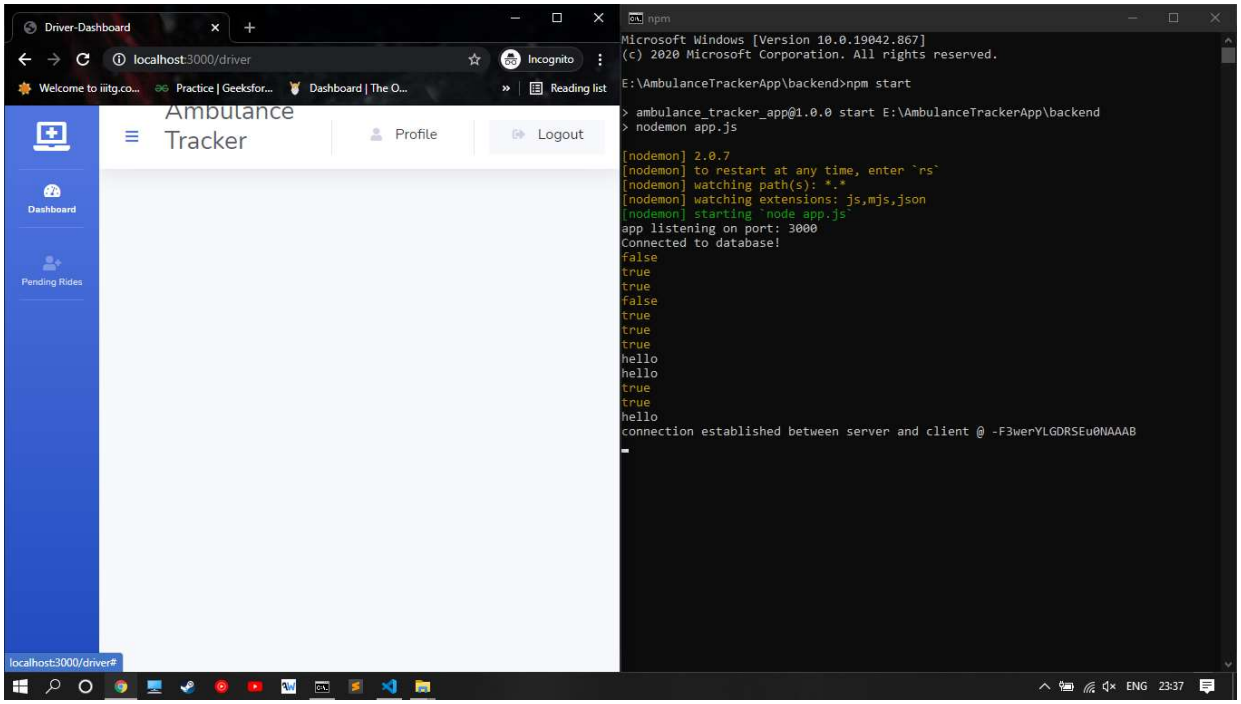
Logout Popup :



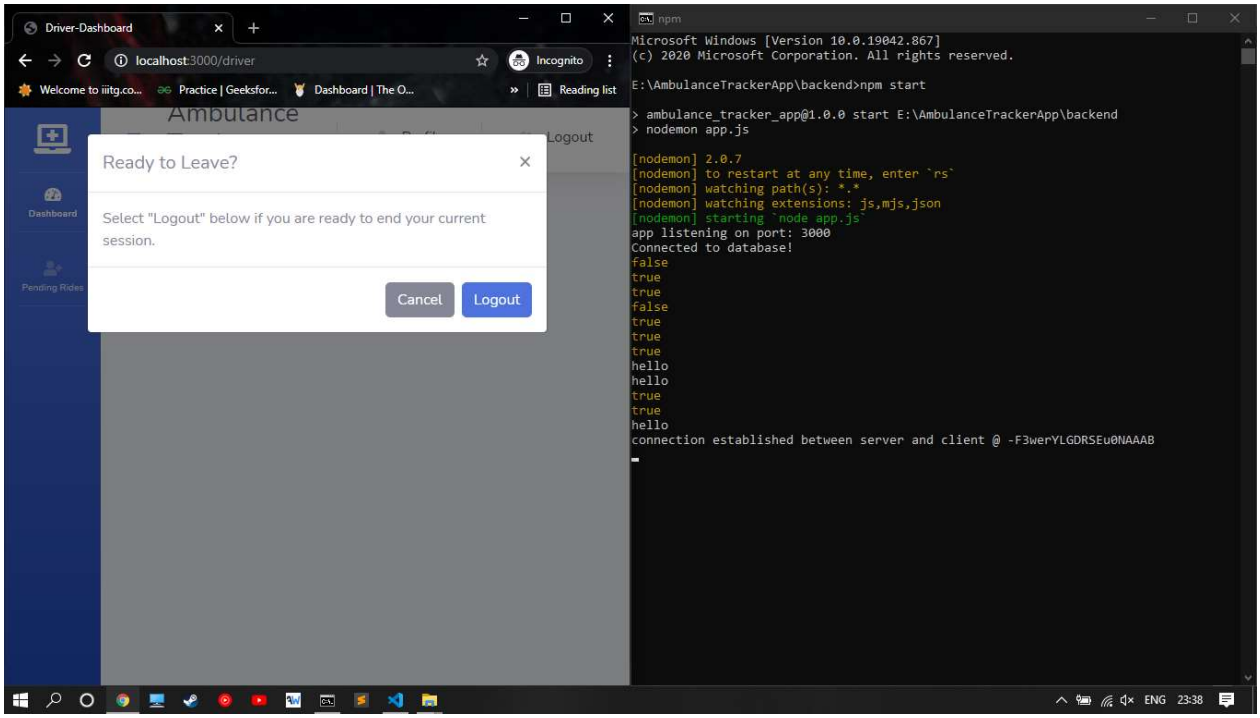
Successfully Logged Out :



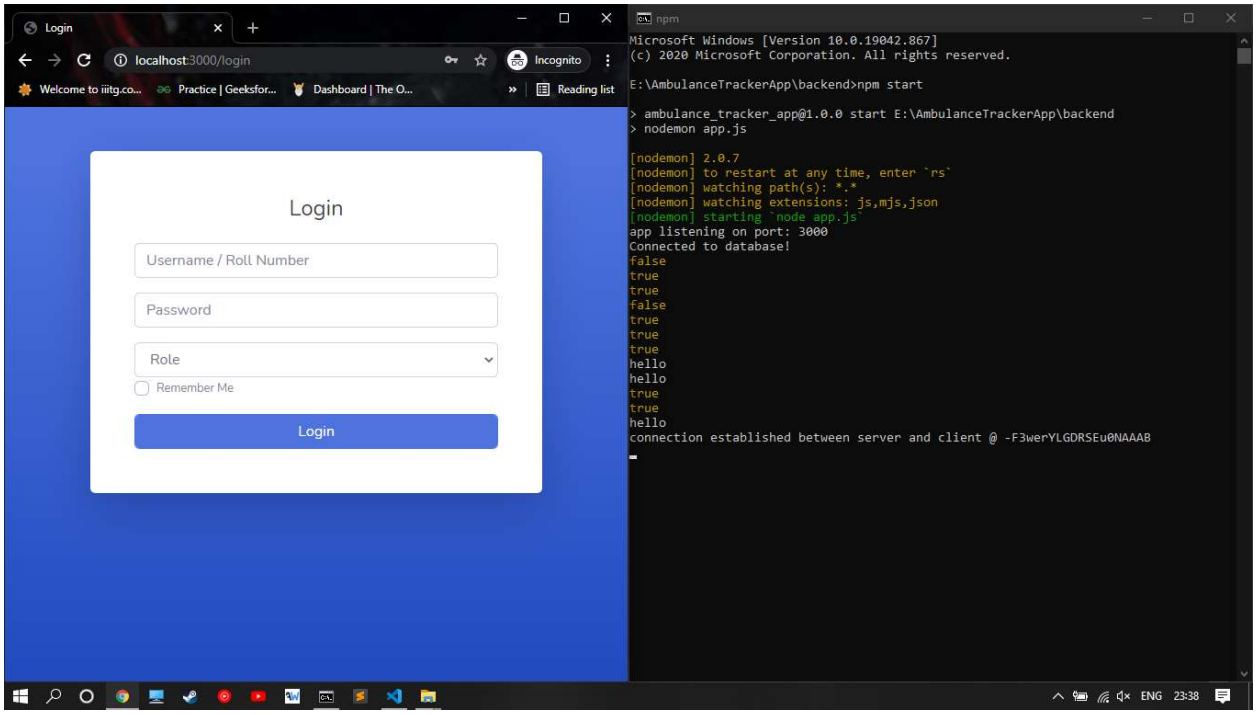
Logout of Driver :



Logout Popup :



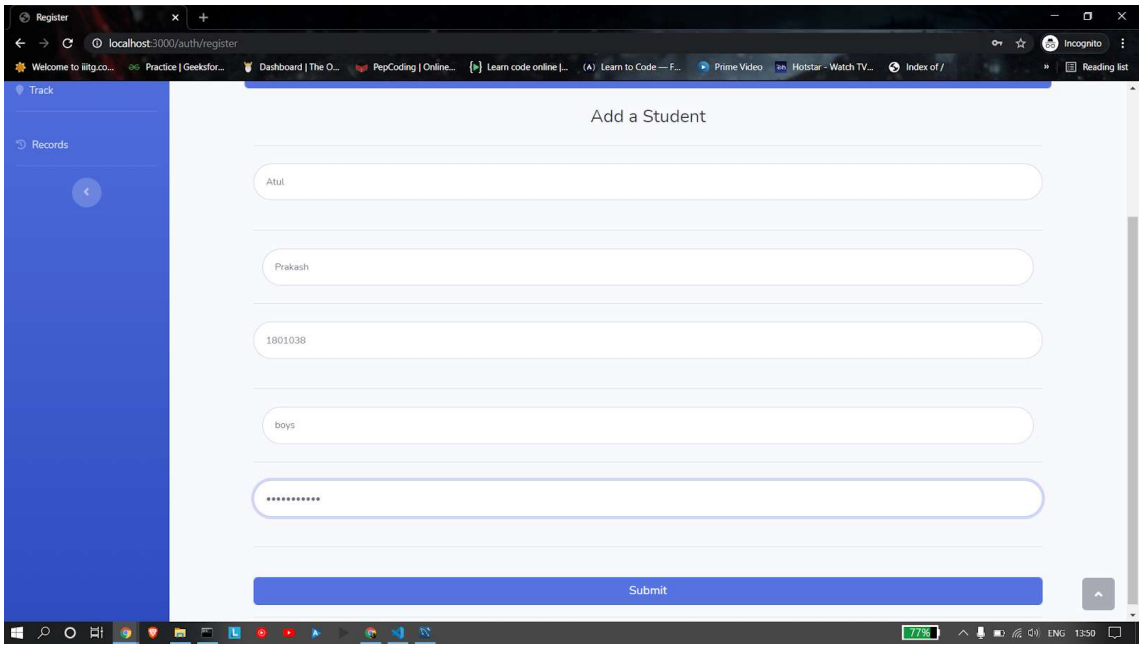
Successfully Logged Out :



