MINI PROJECT
(2020 - 21)
TASK MANAGER

MID-TERM REPORT

Institute of Engineering & Technology

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1.Introduction

1.1 a) General Introduction to the Topic

Task Manager is like a To-Do list. By managing a TO-DO list, you make sure that your tasks are written down all in one place so you don't forget anything important. And by prioritizing tasks, you plan the order in which you'll do them, so that you can tell what needs your immediate attention, and what you can leave until later.

In this project, we are creating a website which allows its users to manage their tasks. This project uses web development languages such as HTML, CSS, JavaScript, jQuery, Bootstrap, Nodejs.

To-Do Lists are essential if you're going to beat work overload. When you don't use them effectively, you'll appear unfocused and unreliable to the people around you.

When you do use them effectively, you'll be more organized, and you'll be much more reliable. You'll experience less stress, safe in the knowledge that you haven't forgotten anything important. More than this, if you prioritize intelligently, you'll focus your time and energy on high-value activities, which will mean that you're more productive, and more valuable to your team.

1.1 b) How you can make an effective TO-DO List

- The first step in breaking a task down into smaller chunks using to-do lists is the establishment of goals. Those goals refer to the results that any task will produce, even if its's perfectly and without error.
- Next, one should identify the obstacles of the task at hand, and furthermore, these obstacles should be clearly

documented and made known to every individual working on the task.

- Then start by determining the smallest possible step capable of initiating the task's completion process.
- Finally, remember that any of these to-do list steps can be edited if new obstacles or unexpected elements arise during the task's completion.

1.2 Area of Computer Science

One of the biggest things Computer Science do is how to logically think through a problem and find a way to solve it. No matter how brilliant you are, at some point you will have to explain to someone how your product works or what your code does. One of the best parts of breaking a task down into smaller parts is that by doing so, one makes the entire project much more manageable, and much easier for different individuals to complete certain parts. However, this doesn't mean that only groups can delegate checklist steps—individuals can as well, though in different ways.

For groups tackling the to-do list, the individual strengths and talents of each member is crucial to delegating specific steps. In a writing project, the writers should obviously write. Meanwhile, proofreaders are responsible for proofreading. And editors are responsible for giving it one last look before the content heads for publication.

For individuals, delegating steps of a task obviously cannot mean assigning them to different persons. However, delegating steps of a task can refer to assigning them to different times for the individual, so as to not overwhelm him or her. Moreover, delegation is important for maximizing the quality of a person's efforts.

1.3 Hardware and Software Requirements

- Hardware-
  - Server-
    - Express JS SERVER

        - Express JS Routers
    - Internet
    - Dual Quad Core Processor
- Software-
    - Visual Studio Code
    - OS-Linux and Windows
    - Programming Languages-
        - JavaScript
        - Node.JS
    - Modules-
        - Bycrypt (For Password Encryption)
        - Passport (For Login Sessions)
        - Axios (For API’s call)
        - Multer (Uploading Image Files)
        - Sharp (For Image Processing)
    - Database-
        - MongoDB
    - UI-
        - HTML WITH CSS
        - BOOTSTRAP
        - MEDIA QUERY

2. Problem Definition

Business today is entirely different than it has been, it all shifted online and it results in the bigger projects and requires faster outcomes. The corresponding workload associated with a successful company is larger than ever. To be sure, even relatively simple tasks require ample attentiveness and multi-faceted plans to complete.

That’s where to-do lists, as well as the general idea of breaking tasks down into smaller and easier-to-handle chunks, come into perspective.

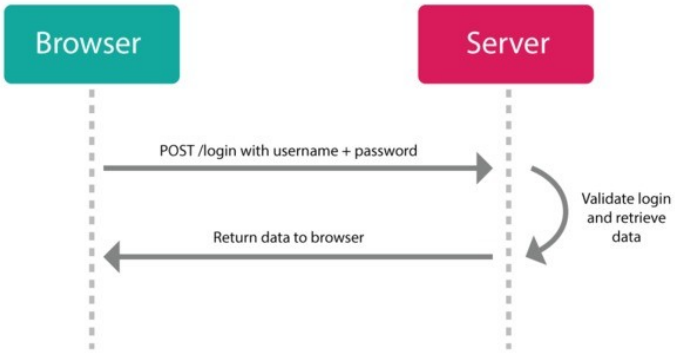
3. Objectives:

- Users will be able to manage their daily routine and work.
- While adding an entry, its date and time will also be saved which will help in telling the user the date of creation of a TODO item.
- User’s data will be secure (by using different modules).
- Users will be able to access their todo list any time.
- Features like adding an item, removing an item, updating will be available.
- A session will be maintained for each user, so that they don’t have to log in again and again.

