# Final Project Proposal

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***Project Title***: Wellness Diagnostic Center Lab Test Bill Management System

***Introduction:*** We are building a web application for a Wellness Diagnostic Center which provides lab testing services. It requires a web portal to manage the details of lab test bills. The proposed web application will be built using Angular, NodeJS, Express.js, and MongoDB. The application will include functionalities to add lab test bill details, display lab test details within a sample collection date range, and authenticate user login.

***Technologies Used:***

1. Angular: Front-end framework
2. NodeJS: Backend runtime environment
3. Express.js: Backend framework for building RESTful APIs
4. MongoDB: Cloud-based database management system using Mongoose.
5. Routing.ts: Angular routing library
6. Service.js: Angular service library
7. Component.css: Styling using CSS.

***Functionalities:***

1. The following information will be required: patient name, test name, test charges, date of collection, and paid amount. This information will be stored in the Bill table in the database.
2. Display Lab-Test details within the sample collection date range: Users will be able to view the lab test details within a sample collection date range. The following information will be displayed: patient name, test name, test charges, date of collection, and paid amount. This information will be fetched from the Bill table in the database using the sample collection date range.
3. Login Authentication: Users will be required to authenticate themselves before accessing the system. Authentication will be implemented using a login page with a username and password field. Only authenticated users will be allowed to add and view lab test bill details.

***Extra Credit Requirements:***

1. Subjects (5 points): Subjects can be added to the system to organize lab tests by category.
2. Login Authentication (10 points): User authentication will be implemented to ensure only authorized users can access the system.
3. Pipe (5 points): Angular pipes will be implemented to transform data for display.
4. Filter (5 points): Angular filters will be implemented to filter data based on user input.

In summary, the proposed web application will enable Wellness Diagnostic Center to manage lab test bill details efficiently. It will be built using Angular, NodeJS, Express.js, and MongoDB, and will include functionalities to add lab test bill details, display lab test details within a sample collection date range, and authenticate user login. We are implementing the Extra credit functionalities to enhance the user experience.