2. Authorities can register new users :

Case 1: Correct Input

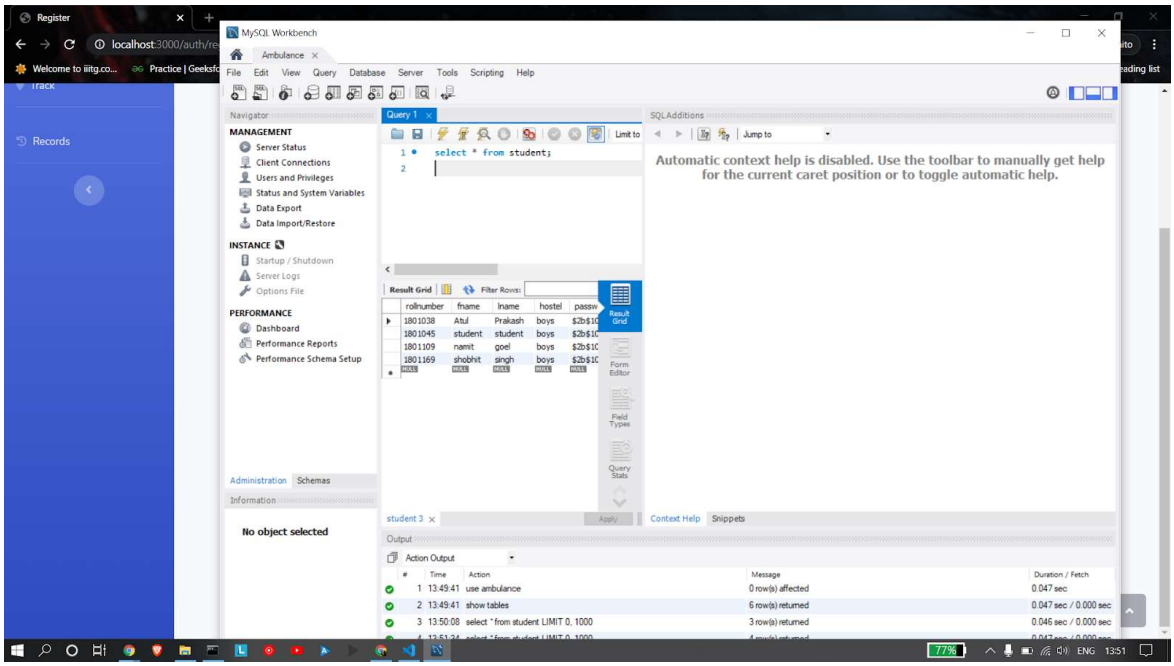
Input :



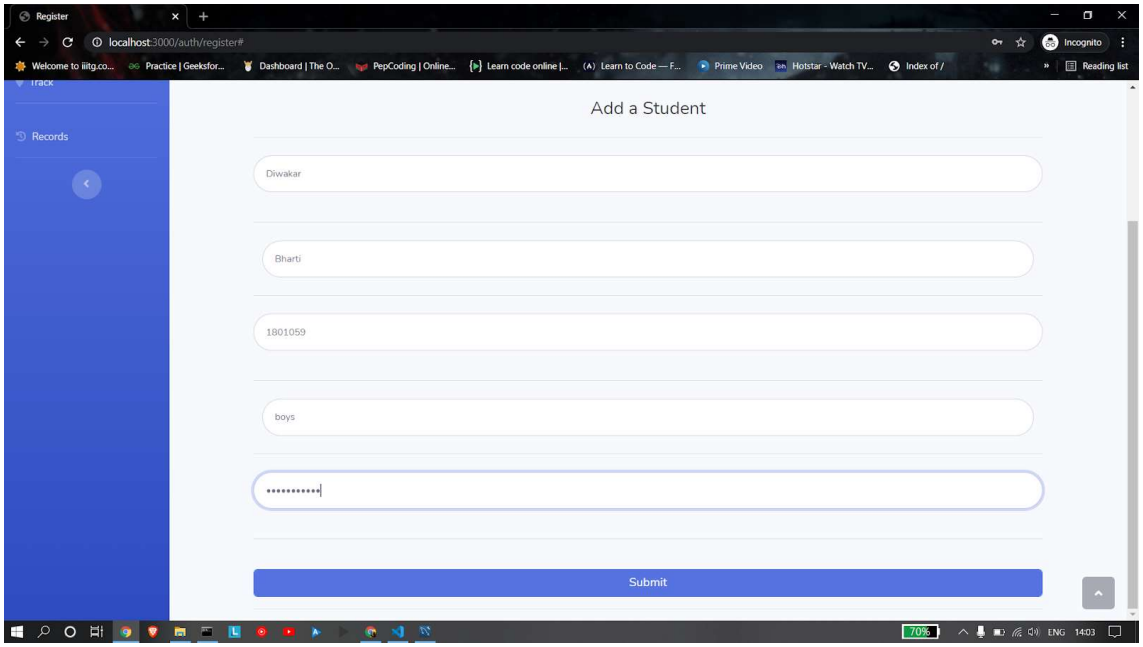
Expected Result : User should be successfully registered

Result :

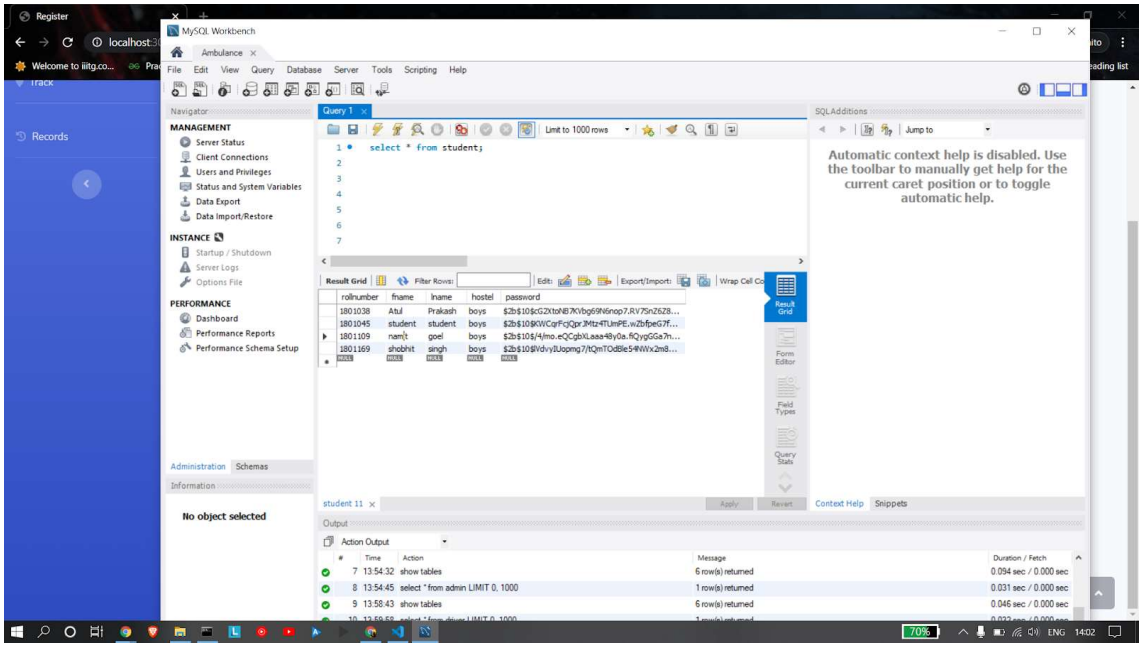
User Added -



Input :



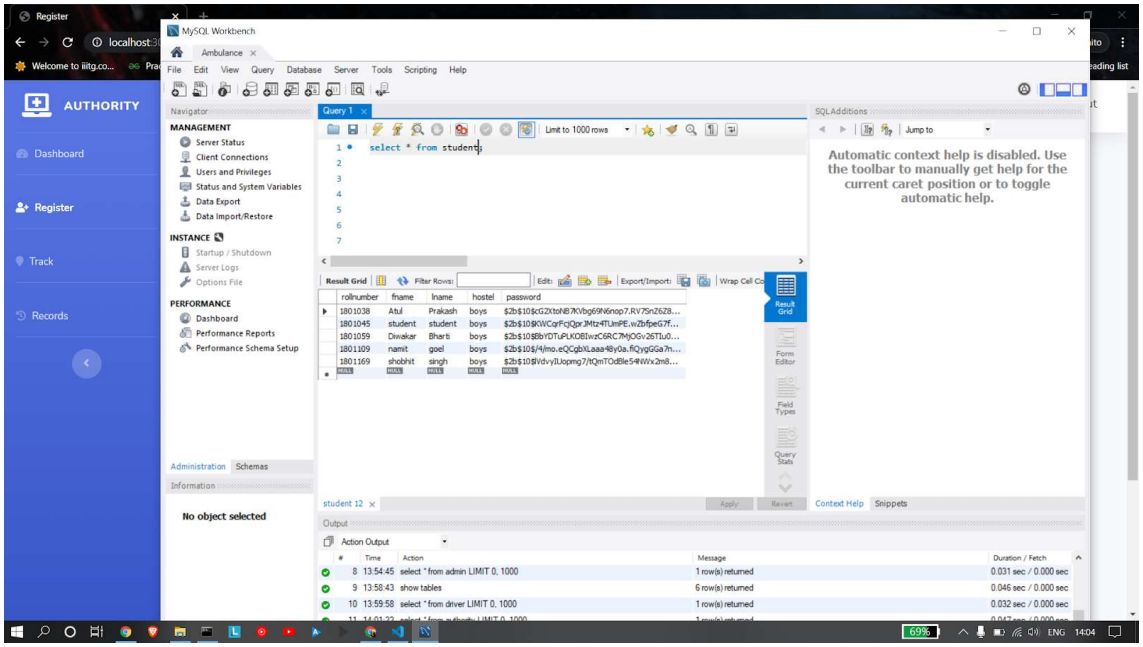
Before Adding :