4. Implementation Details-

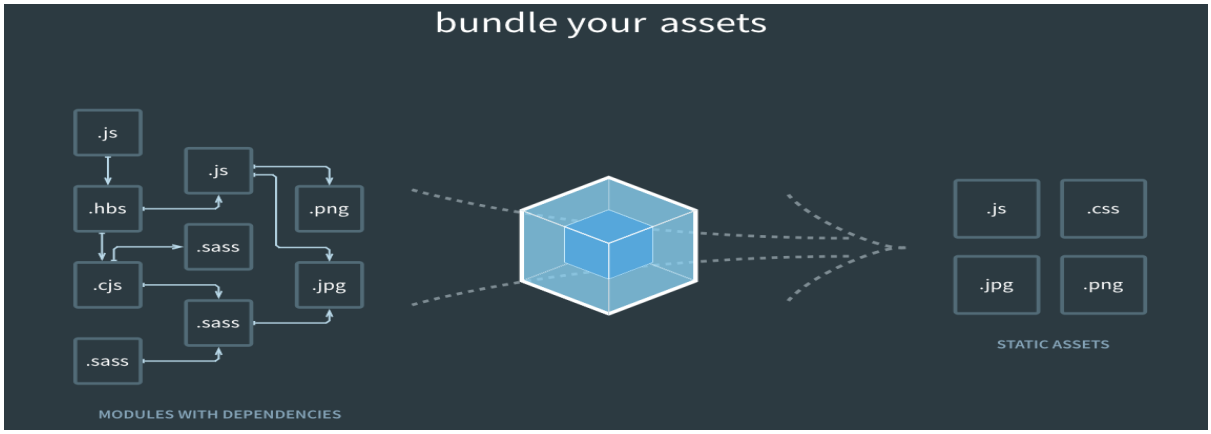
- Our main goal is to improve the security of this application so that we are left with no loopholes.
  We are using the concept of JWT (JSON WEB TOKEN) for authorization .We are using npm module of JSON WEB TOKEN which is provided in npm library.

For encryption we are using bcrypt which is a npm module to encrypt the password and store it to database.



- Till today's date we have implemented the whole backend of our application which is giving us rest endpoints from where we will be getting the required information. All of this is implemented with NODE.JS and we have used express server which is a npm module to host an API's locally to our computer and we have also deployed this API'S to heroku server.

- We are also working on creating frontend and we are half way through it. For designing purpose we are using HTML,CSS AND BOOTSTRAP which helped us to create html static web pages.
  We are using web pack module which is also a part of npm library to bundle all the images,svg,css,html and JavaScript code in one place
  and to make it more secure.

