NITTE EDUCATION TRUST | NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY

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BIGDATA LABORATORY

Report on,

Learning Activity I-Mini-Project

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(An autonomous institution with A+ Grade by NAAC /UGC, Affiliated to Visvesvaraya Technological University, Belgaum, Approved by UGC/AICTE/Govt. of Karnataka)

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INTRODUCTION

MongoDB is a general purpose, document-based, distributed database built for modern application developers and for the cloud era. MongoDB makes you more productive.

MongoDB is a document database, which means it stores data in JSON-like documents. We believe this is the most natural way to think about data, and is much more expressive and powerful than the traditional row/column model.

Features of MongoDB

- ❖ **<u>Rich JSON Documents</u>**

- The most natural and productive way to work with data.
- Supports arrays and nested objects as values.
- Allows for flexible and dynamic schemas.

❖ **Powerful query language**

- Rich and expressive query language that allows you to filter and sort by any field, no matter how nested it may be within a document.
- Support for aggregations and other modern use-cases such as geo-based search, graph search, and text search.
- Queries are themselves JSON, and thus easily composable. No more concatenating strings to dynamically generate SQL queries.

❖ **Advantages of MongoDB**

- Multi-cloud data distribution
- Secure for sensitive data
- Designed for developer productivity
- Reliable for mission-critical workloads
- Built for optimal performance
- Managed for operational efficiency

Chapter-II

DESCRIPTION

Disaster Information Blog will help the authentic users of a particular locality to register themselves with home address and location. If a burglary, power outage, traffic congestion or any other problems related to above mentioned issues, it will be posted by the users.Later municipality corresponding to that particular locality will address the issue and try to resolve users problem.

The app allows you to lodge a detailed complaint along with the photograph and save it with tags, and municipality corresponding to that particular area will get to update the user regarding his complaint.Only the original author of the complaint will be able to edit or delete his complaint.

This app supports all the CRUD operations and detailed description is as follows :

CREATE : Lodge a complaint by uploading images,describing the problem faced by the localities and later municipality will resolve the issue.

READ : Database reads all your activities regarding the complaints which you are doing with the app like posting , updating or deleting a complaint and reflects back the same on the app.

UPDATE : Whenever a user wants to update any complaint lodged by him , the app will update the database and shows each modifications made by the user.

DELETE : User can easily delete a complaint lodged by them whenever they want. It allows users to either edit the post and update it instead of deleting but if user still wants he/she can delete the post.

Chapter-III

REQUIREMENTS

1. Hardware Requirements

- Laptop
- Computer

2. Software Requirements

- MongoDB
- NodeJS

Technology

Front-end

- HTML
- CSS
- JavaScript

Application-framework

- NodeJS
- ExpressJs
- Passport
- NPM(Node Packet Manager)

Back-end

- MongoDB Atlas

Chapter-IV

Link to the project source code(github links)

Kumar Aman Vatsa(1NT18IS085)

https://github.com/1NT18IS085/1NT18IS085_kumaramanvatsa_B_bdlab

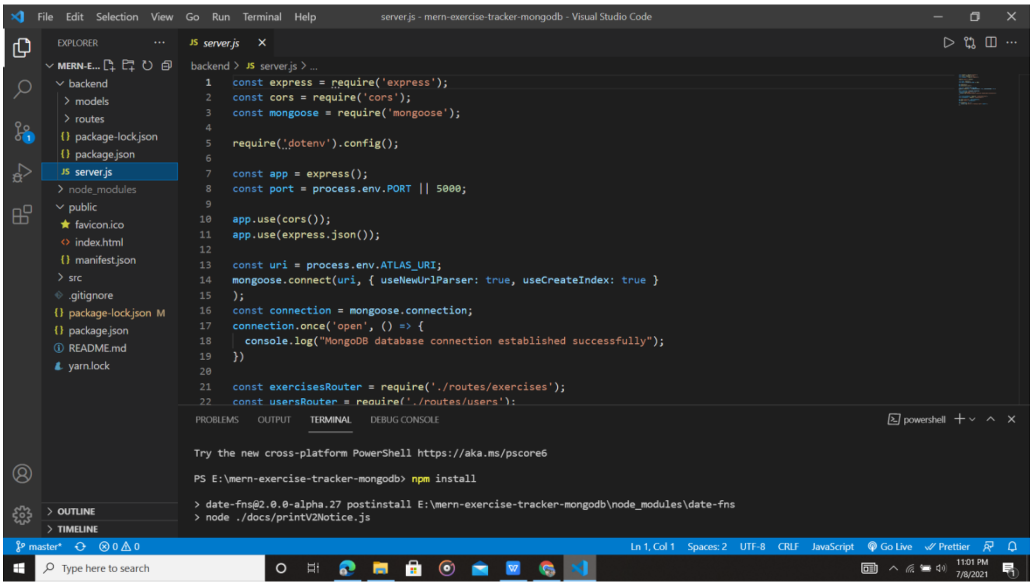
Kishore Kumar J(1NT18IS082)