Expected Result : User should be successfully registered

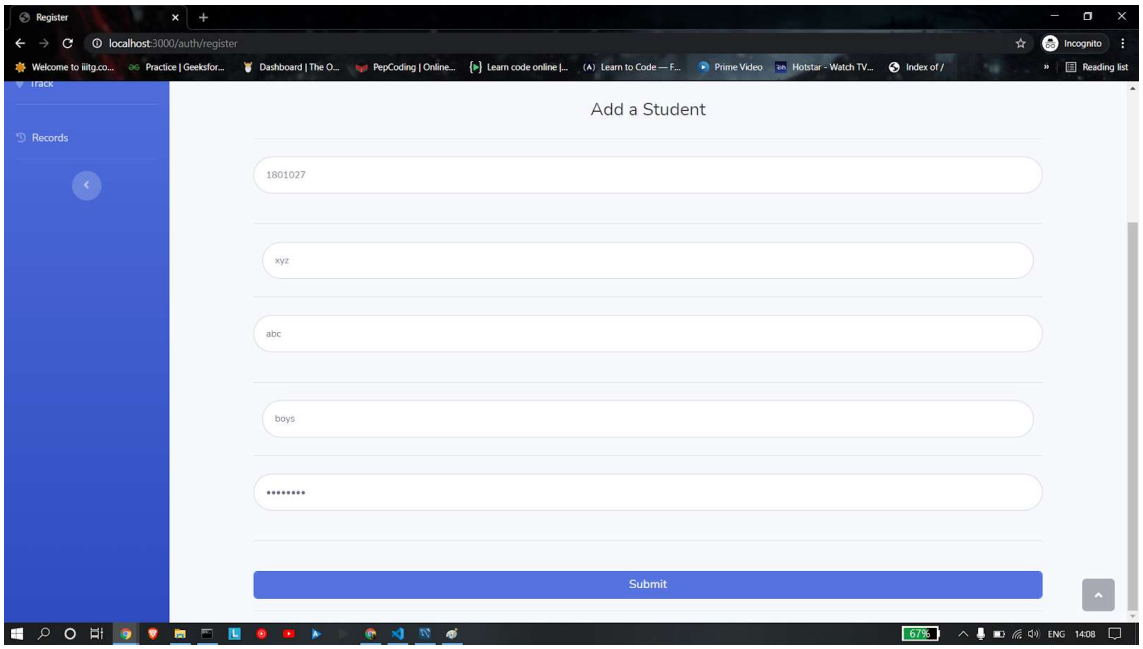
Result :

User Added -



Case 2: Wrong Input

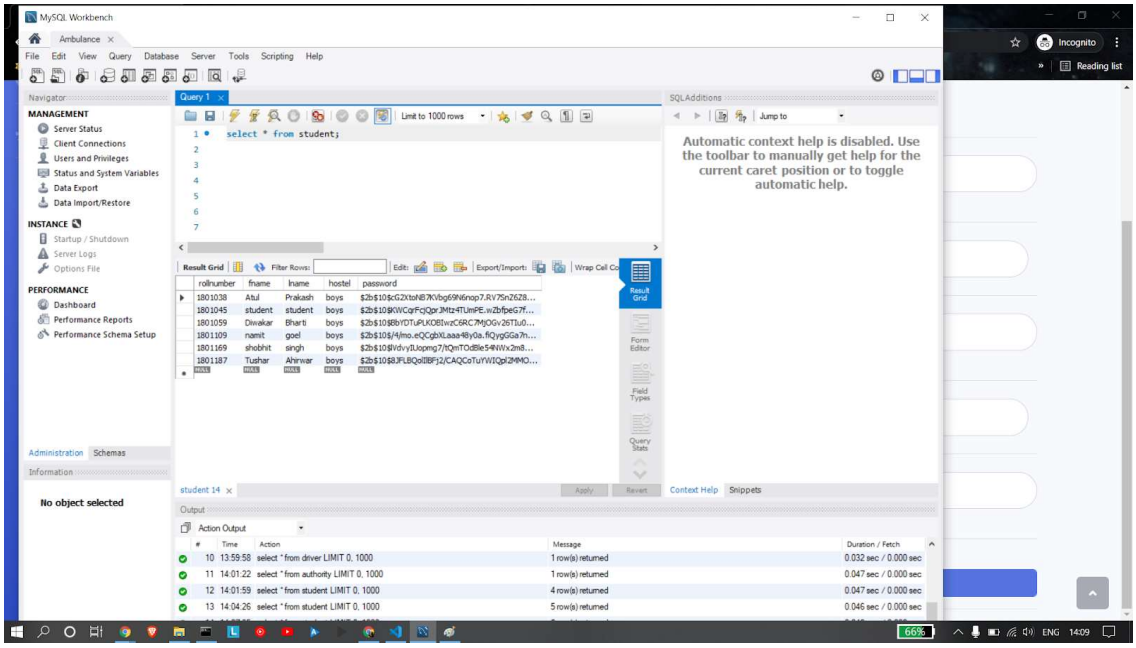
Input :



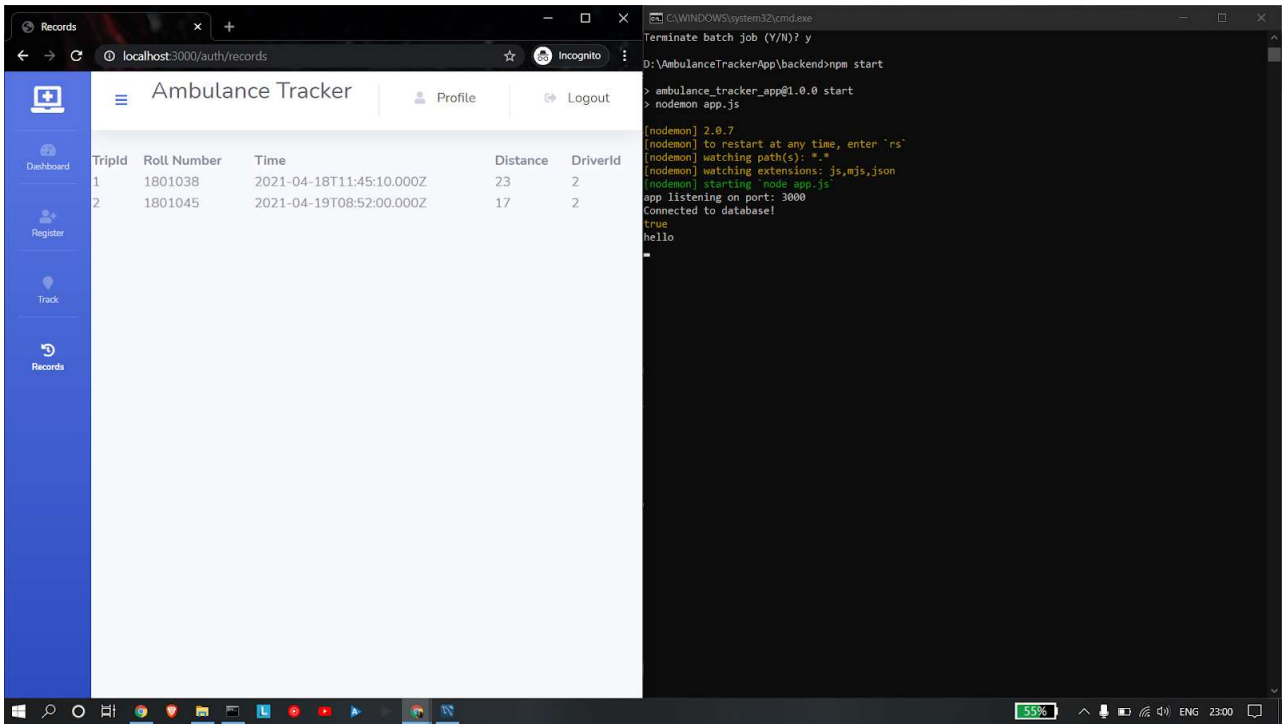
Expected Result : User should not be added

Result :