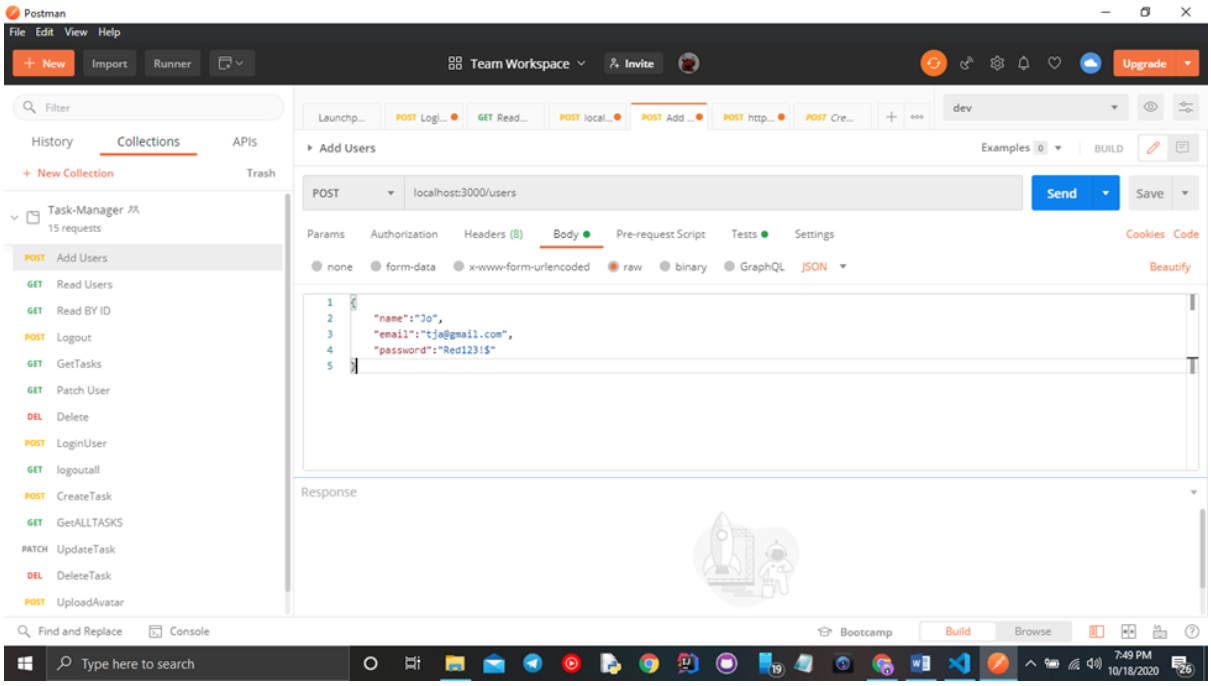


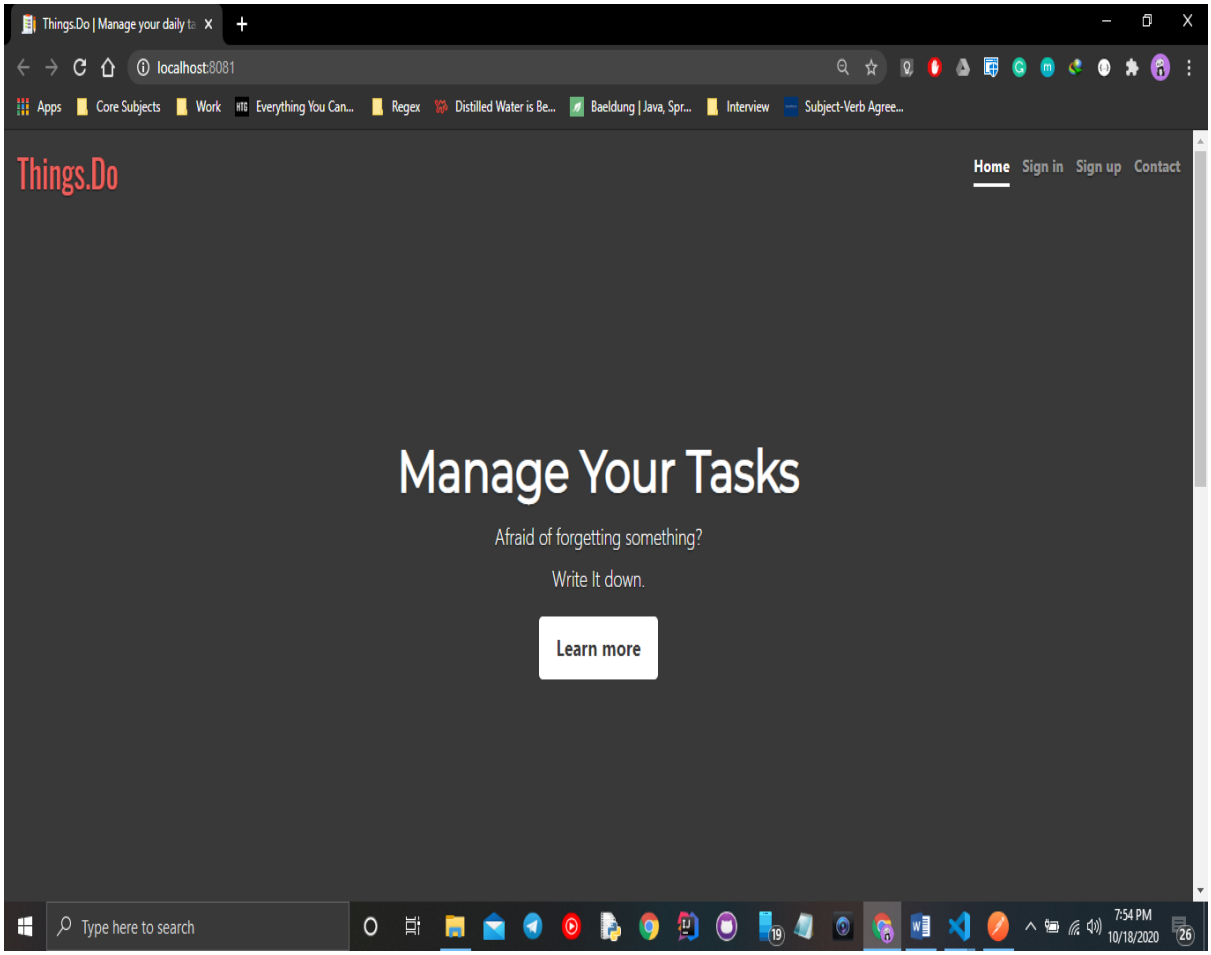
- We are using web pack-dev-server to host our final website on our localhost.