https://github.com/1NT18IS082/1NT18IS082.git

Chapter-V

Results and Snapshots (with explanation)

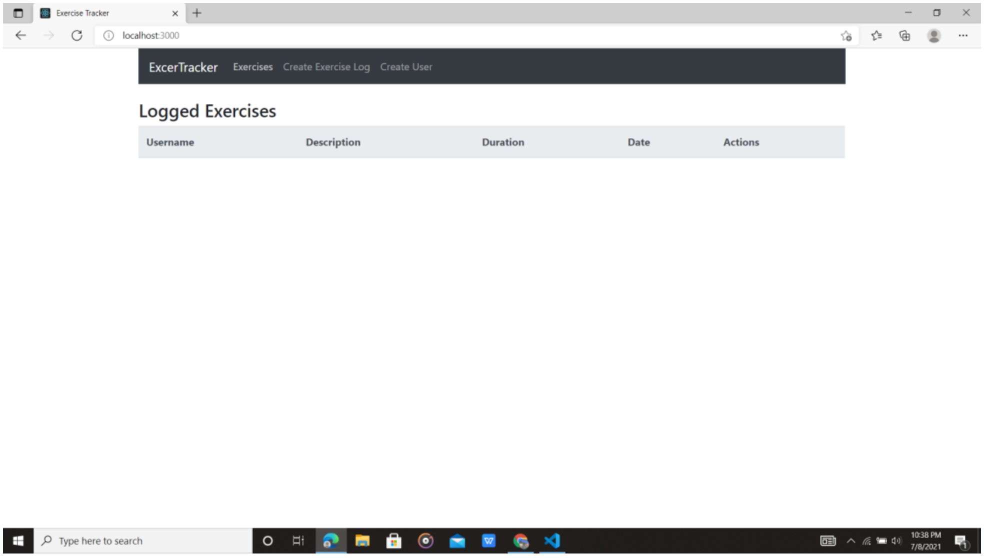
1. Running the client and server on terminal with the help of npm(node package manager) and establishing the connection with mongoDB atlas.



```
const express = require('express');
const cors = require('cors');
const mongoose = require('mongoose');

require('dotenv').config();

const app = express();
const port = process.env.PORT || 5000;

app.use(cors());
app.use(express.json());

const uri = process.env.ATLAS_URI;
mongoose.connect(uri, { useNewUrlParser: true, useCreateIndex: true }
);
const connection = mongoose.connection;
connection.once('open', () => {
  console.log("MongoDB database connection established successfully");
})

const exercisesRouter = require('./routes/exercises');
const usersRouter = require('./routes/users');
```

```
Try the new cross-platform PowerShell https://aka.ms/pscore6

PS E:\mern-exercise-tracker-mongodb> npm install

> date-fns@2.0.0-alpha.27 postinstall E:\mern-exercise-tracker-mongodb\node_modules\date-fns
> node ./docs/printV2Notice.js
```

