

# 9530

## ST.MOTHER THERESA ENGINEERING COLLEGE

COMPUTER SCIENCE AND ENGINEERING

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# Phase -4 Completed the project named as ANGULAR JS WITH SQL INTEGRATING

SUBMITTED BY,

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# Project Report: AngularJS with SQL Integration

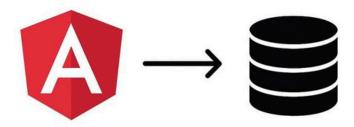
#### **Additional Features**

- -User authentication and role-based access control.
- -Data filtering, sorting, and pagination on the front end.
- -Error handling and validation on both client and server side.

#### **UI/UX Improvements**

RefertotheattachedUI/UXdesign image for a better understanding of the interface improvements.

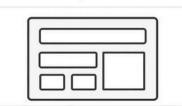
# Angular JS with SQL Integration



# **Additional Features**

- Authentication
- Data Sorting
- Pagination

# **UI/UX Improvements**



#### **API Enhancement**

The project uses the following API types:

- 1. REST API: A lightweight, stateless API using HTTP methods (GET, POST, PUT, DELETE) to perform CRUD operations.
- 2. Authentication API: Provides secure user login and token-based authentication using JWT.
- 3. Data API: Handles data requests from AngularJS to SQL database and sends back structured responses in JSON format.

#### **Performance and Security Checks**

- -Query optimization for faster SQL data retrieval.
- -Angular lazy loading for improved performance.
- -Input sanitization and SQL injection prevention.
- -HTTPS for secure communication between client and server.

### **Testing of Enhancement**

- -Unit testing of Angular components using Jasmine and Karma.
- -API testing with Postman.
- -End-to-end testing using Cypress or Protractor.

# **Deployment (Netlify, Vercel, or Cloud Platform)**

- -Front-end deployed on Netlify/Vercel for free hosting with CI/CD pipeline.
- -Back-end hosted on cloud services like AWS/Heroku.
- -SQL database connected through a secure remote connection.