

SAURABH KUMAR JHA  
Evigway Technology Web-Development Task  
Report

## **Overview**

The task involved creating a basic CRUD (Create, Read, Update, Delete) web application using the MERN (MongoDB, Express.js, React.js, Node.js) stack. The goal was to build a simple web interface that allows users to interact with a REST API for managing a collection of notes.

## **Approach**

### **Frontend:**

- Technology Choice: We opted for the MERN stack, which includes MongoDB, Express.js, React.js, and Node.js, for our project.
- User Interface: We designed a user-friendly web interface with React, offering features for listing items, adding new items, editing existing items, and deleting items.
- Validation: We implemented client-side validation for user inputs and provided user-friendly error messages for feedback.
- Integration: We connected the frontend to the backend by making HTTP requests to the REST API.

### **Backend:**

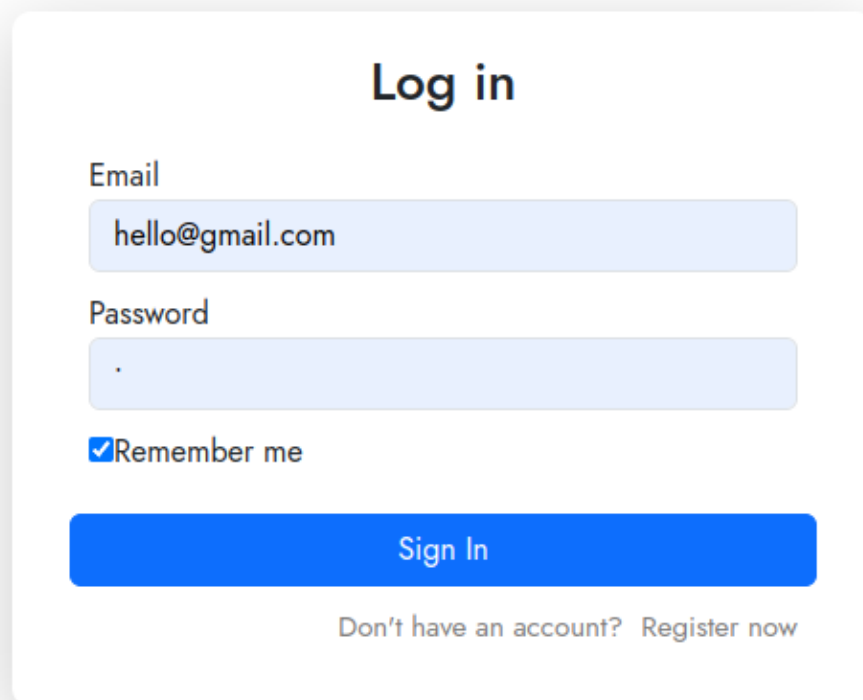
- Technology Choice: We used Express.js and Node.js to create a RESTful API for CRUD operations.
- Data Storage: We set up a MongoDB database and created a collection to store the data entities.
- Endpoints: We implemented endpoints for listing all items, creating a new item, updating an existing item, and deleting an item.

Successfully implemented a complete MERN-based web application, providing a functional user interface and a RESTful API.

Demonstrated the ability to perform CRUD operations on a data entity collection, including Create, Read, Update, and Delete.

Included client-side validation for user inputs, enhancing the user experience.  
Connected the frontend and backend, allowing seamless data interaction.

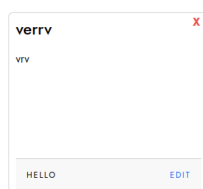
### Snapshots:



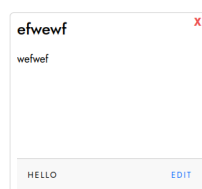
A login form titled "Log in" with a white background and rounded corners. It features two light blue input fields: "Email" containing "hello@gmail.com" and "Password" containing a single dot. Below the password field is a checkbox labeled "Remember me" which is checked. A prominent blue "Sign In" button is centered below the inputs. At the bottom, a link reads "Don't have an account? Register now".