5. Progress till date and remaining work :

- Backend is ready using NodeJS, ExpressJS and also added a database using MongoDB.
- Sign in route is tested successfully.
- Home Page and Sign in Page are partially ready.
- Private routes are made secure by using modules such as bcryptjs, jsonwebtoken (JWT).
- Remaining work is, developing the frontend, testing all the routes.

6. Some Screenshots-

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Manage Your Tasks
Afraid of forgetting something?
Write It down.
Learn more
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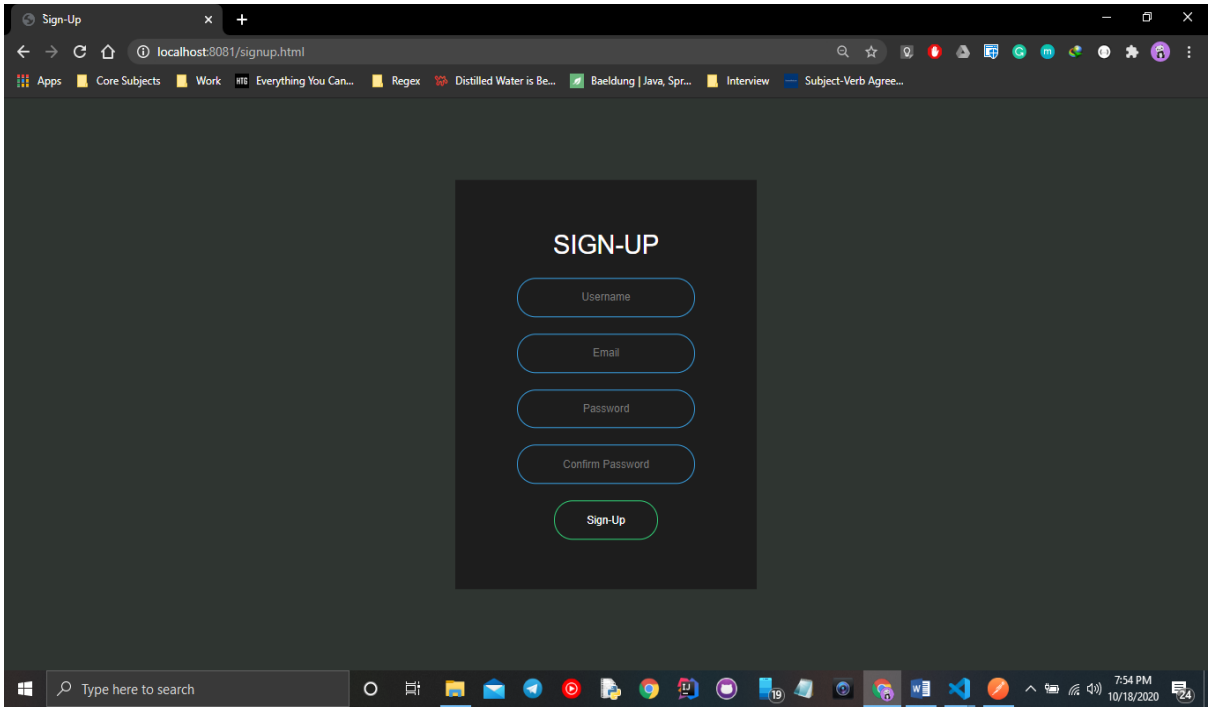
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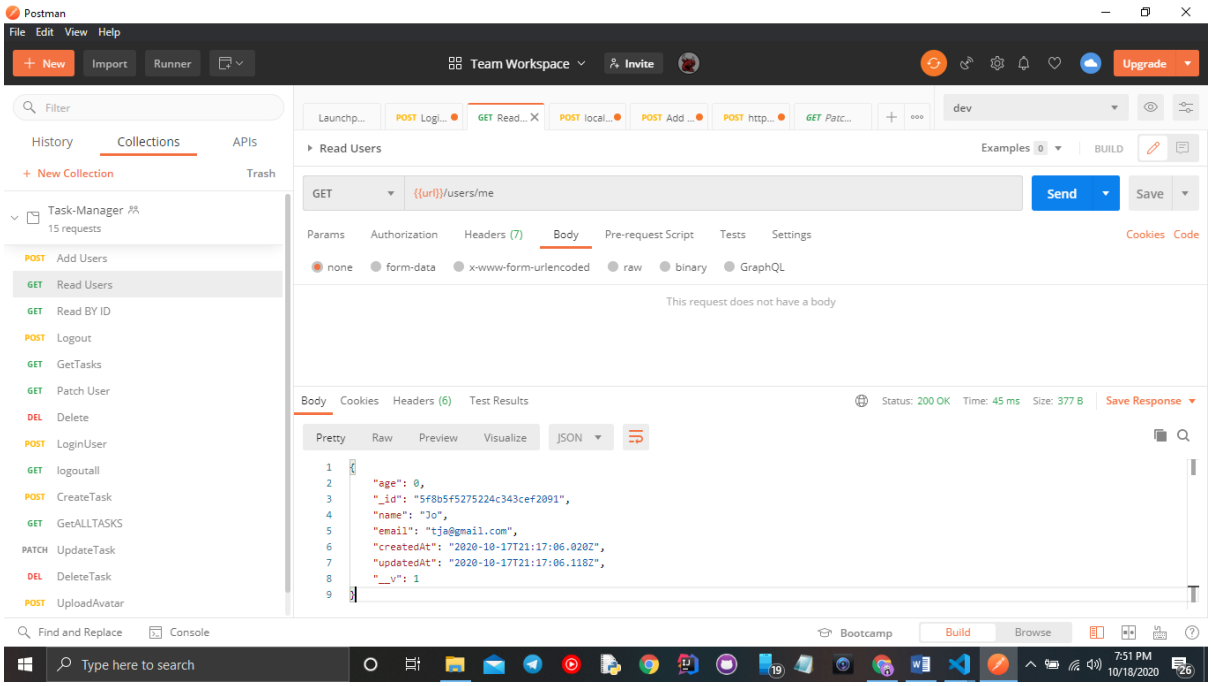

7. References-

1. The Complete Node.JS Developer-Udemy(https://www.udemy.com/course/the-complete-nodejs-developer-course-2)
2. MDN Documentation for JavaScript(https://developer.mozilla.org/en-US/docs/Web/JavaScript)
3. YouTube(https://youtube.com)
4. Stackoverflow(https://stackoverflow.com)
5. NPM Library(https://www.npmjs.com)