

NETWORK BASED APPLICATION AND DESIGN – MILESTONE 5

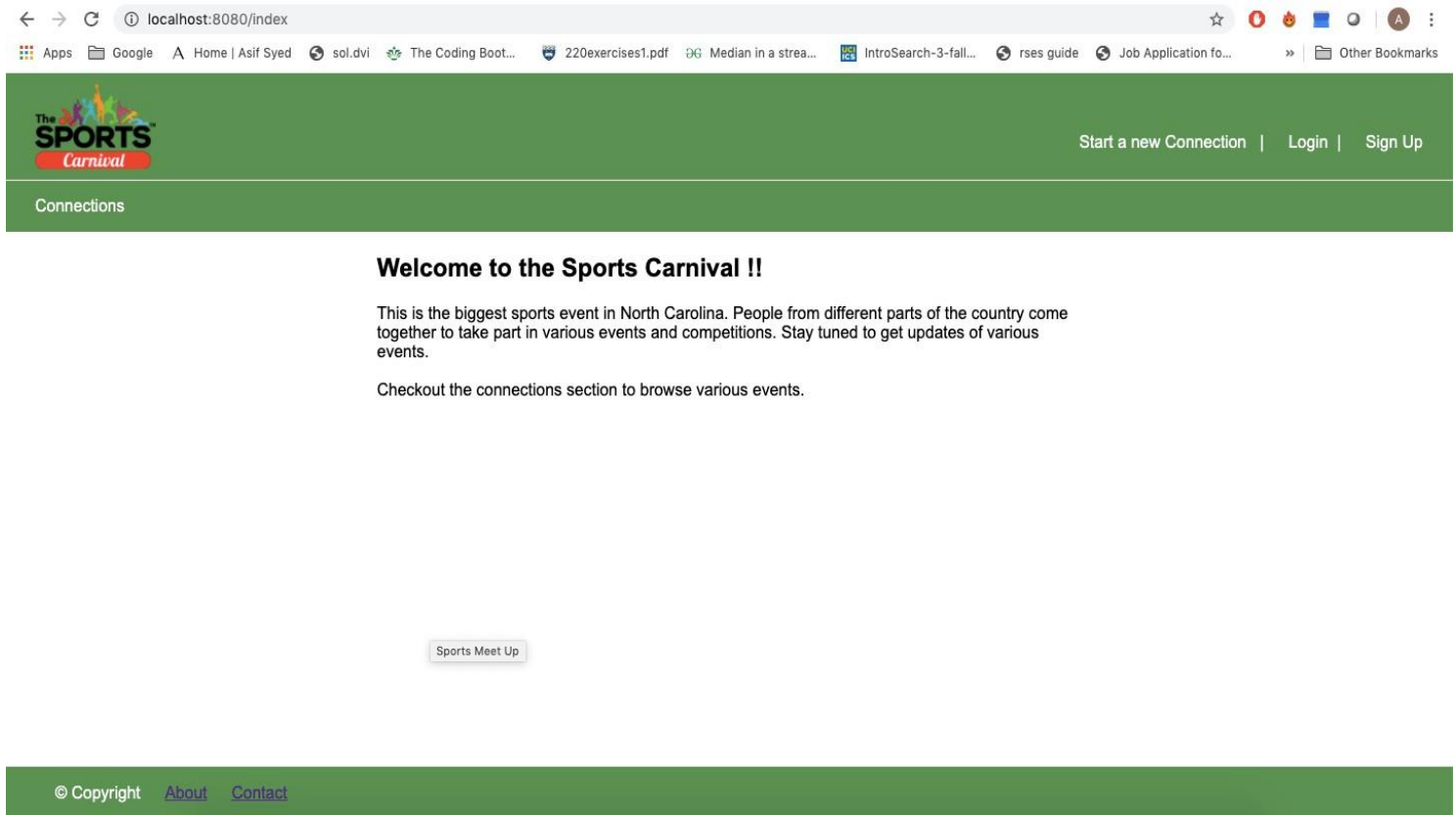
Project Topic – Sports Meetup

Name : Afreen
Student ID : 801136632

Test User -- USERID : Test123 | PASSWORD : Test123

Afreen -- USERID : AF801136632 | PASSWORD : Afreen123

- i. Homepage/Index page – Displays the welcome message.