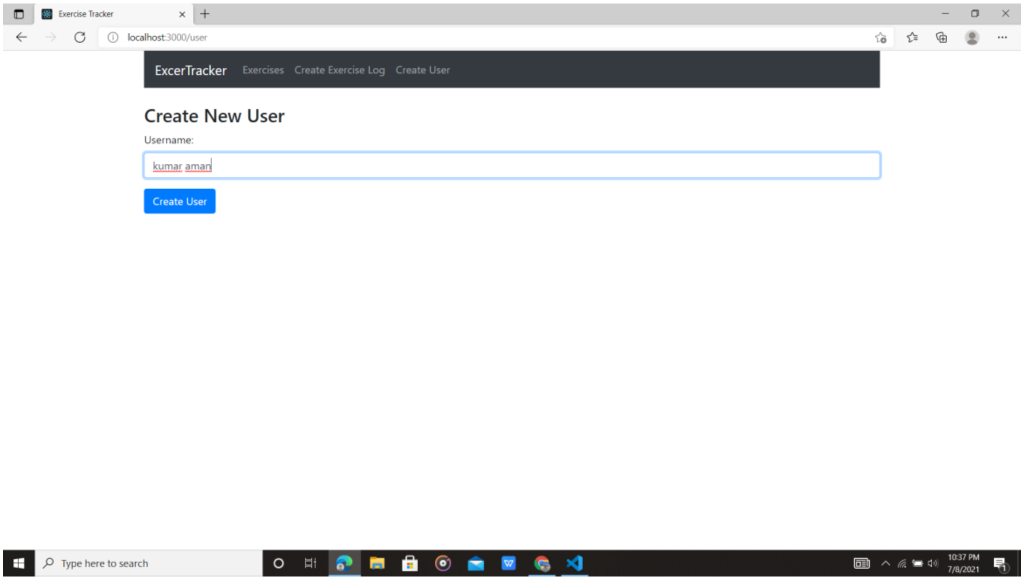
2. The app will start on the localhost:3000 port,it will show the list of complaints lodges by authentic users.



Logged Exercises

Username	Description	Duration	Date	Actions

3. Registration of a complaint by the authentic user.

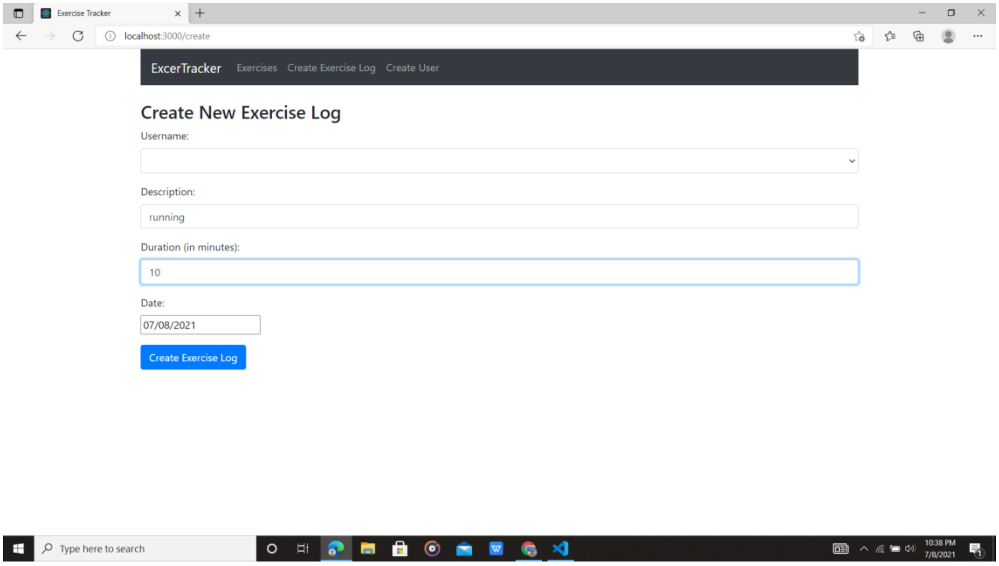


Create New User

Username: kumar aman

Create User

4. Fill the details about exercises.



Create New Exercise Log

Username:

Description: running

Duration (in minutes): 10

Date: 07/08/2021

Create Exercise Log

Chapter-VI

References

[1] https://www.mongodb.com/

[2] https://www.google.co.in/

[3] https://en.wikipedia.org

[4] https://www.tutorialspoint.com/

[5] https://www.geeksforgeeks.org/