NotesApp

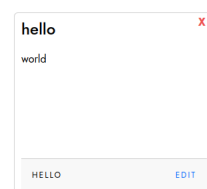
[Home](#) [Create Note](#) [Logout](#)



A note card with a white background and a red close button (X) in the top right corner. The title is "verrv" and the content is "vrv". At the bottom, there is a light gray bar with the text "HELLO" and a blue "EDIT" button.



A note card with a white background and a red close button (X) in the top right corner. The title is "efwewf" and the content is "wefwef". At the bottom, there is a light gray bar with the text "HELLO" and a blue "EDIT" button.



A note card with a white background and a red close button (X) in the top right corner. The title is "hello" and the content is "world". At the bottom, there is a light gray bar with the text "HELLO" and a blue "EDIT" button.

## MONGODB:

The screenshot shows the MongoDB Compass interface. On the left sidebar, the database 'noteapp' is selected, and the 'test' collection is expanded, showing 'notes' and 'users' collections. The 'users' collection is selected. The main panel displays a query filter bar with the text 'Type a query: { field: 'value' }'. Below the filter bar, the query results are shown as 'QUERY RESULTS: 1-1 OF 1'. The result is a single document with the following fields: '\_id: ObjectId('653a114deae1bde2e63e0b15')', 'username: "hello"', 'email: "hello@gmail.com"', 'password: "\$2b\$10\$S36g/i0jsI/3CVfKbPji8uo09/T0ZKDpvdh1/no4oym.zMzV4LD1a"', 'createdAt: 2023-10-26T07:12:13.222+00:00', 'updatedAt: 2023-10-26T07:12:13.222+00:00', and '\_\_v: 0'.

```
{
  "_id": "653a114deae1bde2e63e0b15",
  "username": "hello",
  "email": "hello@gmail.com",
  "password": "$2b$10$S36g/i0jsI/3CVfKbPji8uo09/T0ZKDpvdh1/no4oym.zMzV4LD1a",
  "createdAt": "2023-10-26T07:12:13.222+00:00",
  "updatedAt": "2023-10-26T07:12:13.222+00:00",
  "__v": 0
}
```

The screenshot shows the MongoDB Compass interface. On the left sidebar, the database 'noteapp' is selected, and the 'test' collection is expanded, showing 'notes' and 'users' collections. The 'notes' collection is selected. The main panel displays a query filter bar with the text 'Type a query: { field: 'value' }'. Below the filter bar, the query results are shown as 'QUERY RESULTS: 1-2 OF 2'. The results are two documents. The first document has the following fields: '\_id: ObjectId('653a272f08a11dda24591352')', 'title: "verrv"', 'content: "vrv"', 'date: 2023-10-26T08:45:35.533+00:00', 'user\_id: "653a114deae1bde2e63e0b15"', 'name: "hello"', 'createdAt: 2023-10-26T08:45:35.534+00:00', 'updatedAt: 2023-10-26T08:45:35.534+00:00', and '\_\_v: 0'. The second document has the following fields: '\_id: ObjectId('653a276708a11dda24591358')', 'title: "wefef"', 'content: "ewfewf"', 'date: 2023-10-26T08:46:31.901+00:00', 'user\_id: "653a114deae1bde2e63e0b15"', 'name: "hello"', and 'createdAt: 2023-10-26T08:46:31.902+00:00'.

```
{
  "_id": "653a272f08a11dda24591352",
  "title": "verrv",
  "content": "vrv",
  "date": "2023-10-26T08:45:35.533+00:00",
  "user_id": "653a114deae1bde2e63e0b15",
  "name": "hello",
  "createdAt": "2023-10-26T08:45:35.534+00:00",
  "updatedAt": "2023-10-26T08:45:35.534+00:00",
  "__v": 0
}, {
  "_id": "653a276708a11dda24591358",
  "title": "wefef",
  "content": "ewfewf",
  "date": "2023-10-26T08:46:31.901+00:00",
  "user_id": "653a114deae1bde2e63e0b15",
  "name": "hello",
  "createdAt": "2023-10-26T08:46:31.902+00:00"
}
```