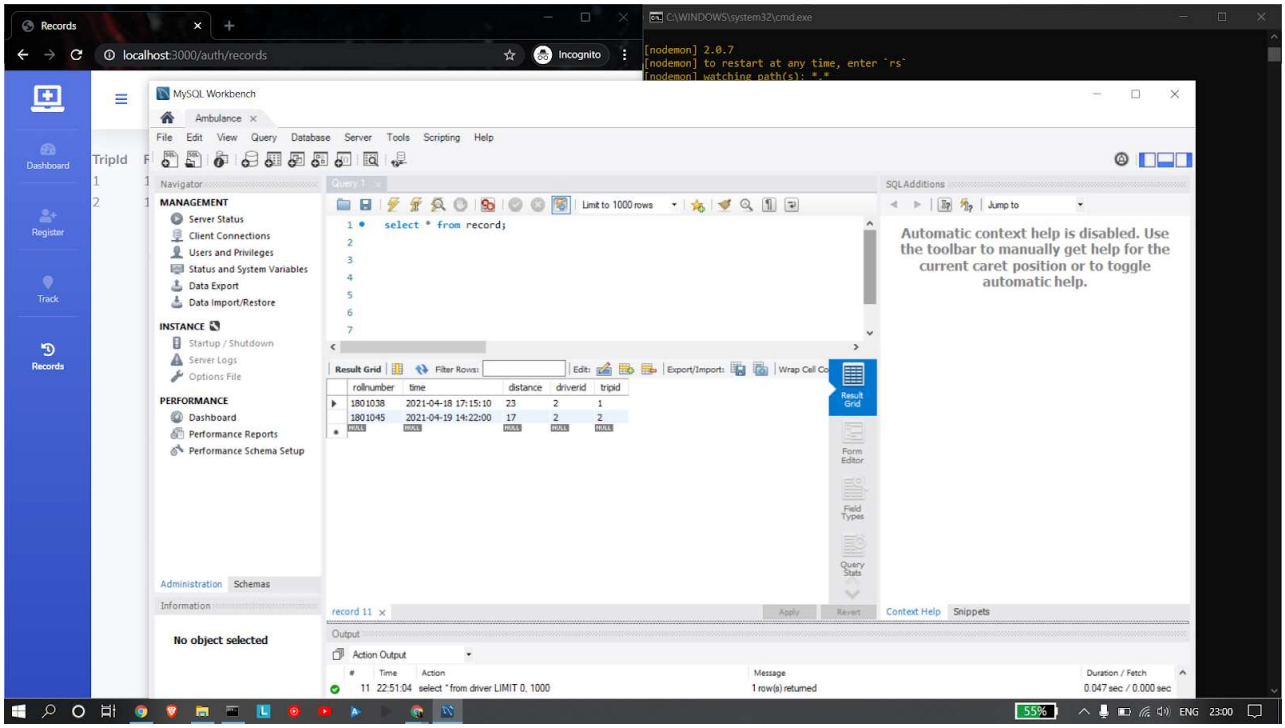
User not added -



3. Authorities will have full access to the records :

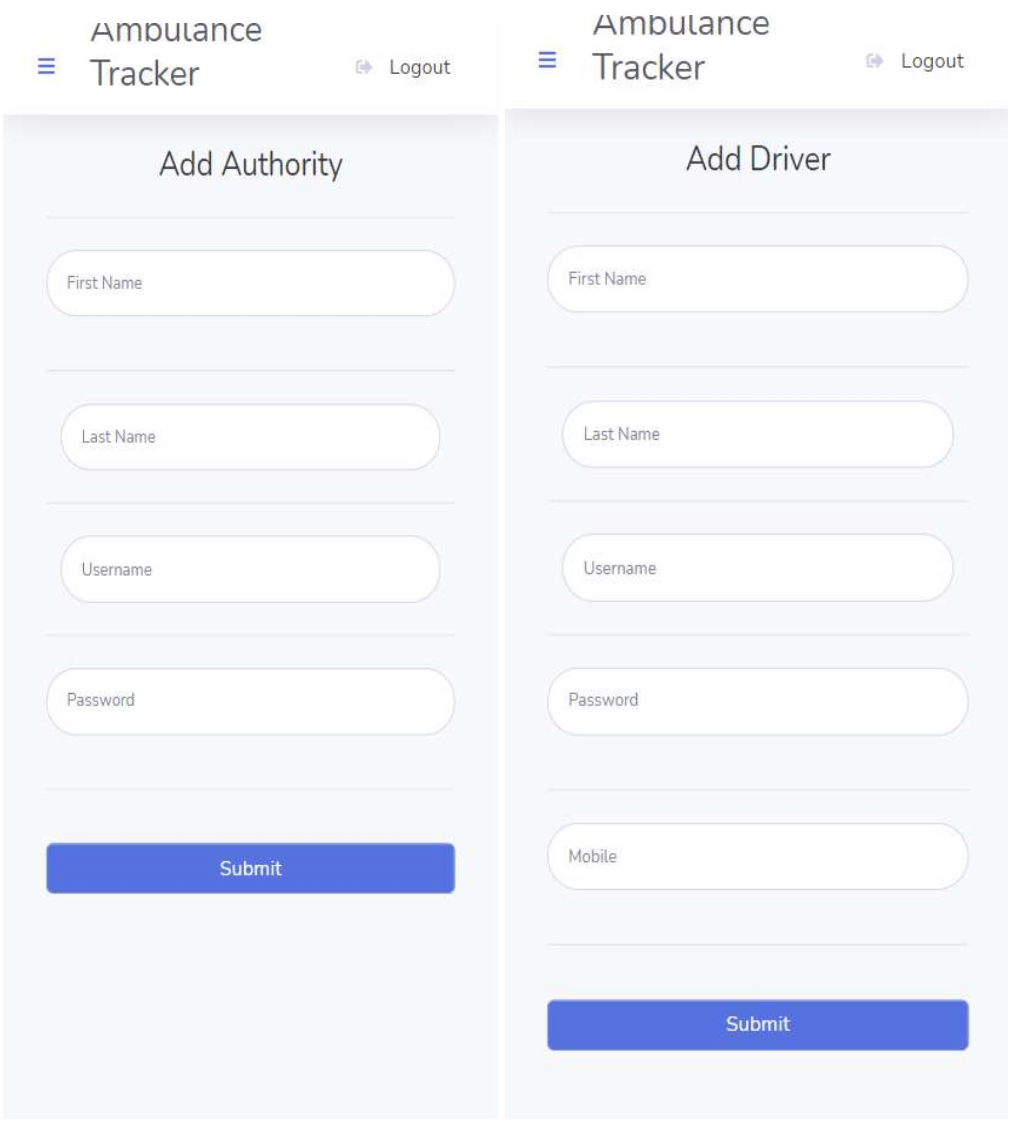


Records table :

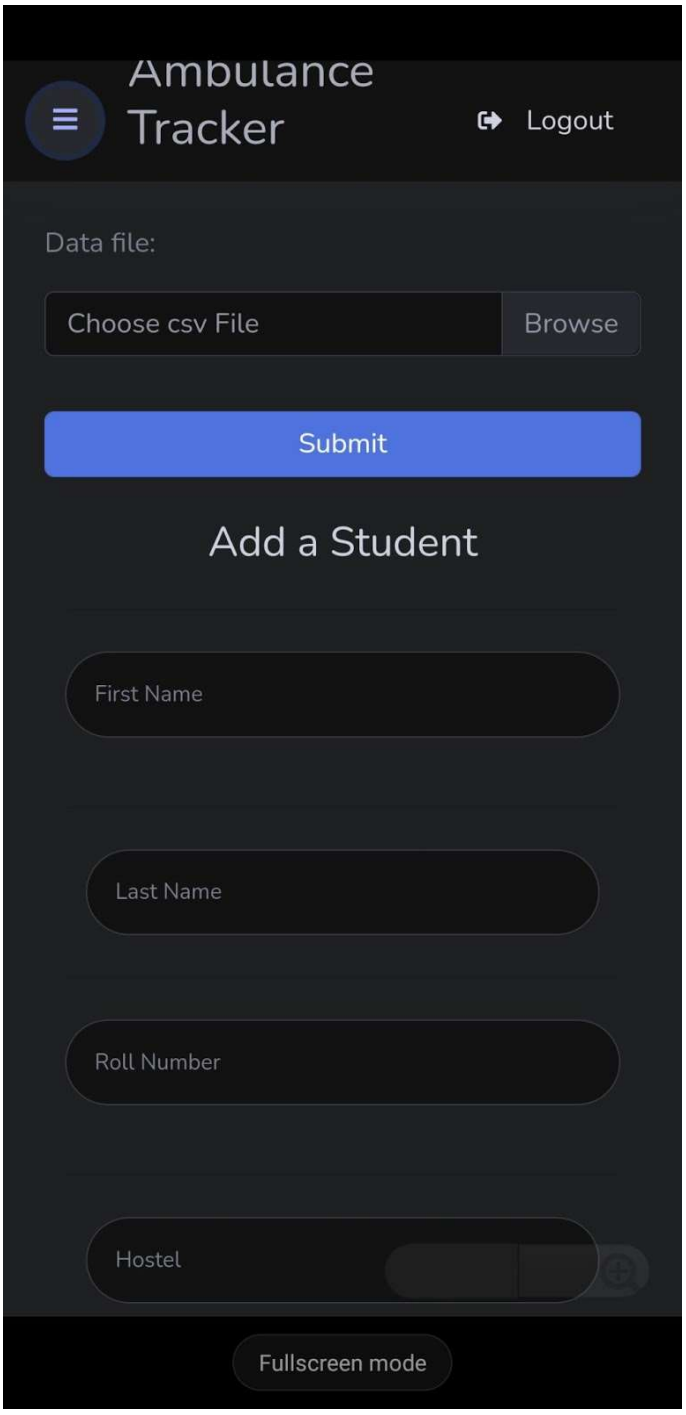


4. Separate interface for Authority, Students and Drivers :

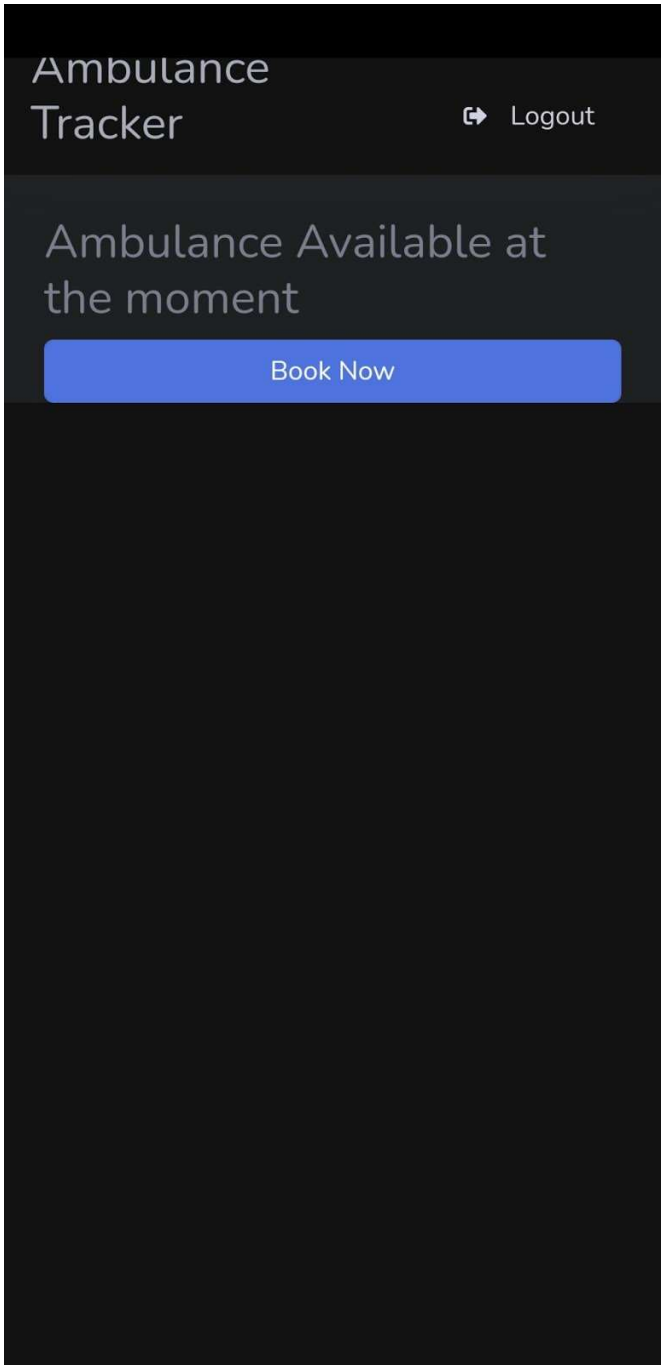
Admin :



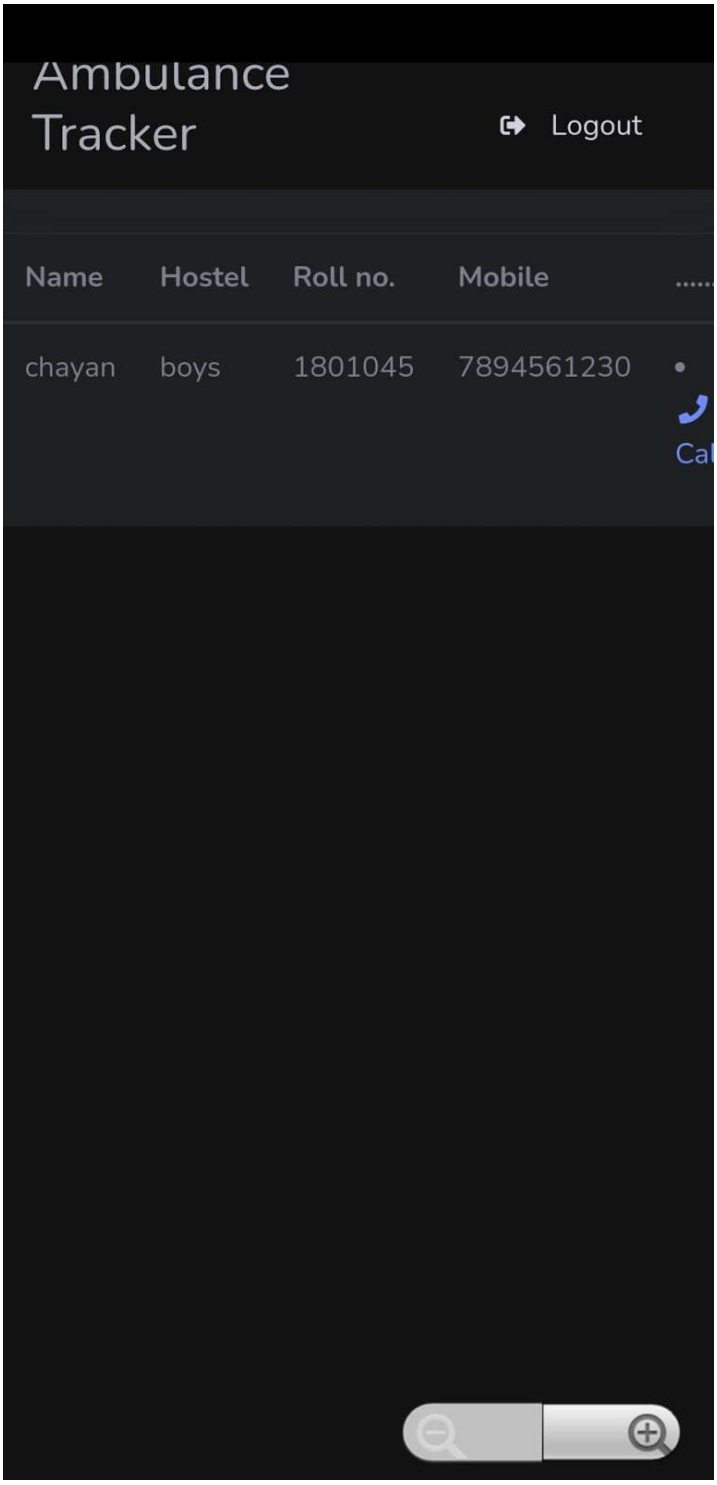
Authority :


