

LIMS Documentation

This documentation covers the period from July to the present date, summarizing the work, achievements, and challenges encountered during this time. It provides a comprehensive record of our contributions and progress in the Laboratory Information Management System (LIMS) project.

Month and Year: July 2023

In July, We continued to fulfil our responsibilities as Jr. Full Stack Developers at KDM Engineers Group.

Initiatives:

- Objectives for July:

Conduct knowledge transfer sessions (KT) from the previous employee *Mr. Vikram Reddy Annem*

Initiate discussions and planning for the Laboratory Information Management System (LIMS) implementation for KDM Engineers Group

Initiate developing LIMS

Gain a basic understanding of Project & Firebase.

- What we have done?

Facilitated and participated in the KT sessions, including those focused on Firebase basics.

Engaged in discussions and planning for LIMS implementation.

- Outcomes/Accomplishments for July:

In the first three weeks of July, we successfully conducted around 14 knowledge transfer (KT) sessions, including sessions about Firebase, with each session lasting approximately 1:30 hours.

The Firebase sessions helped us gain a fundamental understanding of this technology. We initiated discussions and planning for the LIMS implementation.

Started developing LIMS

On July 29th, Mr. Praveen joined our team as the new Project Lead, marking the beginning of our collaboration.

- **Challenges:**

In the initial stages of our LIMS implementation discussions, we encountered a challenge related to a lack of clarity in the project scope. This led to some confusion among team members about the specific requirements and objectives.

The impact of this challenge was a delay in setting clear project milestones and potential misalignment in team expectations.

- **Addressing Challenges:**

To address this challenge, we organized multiple meetings with the team to clarify project objectives and create a shared understanding of the scope. This helped us realign our efforts and set clearer milestones moving forward.

Month and Year: August 2023

Projects and Initiatives:

- Objectives for August:

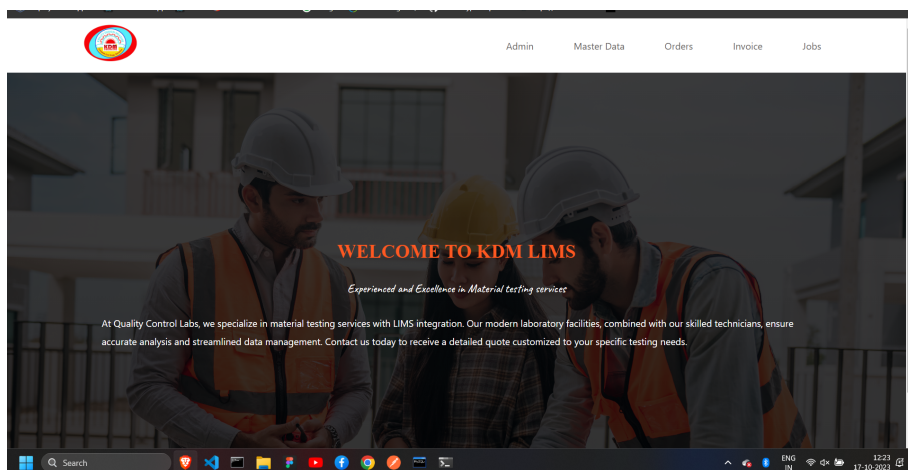
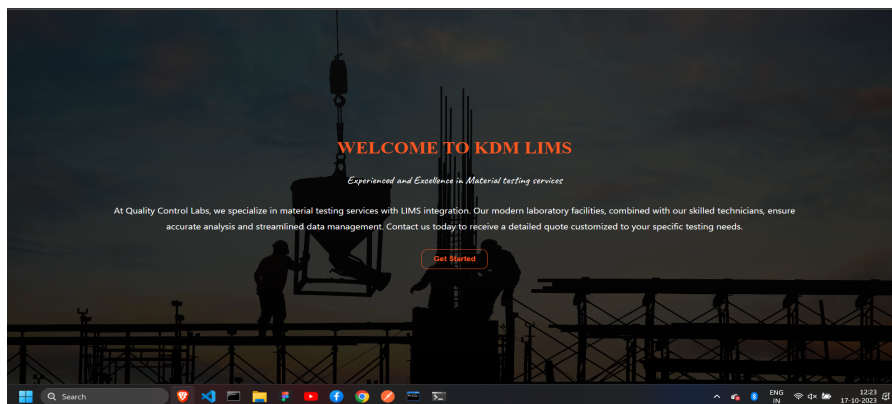
Continue discussions and planning for the Laboratory Information Management System (LIMS) implementation.

Make progress on developing LIMS. Collaborate with Mr. Praveen, the Project Lead.

Ensure the consistency of the database schema.

- What we have done ?