ii. Sign Up page – It is used to register a user. (Includes validation)

localhost:8080/signup

The SPORTS Carnival

Start a new Connection | Login | Sign Up

Connections

Validation Errors :

- Entered value : sfn 8
Error message : First name can contain only letters and spaces.
- Entered value : nh8
Error message : Last name can contain only letters and spaces.
- Entered value : sd@gmail.com
Error message : Use UNCC registered email id (Ex:a4@uncc.edu).
- Entered value : ashjdsa123
Error message : Password must contain one lowercase letter,one uppercase letter and a digit and the length should be between 6 and 20.
- Entered value : sdfd23xcsgd
Error message : Passwords do not match!
- Entered value : 234
Error message : Zipcode should have atleast 5 digits.

Sign Up Here!

User ID :

First Name :

Last Name :

Email :

Password :

Confirm Password :

Address :

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iii. Login Page – It is used for a user to login with a user ID and password. (Validated for both User ID and password).

Test User -- USERID : Test123 | PASSWORD : Test123

Afreen -- USERID : AF801136632 | PASSWORD : Afreen123

localhost:8080/login

The SPORTS Carnival

Start a new Connection | Login | Sign Up

Connections

Validation Errors :

- Invalid UserID : User does not exist!

Welcome to sports meet up.

Enter User ID and Password to login.

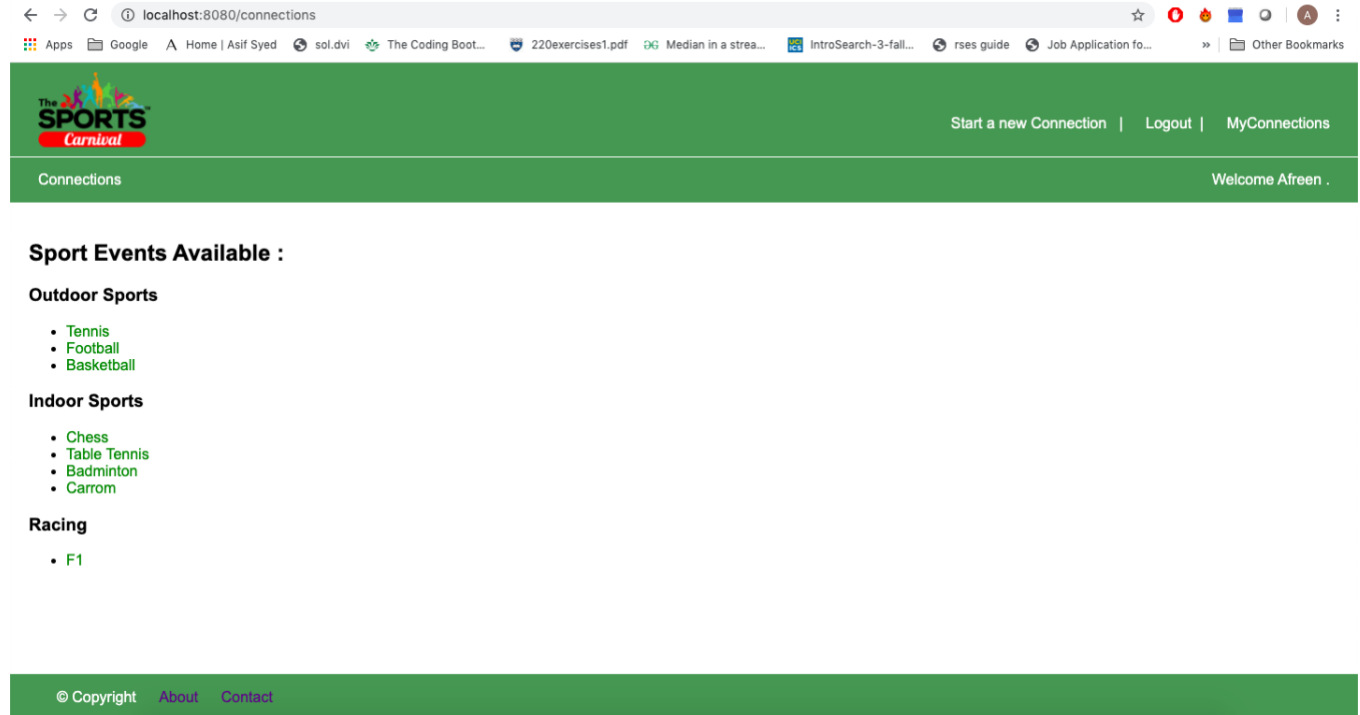
User ID :