Ambulance Tracker
Logout
Data file:
Choose csv File
Browse
Submit
Add a Student
First Name
Last Name
Roll Number
Hostel
Fullscreen mode

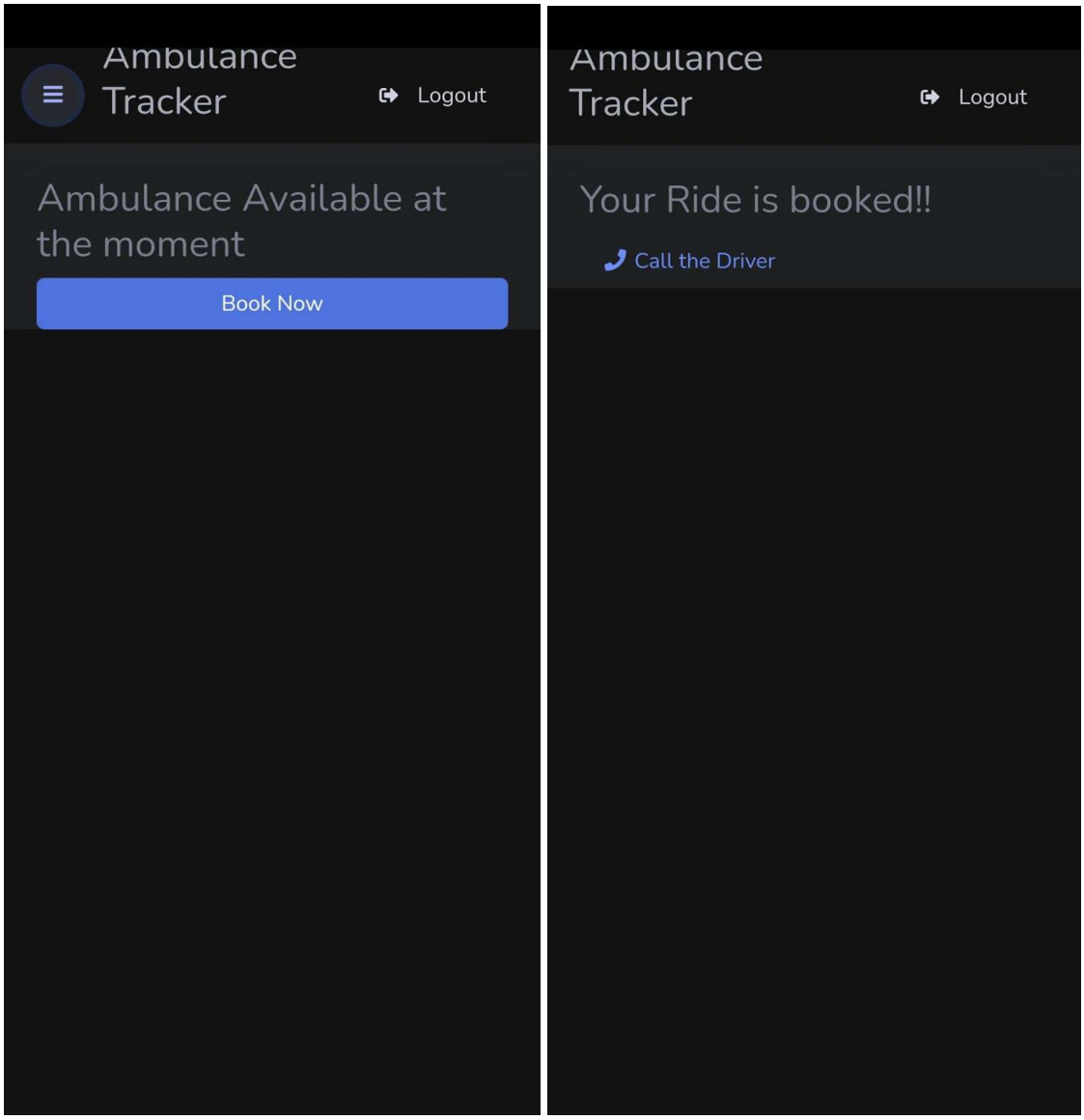
Student :


Ambulance
Tracker
Logout
Ambulance Available at
the moment
Book Now

Driver :

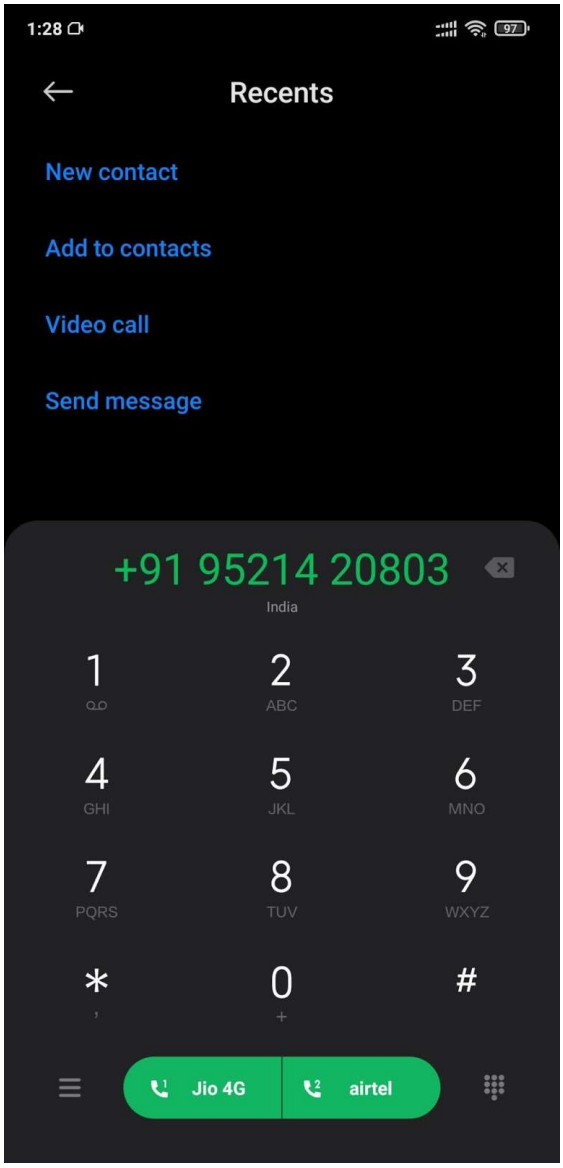

Ambulance
Tracker
Logout
Name
Hostel
Roll no.
Mobile
chayan
boys
1801045
7894561230

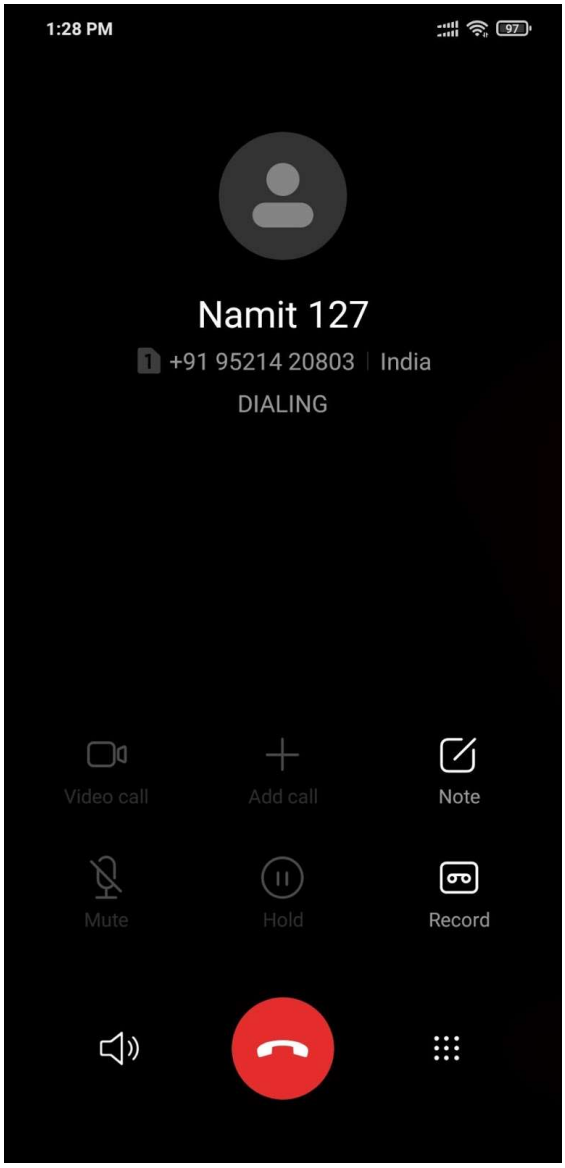
5. **Students can check the availability of the ambulance in case of an emergency and book it or call the driver :**



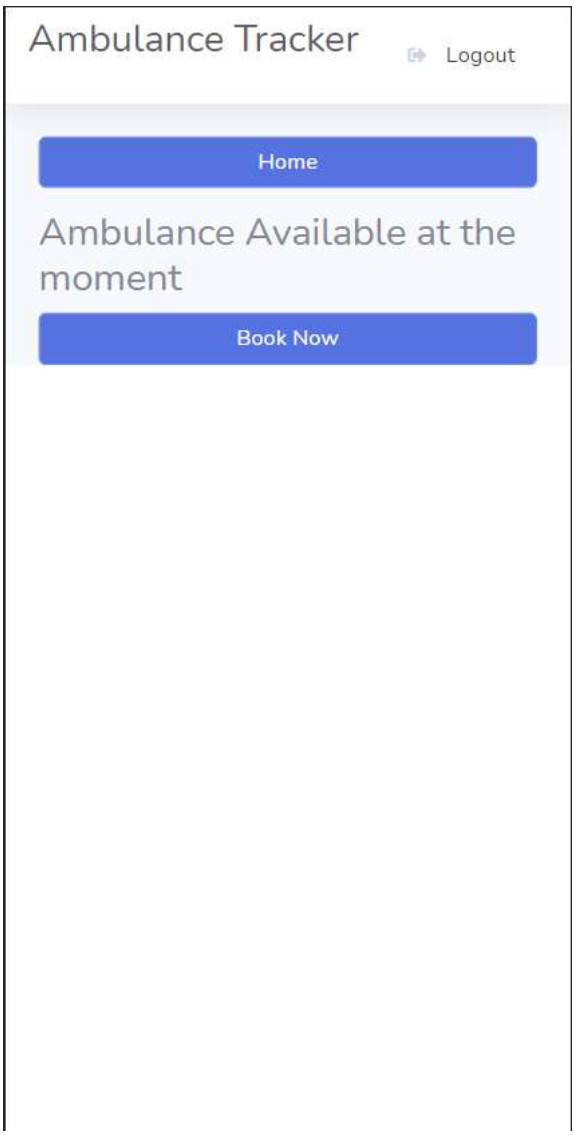
After clicking the Book now button, The option to call the driver will be available if the ambulance is available.

