

Mahesh Rautrao

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Skills

C, C++, Data Structures and Algorithms, Problem Solving, Full Stack Web Development

Front-end: HTML, CSS, JavaScript, React.js, Tailwind CSS, Bootstrap

Back-end: Node.js, Express.js, MongoDB

Others: Git, GitHub, Postman, VS Code

Projects

Evapotranspiration Web App | [Deployed Link](#) | [Github Link](#)

HTML, CSS, JavaScript, J-query, Fetch API, Dom-manipulation, Promises

- We did this project in the sixth semester under the guidance of our professor.
- This project can calculate evapotranspiration of any place in the world.
- At first, we read the **FAO 56 research paper** and understood the Penman-Monteith equation which is used to calculate the evapotranspiration of any place. Then we converted the formulation into working code.
- Initially we had to provide so many inputs manually, so to minimize them we used two APIs.
- First is the **GEOCODER API** of **openWeatherMap.com** to get the coordinates of any place from its name.
- The second API is the **OPEN SOURCE API** of **open-meteo.com** to fetch the required meteorological data based on coordinates obtained from the first API.
- After this data is processed in the backend and the result is computed and shown on the frontend.

Contact Manager Backend Project | [Github Link](#)

JavaScript, Node.js, Express.js, MongoDB, JWT authentication, Postman

- This is an Express.js (Node.js) backend Project developed by me to enhance my backend development skills and gain practical experience.
- **User Authentication:** Implemented JWT authentication to secure contact routes, ensuring only authorized users can access and manage their contacts.
- **CRUD Operations:** Developed Create, Read, Update, and Delete (CRUD) functionalities for contacts.
- **Middleware Implementation:** Employed middleware functions to enhance functionality, such as user auth token validation and error handling.
- **MongoDB Integration:** Utilized MongoDB as the database to store and retrieve all contacts and users information, ensuring data persistence and flexibility.
- Implemented **Register, Login, and Current User functionalities** for users.
- Used Express.js framework for the backend and Postman for API testing

Experience

Web Developer | *Civil Engineering Society, MNIT*

Dec 2021 – Jan 2023

- Our responsibility was to design and develop the society's official website.
- We implemented a clean and organized folder structure for the codebase, prioritizing maintainability and ease for future updates.
- For the backend we used Nodejs, Ejs and for frontend, we used plain HTML CSS and JavaScript
- I Gained practical experience in web development, enhancing skills in HTML, CSS, JavaScript, Nodejs, and Ejs.

Education

Malaviya National Institute of Technology, Jaipur - *Bachelor of Technology (Civil Engineering)*

2024

Rajarshi Shahu Mahavidyalaya , Latur — *12th*

2019

Maharashtra Vidyalaya, Latur — *10th*

2017