

School of Computer Engineering & Technology Class: Third Year B.Tech CSE (Semester V)

Course: Full Stack Development

FSD Laboratory 07

Aim: Develop a full stack web application using MERN stack to perform CRUD operations. **Objectives:**

- 1. To develop full-stack web projects using the MERN stack.
- 2. To learn database connectivity using fetch api.
- 3. To perform insert, update, delete and search operations on database.

Theory:

- 1. What is MERN stack?
- 2. Use of Fetch api.

FAQ:

1. What makes MERN stack the fastest growing tech stack?

Output: Screenshots of the output to be attached.

Sample Problem Statements:

CRUD Operations using MERN stack:

- 1.Student can create a React form or use existing/ implemented HTML form for Student's Registration System with the fields mentioned: First name, Last name, Roll No/ID, Password, Confirm Password, Contact number and perform following operations
- 1.Insert student details -First name, Last name, Roll No/ID, Password, Confirm Password, Contact number
- 2.Delete the Student records based on Roll no/ID
- 3.Update the Student details based on Roll no/ID- Example students can update their contact details based on searching the record with Roll no.
- 4. Display the Updated student details or View the Students record in tabular format.
- 2. Student can create a React form or use existing/ implemented HTML form for Library Management System with the fields mentioned: Book name, ISBN No, Book title, Author name, Publisher name and perform following operations
- 1. Insert Book details -Book name, ISBN No, Book title, Author name, Publisher name
- 2.Delete the Book records based on ISBN No
- 3.Update the Book details based on ISBN No- Example students can update wrong entered book details based on searching the record with ISBN No.
- 4. Display the Updated Book details or View the Book Details records in tabular format.
- 3. Student can create a React form or use existing/ implemented HTML form for Employee Management System with the fields mentioned: Employee name, Employee ID, Department_name, Phone number, Joining Date and perform following operations
- 1.Insert Employee details -Employee name, Employee ID, Department_name, Phone number, Joining Date
- 2.Delete the Employee records based on Employee ID



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- 3.Update the Employee details based on Employee ID- Example students can update Employee details based on searching the record with Employee ID.
- 4.Display the Updated Employee details or View the Employee Details records in tabular format.
- 4. Student can create a React form or use existing/ implemented HTML form for Flight Booking Management System with the fields mentioned: Passenger name, From, to, date, Departure date, Arrival date, Phone number, Email ID and perform following operations
- 1.Insert Passenger details -Passenger name, From, to, date, Departure date, Arrival date, Phone number, Email ID
- 2.Delete the Passenger records based on Phone Number
- 3.Update the Passenger details based on Phone Number Example students can update Flight Booking details based on searching the record with Phone Number.
- 4.Display the Updated Flight Booking details or View the Flight Booking Details records in tabular format.

Help Link:

https://www.mongodb.com/languages/mern-stack-tutorial