After Call the Driver , it will automatically redirect to the calling option to call the driver.


1:28
Recents
New contact
Add to contacts
Video call
Send message
+91 95214 20803
India
1
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
*
0 +
#
Jio 4G
airtel

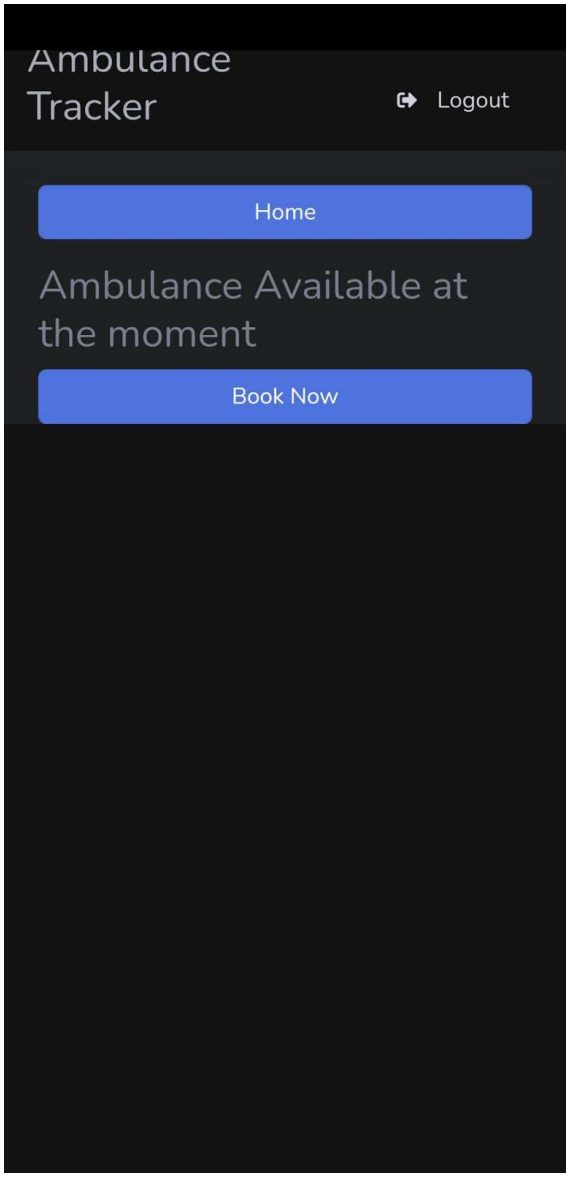

1:28 PM
Namit 127
+91 95214 20803 | India
DIALING
Video call
Add call
Note
Mute
Hold
Record

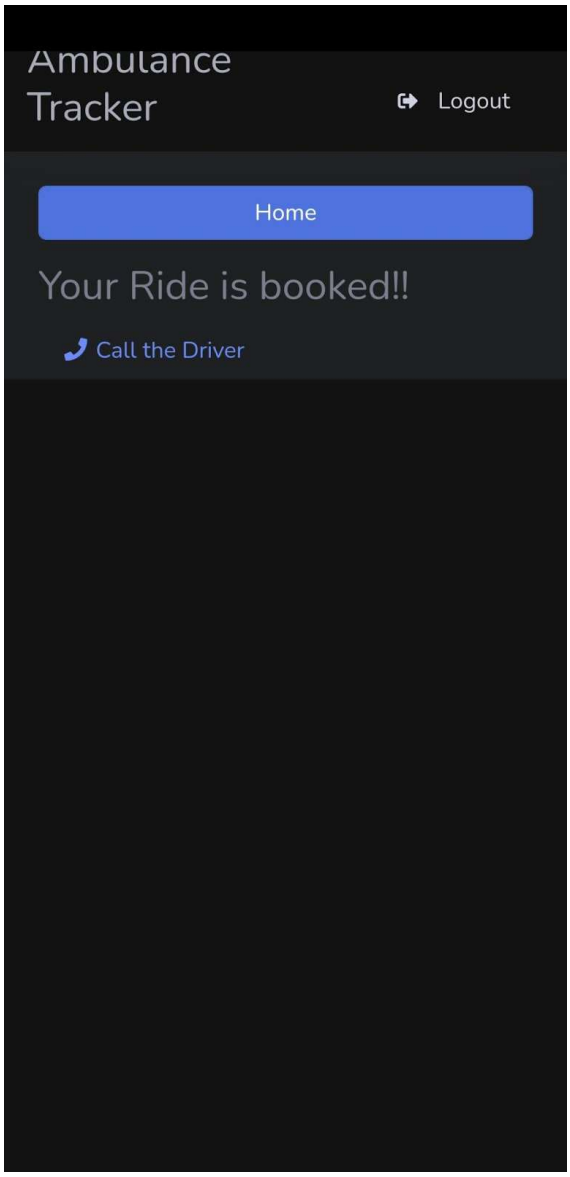
Checking the Availability of the Ambulance :



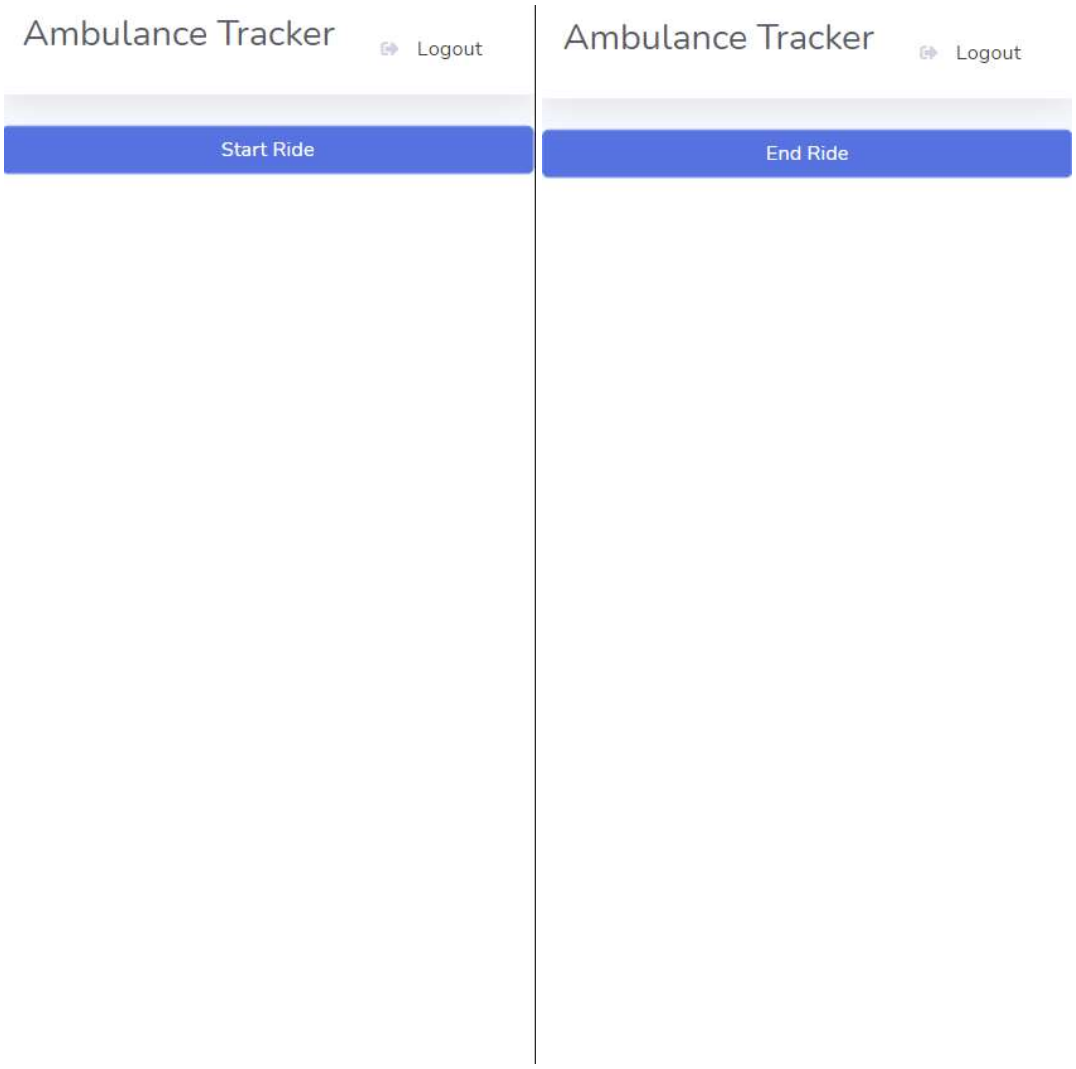
6. **<u>After a student's request for an ambulance, the driver can initiate and end the ride upon the completion of which a POST request would be generated to the server with appropriate information accordingly</u> :**

Student :


Ambulance
Tracker
Logout
Home
Ambulance Available at the moment
Book Now


Ambulance
Tracker
Logout
Home
Your Ride is booked!!
Call the Driver

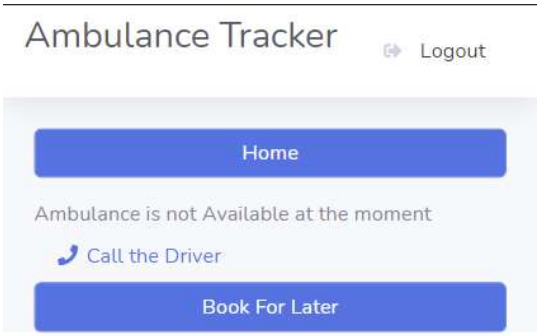
Driver :