Password :

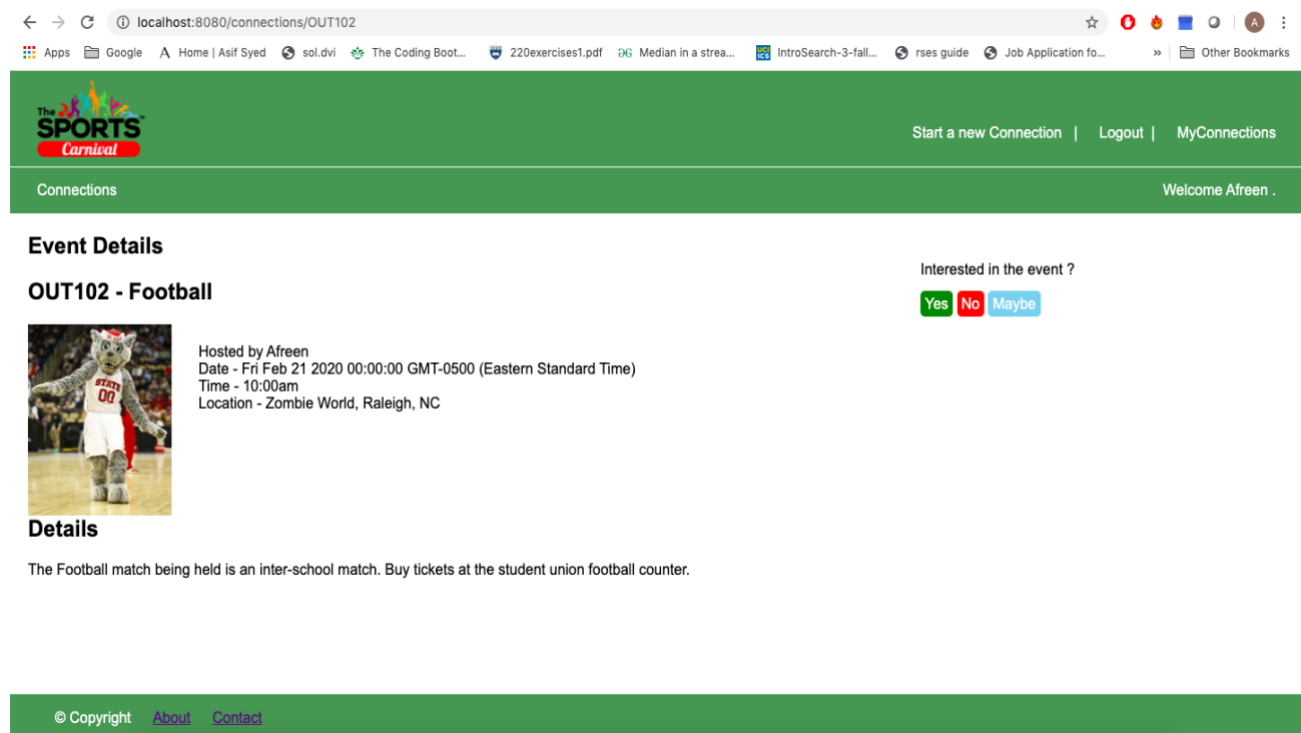
Login

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- iv. **Connections page** – Lists all the events.



v. **Connection page**—Displays details of the connection selected from connections page.



- vi. Saved Connections page – On responding to an event in connection, the connection gets saved with the RSVP and is displayed on saved connections page, this page can also be accessed using view my connections link on the navigation bar.

localhost:8080/login

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The SPORTS Carnival

Start a new Connection | Logout | MyConnections

Connections Welcome Afreen .

Afreen .'s Connections

Connections	Category	Going ?	Update/Delete
OUT102 - Football	Outdoor Sports	maybe	Update Delete
OUT103 - Basketball	Outdoor Sports	maybe	Update Delete
IND102 - Table Tennis	Indoor Sports	yes	Update Delete
OUT101 - Tennis	Outdoor Sports	no	Update Delete
IND101 - Chess	Indoor Sports	yes	Update Delete
IND103 - Badminton	Indoor Sports	no	Update Delete
ABC101 - F1	Racing	yes	Update Delete

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- vii. New Connection page – This page is used to create a new connection. (Validation included)

localhost:8080/connections/newConnection

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The SPORTS Carnival

Start a new Connection | Logout | MyConnections

Connections Welcome Afreen .