In the first two weeks of August, we focused on developing several UI scenes.



PERSONAL PROFILE

EMPLOYEE ID
Ex - E0001

FIRST NAME
First Name

LAST NAME
Last Name

DATE OF BIRTH
dd-mm-yyyy

MOBILE NUMBER
Ex - 9876543210

EMAIL
employee@gmail.com

EMPLOYEE ADDRESS
Enter address

ADDITIONAL INFORMATION
Additional Information

WORK PROFILE

DEPARTMENT
Department

ROLE
Role

APPOINTED
dd-mm-yyyy

SALARY
Ex - 45000

BRANCH
Ex - hyd

SUPERVISOR
HOD

PROFILE PHOTO
Choose File No file chosen

AADHAR CARD
Choose File No file chosen

ATTACH PAN CARD
Choose File No file chosen

BANK ACCOUNT
Choose File No file chosen

APPOINTMENT LETTER
Choose File No file chosen

SSC FILE
Choose File No file chosen

INTERMEDIATE MEMO
Choose File No file chosen

DEGREE MEMO
Choose File No file chosen

And a few more . . .

On August 17th, we had a significant physical meeting with Mr. Praveen Kumar at Punjagutta. During this meeting, we discussed the system architecture of LIMS, the code structure to be followed, and technology choices.

In the third and fourth weeks of August, we focused on enhancing the database schema for the LIMS project.

Specifically, we worked on identifying and establishing relations between database tables to ensure data consistency and integrity.

- **Outcomes/Accomplishments for August:**

Successfully identified and documented key relationships between database tables, contributing to the database schema's integrity.

This effort is a critical step in maintaining data consistency and enabling the LIMS application to function smoothly.

The refined database schema will support the data management needs of the LIMS project effectively.

We also created a final remote repository in Git with the following link: [GitHub Repository Link](#).

- **Challenges:**

We encountered challenges associated with transitioning to React with TypeScript. Learning TypeScript presented a notable learning curve, requiring us to adapt to its syntax and static typing system. Simultaneously, we grappled with defining form field requirements, including determining the mandatory and optional fields in data collection. Effective collaboration and dedicated learning efforts were essential to address these challenges and ensure the alignment of our UI scenes with project requirements. These obstacles provided valuable learning opportunities and underscored our commitment to improving our skills and project quality.

- **Addressing Challenges:**

We proactively dedicated time to learn TypeScript through online resources and team collaboration.

We initiated discussions with HOD's and staff to establish clear data collection guidelines, ensuring our UI aligns with project requirements.

Month and Year: September 2023

Initiatives:

- Objectives for September:

Start developing server-side code for the Laboratory Information Management System (LIMS) project.

Successfully store employee data and related files in the database.

Achieve the ability to fetch and retrieve data from the backend.

- What we have done ?

In September, our focus shifted towards the development of server-side code for the LIMS project.

We successfully implemented the storage of employee data and related files in the database, enhancing data management capabilities.

We achieved the ability to fetch and retrieve data from the backend, enabling seamless data access for the LIMS application.

- Outcomes/Accomplishments for August:

Stored employee data and related files in the database, ensuring data integrity and availability.

Developed server-side code that facilitates data retrieval and enhances the overall functionality of the LIMS application.

- **Challenges:**

we faced issues with file storage and transfer within the LIMS project.

Storing Files: We encountered difficulties ensuring secure and efficient file storage while maintaining data integrity.

Sending Files to the Server: Challenges arose in optimizing file transfer protocols and ensuring successful server delivery.

These challenges prompted proactive troubleshooting and collaboration to enhance our server-side development efforts.

- **Addressing Challenges:**

To address these challenges, we referred to online resources, including YouTube videos, and conducted research to identify and implement effective solutions. This proactive learning and problem-solving approach allowed us to make significant progress in resolving the issues related to file storage and transfer.

Month and Year: October 2023

Projects and Initiatives:

- Objectives for October:

Implement authentication and authorization mechanisms to enhance security within the Laboratory Information Management System (LIMS).

Enable CRUD (Create, Read, Update, Delete) operations for orders to improve data management.

Work towards completing job allocation features within the LIMS system.

- What we have done ?

Our primary focus in October is to design and implement robust authentication and authorization processes to ensure data security.

We will work on enabling CRUD operations for orders, providing efficient data management capabilities.

We will also continue efforts to finalize the job allocation features within the LIMS system.

- Outcomes/Accomplishments for August:

By the end of October, we aim to have successfully implemented authentication and authorization features, bolstering the security of the LIMS application.

We plan to enable CRUD operations for orders, streamlining data management and accessibility.

Our goal is to make substantial progress in completing the job allocation features, enhancing overall functionality.