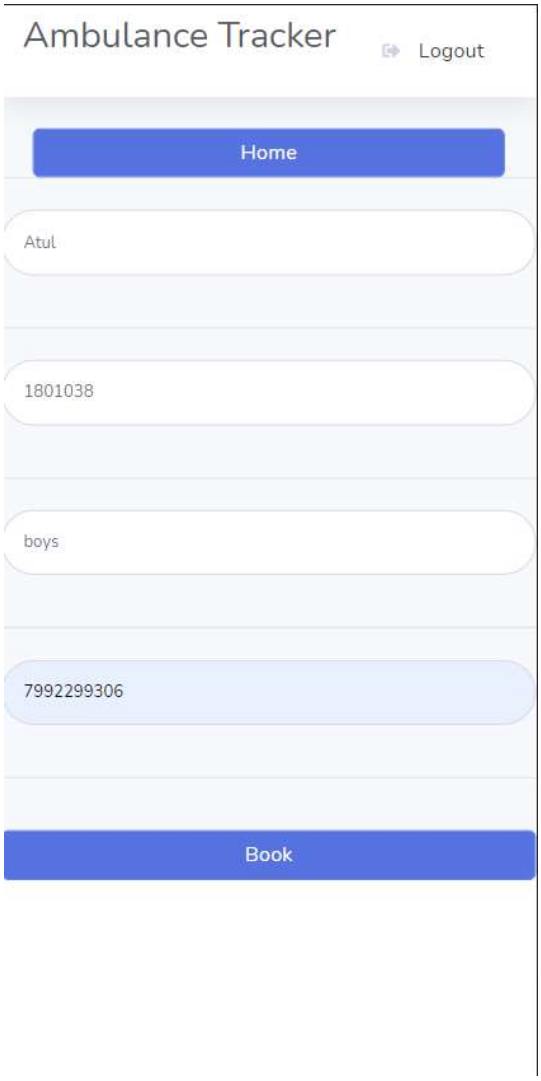


If the ambulance is available then the Driver will get the option to start the ride and as soon as the Driver presses End Ride, he can start a new ride from the pending rides.

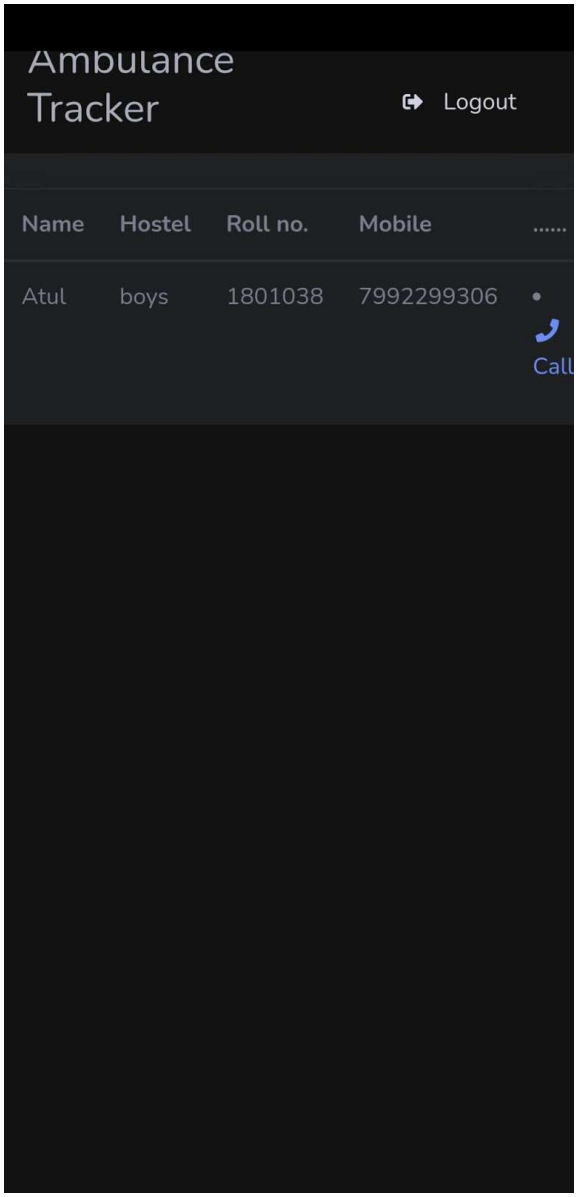
When the ambulance is unavailable, the student will be displayed the unavailability of the ambulance as shown below :

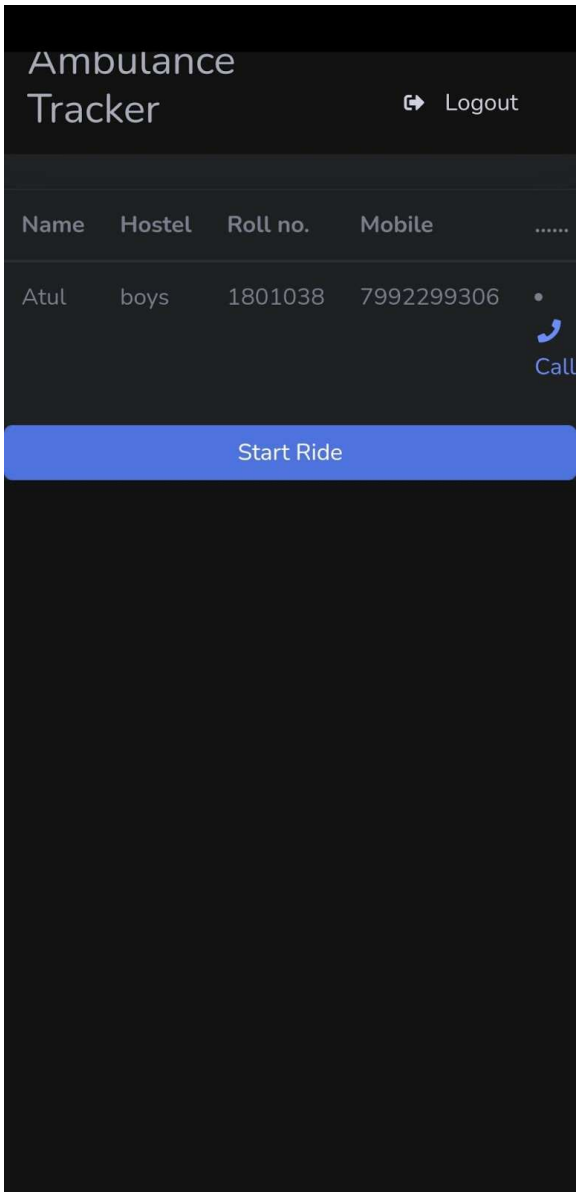
Student :

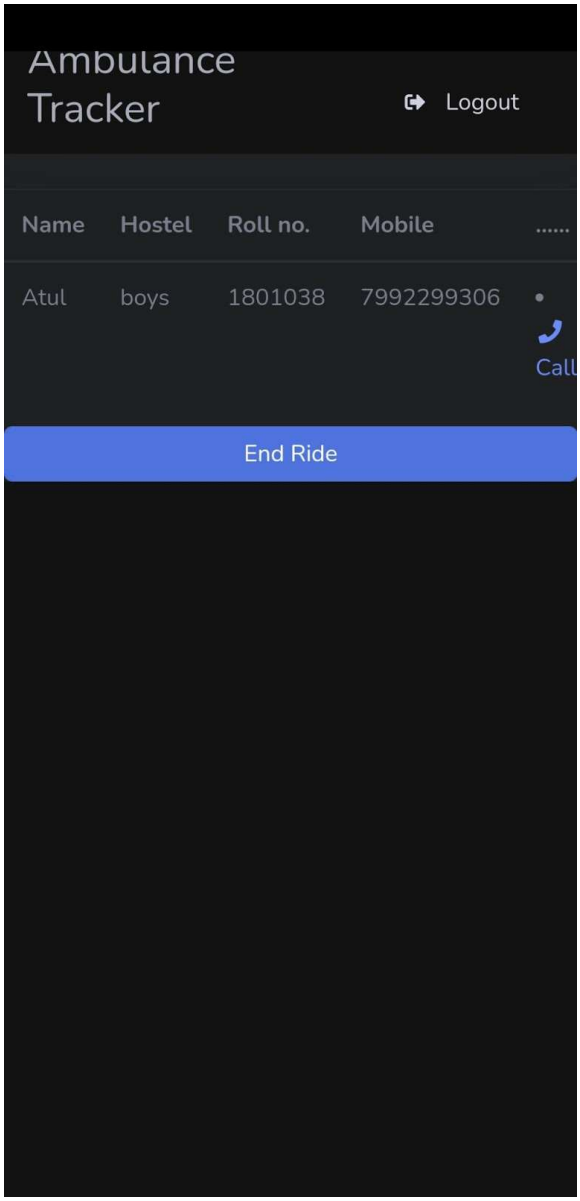

Ambulance Tracker
Logout
Home
Ambulance is not Available at the moment
Call the Driver
Book For Later


Ambulance Tracker
Logout
Home
Atul
1801038
boys
7992299306
Book

Driver :


Ambulance Tracker
Logout
Name
Hostel
Roll no.
Mobile
.....
Atul
boys
1801038
7992299306
Call

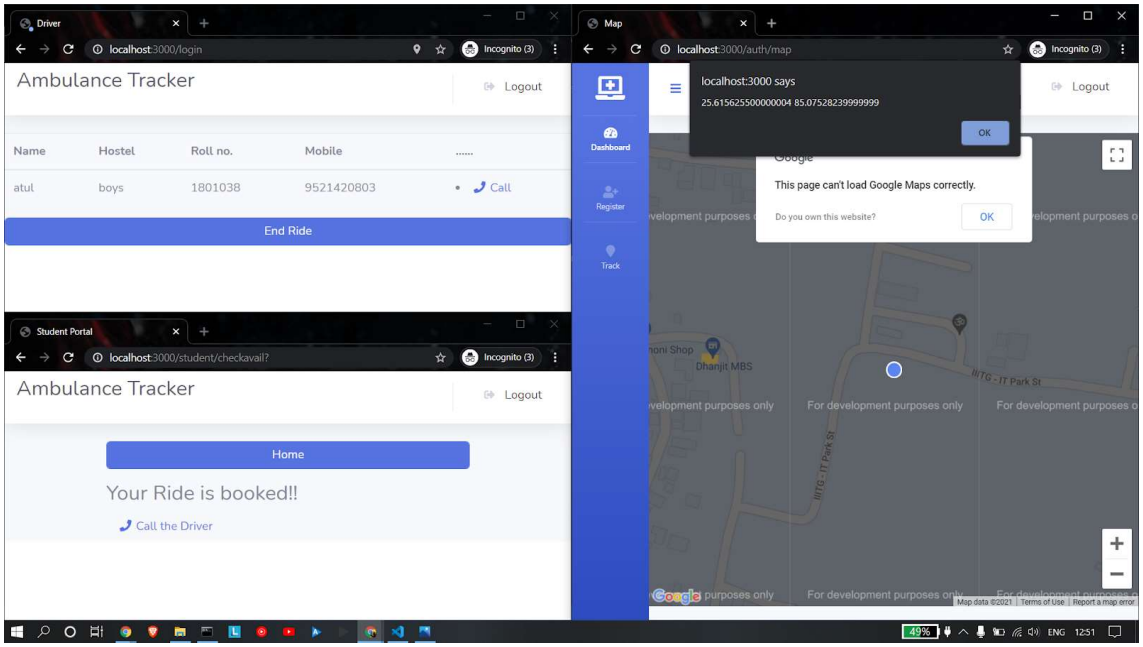

Ambulance Tracker
Logout
Name
Hostel
Roll no.
Mobile
.....
Atul
boys
1801038
7992299306
Call
Start Ride