Validation Errors :

- Entered value : 1232sd .
Error message : Connection ID must contain only alphabets and numbers.
- Entered value : cxaf sa324
Error message : Connection Name can contain only alphabets and spaces.
- Entered value : asf *
Error message : Connection Topic can contain only alphabets and spaces.
- Entered value : *) fds
Error message : Connection Details can contain only alphabets and spaces and special chars(, . ,) .
- Entered value : 2019-12-31
Error message : Events can be created after today's date.
- Entered value : 12:58
Error message : Start time should not be greater than end time
- Entered value : dfs)
Error message : Connection Location can contain only alphabets, spaces number and comma.

Create a new connection.

Connection ID :

Name :

Topic :

Details:

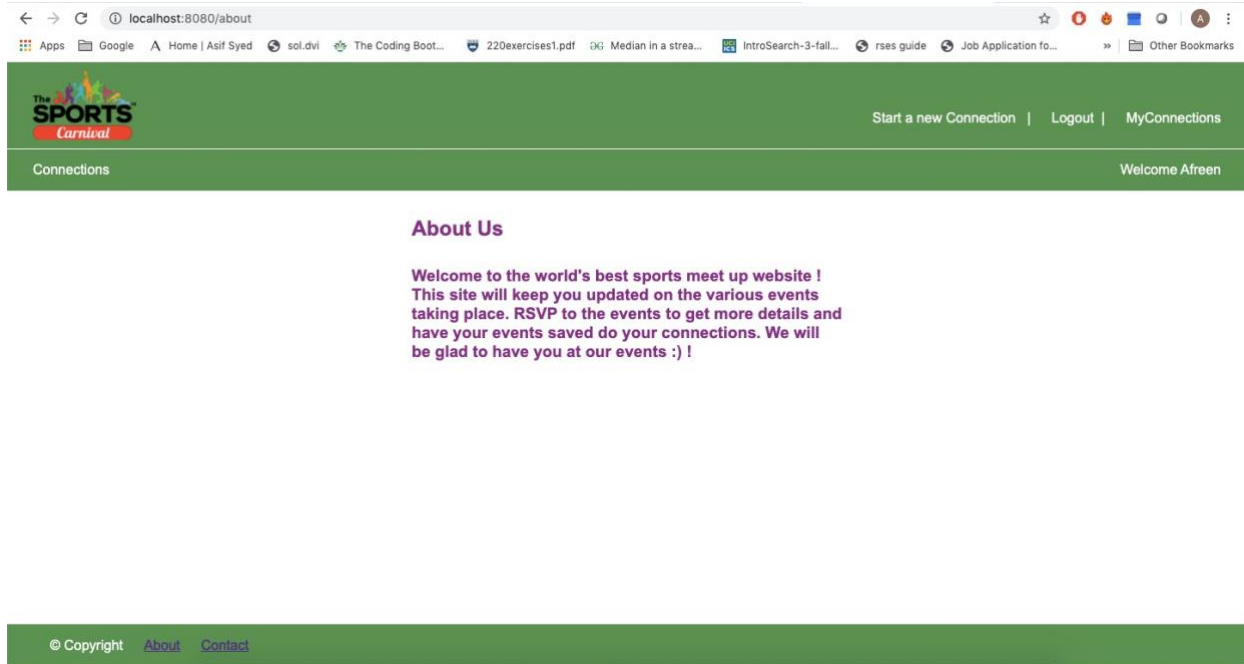
Date:

Start Time:

