



NodeJs Assignment



Please Follow all the mandatory Guidelines in the Assignment

Tech Stack

Mandatory Tech Stack:

- **NodeJS (mandatory)**
- **Puppeteer (For PDF Generation)**
- **POSTMAN Collection (mandatory)**

Objective / Problem Statement :

The task is to showcase proficiency in developing a full-stack web application using the following tech (MongoDB, Express.js, Node.js) stack. Your objective is to create a user-friendly **Invoice Generator application** that enables users to create, and download invoices in PDF format. The generated invoices should mirror the format from the sample provided to you.

The Assignment will consist of the following modules:

API END POINT 1: USER Login

Objective: Create a login api.

Here, you should have email field validation and appropriate messages for login success and failure. Upon successful login, return the Authtoken in response.

API END POINT 2: USER Registration

Objective: Create a Registration API which takes name, email, and password as input.

Ensure Email should be unique.

Return Proper Response and status code.

API END POINT 3: ADD Products

Objective: Here, input should include array of products

Products should have following property

```
Product{  
  name: string;  
  qty: number;
```

```
    rate: number;  
}
```

Here, compute GST as 18% on each Product

Add JWT Token in Authorization Headers

In the backend, store quotation data along with today's date and user id in MongoDB.

Response should include Generated PDF

Note: The generated invoices should mirror the format from the sample provided to you.

API END POINT 4: View Quotations

Objective: Pass user auth token in Authorization Headers, and return list of all pdf generated by the user. Provide option to download individual PDF.

SAMPLE PDF OUTPUT

Product	Qty	Rate	Total
{Product 1}	34	120	INR 4,080
{Product 2}	34	120	INR 4,080
{Product 1}	34	120	INR 4,080
Total			INR 4,080
GST			18%
Grand Total			₹ 108009

Valid untill: 12/04/23

Terms and Conditions

we are happy to supply any further information you may need and trust that you call on us to fill your order. which will receive our prompt and careful attention



Requirement

Backend (NodeJS):

- Set up a Node.js server using Express.js.
- Use MongoDB as the Database to store data.
- Implement required functionality for invoices.
- Include a feature to generate PDF invoices with a library like `puppeteer` or any suitable alternative.
- Use POSTMAN to access API Endpoint
- Ensure proper validation and error handling.

Authentication :

- Implement user authentication (e.g., using JWT tokens) to secure the application.
- Allow only authenticated users to create invoices.

Additional Features : (Optional, Bonus Points):

- Add Option to generate Image of invoices
- Implement CI/CD Pipeline to generate new Image and deploy it whenever commits are made to the repository



Evaluation Criteria and Submission

Candidates will be evaluated based on the following criteria:

- Code Quality
- Error Handling
- Standard Guidelines have been used and implemented
- Upload your assignment on Github.
- Deploy Backend using Docker Image.

Submission Guidelines:

- Create a GitHub repository for the project and share the link.
- Include a README.md file with instructions on how to set up and run the application.
- Clearly specify any additional libraries or tools used.
- Deploy Application using Docker Container on Render/Cyclic/Railway
- Create a POSTMAN Collection to access API
- Fill and Submit the form