Ambulance Tracker
Logout
Name
Hostel
Roll no.
Mobile
.....
Atul
boys
1801038
7992299306
Call
End Ride

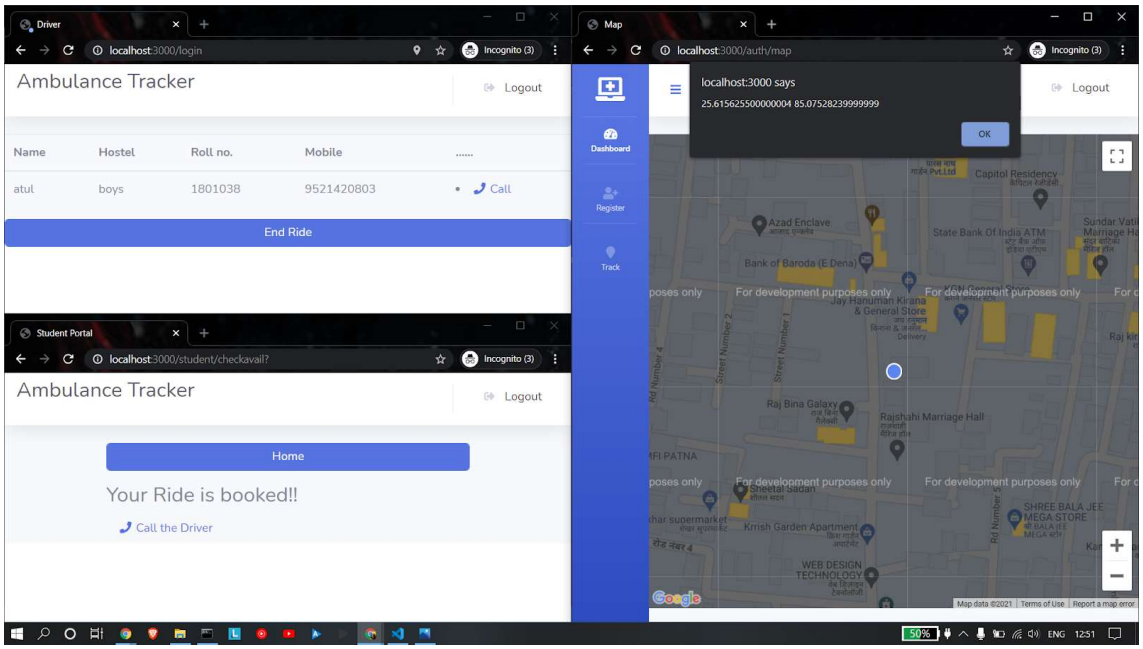

Ambulance Tracker
Logout
No Rides For Now!!!!!!

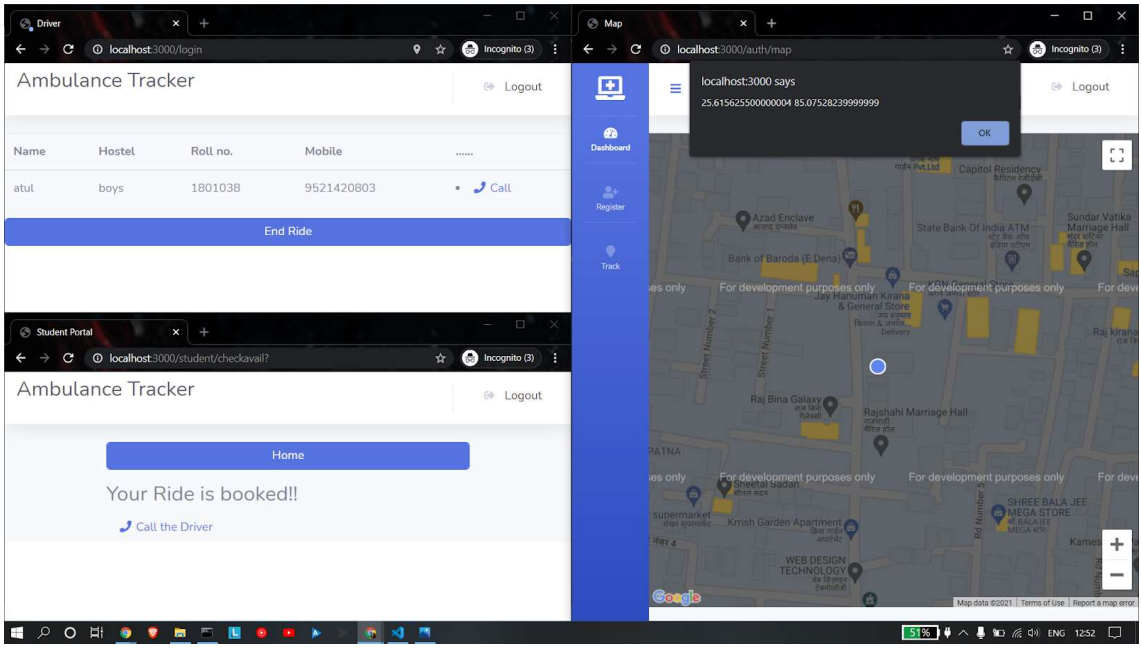
7. Location tracking facility is available for authorities :

After starting ride by driver :

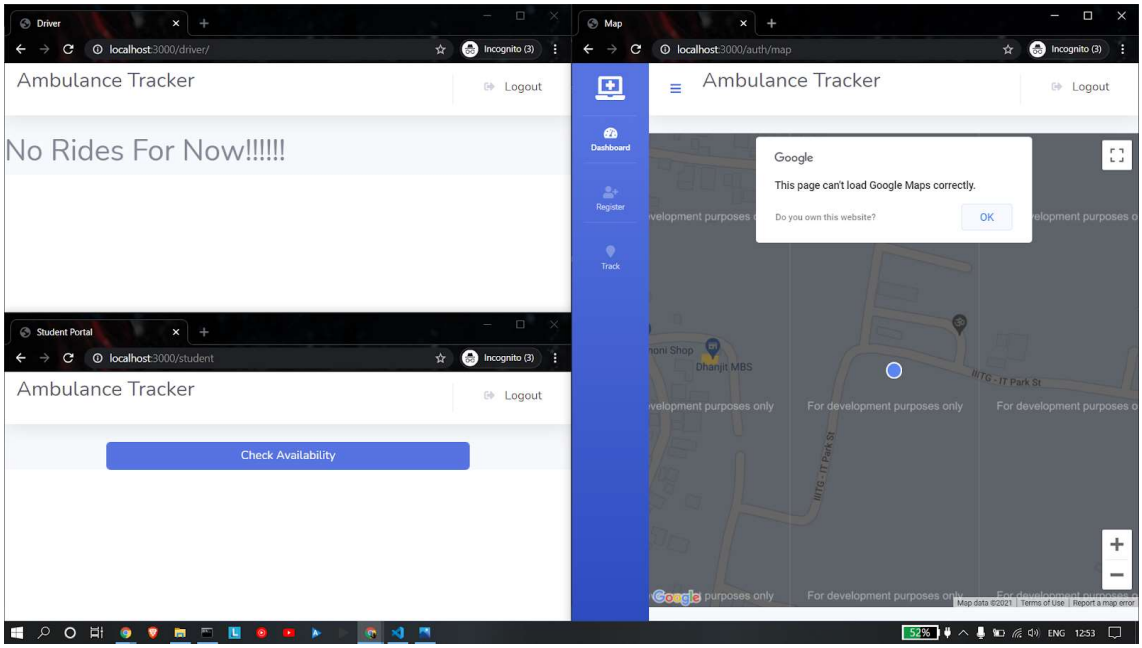


Location Displayed on the authority page :

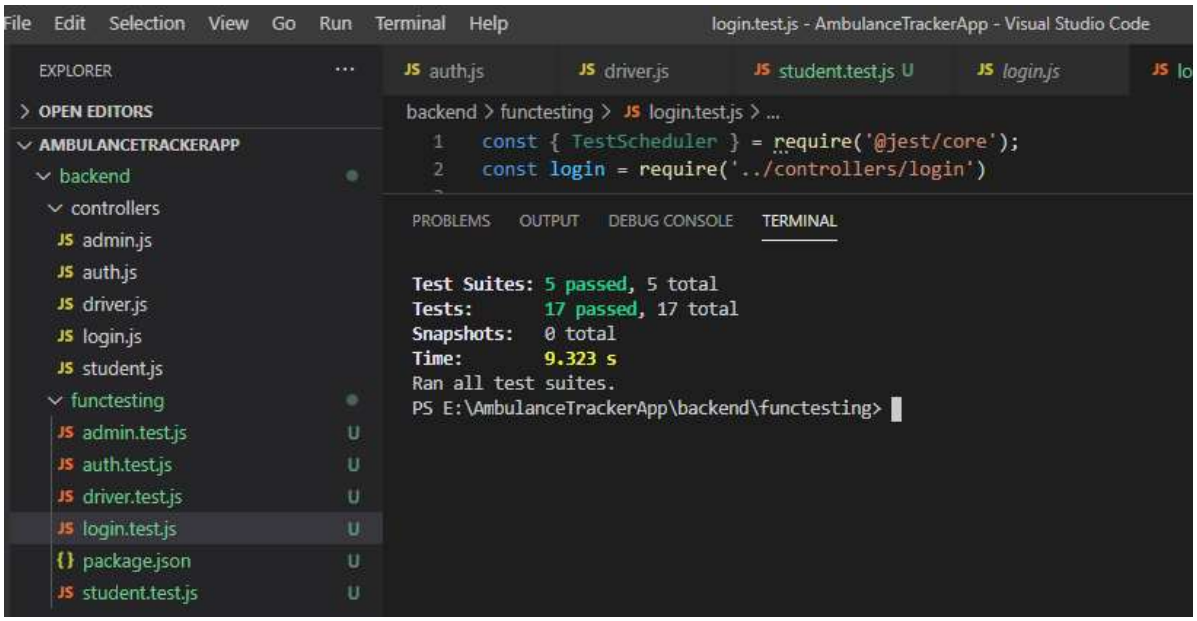




After ending ride :



Lastly Checking the validity of all the functions in our project :



This was all the parts regarding the testing of our project.