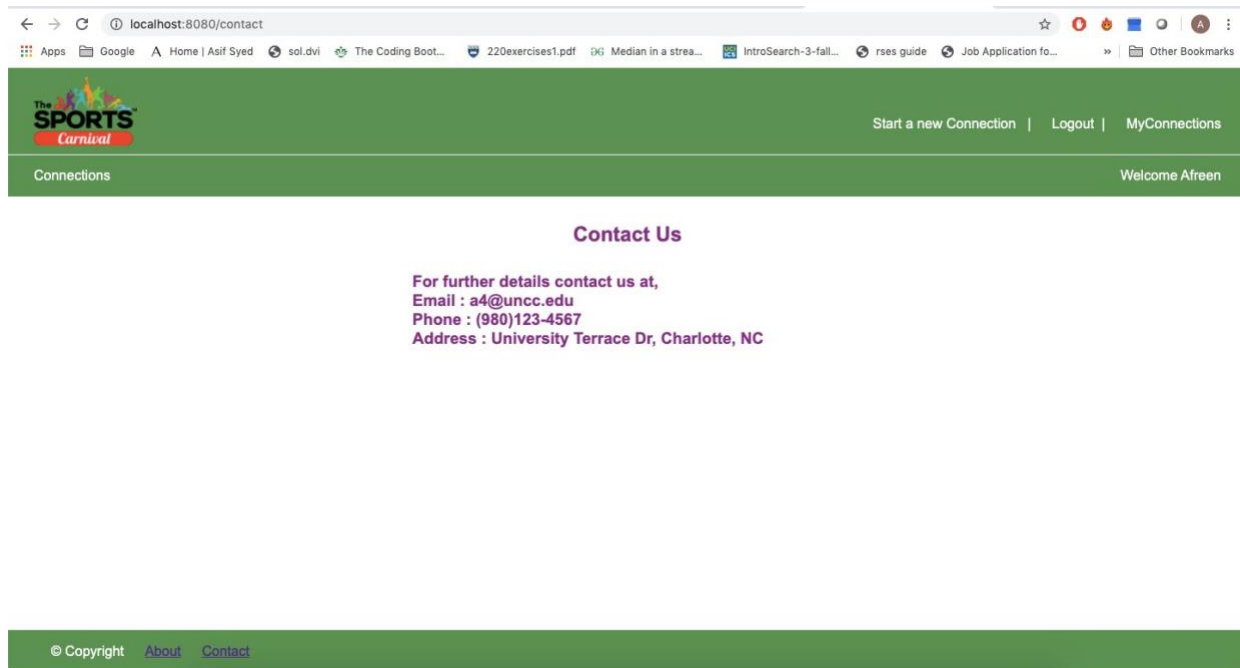
End Time:

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viii. About us page – Displays details about website.



ix. Contact us page – Displays contact details.



Mongo DB screenshots :

1. Creating db and collections :

```
asif — mongo — 111x31

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---

[> show dbs
Courses      0.000GB
admin        0.000GB
config       0.000GB
local        0.000GB
mycourses   0.000GB
mycustomers  0.000GB
newcourse    0.000GB
test         0.000GB
> use sports-meetup
switched to db sports-meetup
[> db
sports-meetup
[> db.createCollection("users")
{ "ok" : 1 }
[> db.createCollection("connections")
{ "ok" : 1 }
[> db.createCollection("userconnections")
{ "ok" : 1 }
[> db.getCollectionNames()
[ "connections", "userconnections", "users" ]
> █
```

2. Add a list of connections

```
asif — mongo — 138x38

WriteResult({ "nRemoved" : 9 })
> db.connections.insertMany([ {connectionID:'OUT101',connectionName:'Tennis',connectionTopic:'Outdoor Sports',details:'The Tennis match being held is an inter-school match. Buy tickets at the student union tennis counter.',date:'02-20-20',starttime:'9:00am',endtime:'10:00am',location:'Webb Road NC'}, {connectionID:'OUT102',connectionName:'Football',connectionTopic:'Outdoor Sports',details:'The Football match being held is an inter-school match. Buy tickets at the student union football counter.',date:'02-21-20',starttime:'10:00am',endtime:'11:00am',location:'Zombie World, Raleigh, NC'}, ... {connectionID:'OUT103',connectionName:'Basketball',connectionTopic:'Outdoor Sports',details:'The Basketball match being held is an inter-school match. Buy tickets at the student union basketball counter.',date:'02-22-20',starttime:'11:00am',endtime:'12:00pm',location:'Lala Land, Greensboro, NC'}, ... {connectionID:'IND101',connectionName:'Chess',connectionTopic:'Indoor Sports',details:'The Chess match being held is an inter-school match. Buy tickets at the student union chess counter.',date:'02-23-20',starttime:'12:00pm',endtime:'2:00pm',location:'Page Ground, Hillsboro, NC'}, ... {connectionID:'IND102',connectionName:'Table Tennis',connectionTopic:'Indoor Sports',details:'The Table Tennis match being held is an inter-school match. Buy tickets at the student union table tennis counter.',date:'02-24-20',starttime:'1:00pm',endtime:'2:00pm',location:'Webb Road NC'}, ... {connectionID:'IND103',connectionName:'Badminton',connectionTopic:'Indoor Sports',details:'The Badminton match being held is an inter-school match. Buy tickets at the student union badminton counter.',date:'02-25-20',starttime:'2:00pm',endtime:'4:00pm',location:'Geico Park, Charlotte, NC'}, ... {connectionID:'IND104',connectionName:'Carrom',connectionTopic:'Indoor Sports',details:'The carrot match being held is an inter-school match. Buy tickets at the student union carrot counter.',date:'02-26-20',starttime:'2:00pm',endtime:'3:00pm',location:'Garner Ground, Raleigh, NC'}, ... {connectionID:'ABC101',connectionName:'F1',connectionTopic:'Racing',details:'Racing event begins this Spring!',date:'02-27-20',starttime:'5:00pm',endtime:'6:00pm',location:'Niner Nation, Charlotte, NC'} ... ])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("5eac0c23d2aab8b0c90097d1"),
    ObjectId("5eac0c23d2aab8b0c90097d2"),
    ObjectId("5eac0c23d2aab8b0c90097d3"),
    ObjectId("5eac0c23d2aab8b0c90097d4"),
    ObjectId("5eac0c23d2aab8b0c90097d5"),
    ObjectId("5eac0c23d2aab8b0c90097d6"),
    ObjectId("5eac0c23d2aab8b0c90097d7"),
    ObjectId("5eac0c23d2aab8b0c90097d8")
  ]
}
> █
```

3. Add users.

```
asif — mongo — 153x39
> db.users.insertOne({ userID:'AF801136632', firstName:'Afreen', lastName:'.', email:'a4@uncc.edu', password:'Afreen123', address:'9551 university terrac
e dr', city:'Charlotte', state:'North Carolina', zipcode:28262, country:'USA' });
{
  "acknowledged" : true,
  "insertedId" : ObjectId("5eac0c9ad2aab8b0c90097d9")
}
> db.users.insertOne({ userID:'Test123', firstName:'Test', lastName:'User', email:'test123@uncc.edu', password:'Test123', address:'UNC Charlotte', city:'
Charlotte', state:'North Carolina', zipcode:28262, country:'USA' });
{
  "acknowledged" : true,
  "insertedId" : ObjectId("5eac0c9bd2aab8b0c90097da")
}
> db.users.find({}).pretty()
{
  "_id" : ObjectId("5eac0c9ad2aab8b0c90097d9"),
  "userID" : "AF801136632",
  "firstName" : "Afreen",
  "lastName" : ".",
  "email" : "a4@uncc.edu",
  "password" : "Afreen123",
  "address" : "9551 university terrace dr",
  "city" : "Charlotte",
  "state" : "North Carolina",
  "zipcode" : 28262,
  "country" : "USA"
}
{
  "_id" : ObjectId("5eac0c9bd2aab8b0c90097da"),
  "userID" : "Test123",
  "firstName" : "Test",
  "lastName" : "User",
  "email" : "test123@uncc.edu",
  "password" : "Test123",
  "address" : "UNC Charlotte",
  "city" : "Charlotte",
  "state" : "North Carolina",
  "zipcode" : 28262,
  "country" : "USA"
}
```

Output Encoding :

Insert the following connection to database. The details property has a script. If the output is not encoded it would display the alert message. However, we see that the details is rendered as it is and not executed.

```
>db.connections.insertOne({connectionID:'NEW101',connectionName:'DANGER
CONNECTION',connectionTopic:'DANGER TOPIC',details:'<script>alert("danger")</script>',date:'02-20-
20',starttime:'9:00am',endtime:'10:00am',location:'Webb Road NC'})
```

Output :

Additional Features :

1. Sign Up page is created which is used to register a new user.
2. Validation is provided for signup page.

Challenges Faced :

S.no	Stopping Point	Status	Solution
1.	Checking output encoding.	Solved	Changed the <%= to <%- to see how the code is affected when a script is inserted. Verified that the application is immune to such code injections.
2.	Displaying validation errors on same page.	Solved	Passed errors and success status whenever the login, signup and new connection page is rendered and check for success=false condition.

Easy Parts :

1. Validating username and password.
2. Creating custom validations for form elements.

References :

1. Lecture videos.
2. Reviewing express-validation resources and exercise 9 practice.
3. Mongoose documentation.

