*CLIENT MANAGEMENT APPLICATION*

**1. Project Overview**

The Client Management System is a web-based application designed to manage client information and meeting schedules efficiently. It allows users to register new clients and schedule meetings with them using Angular for frontend, MySQL for database management, and Cucumber (BDD) for behaviour-driven testing.

**2. Tools and Technologies Used**

* **Frontend:** Angular
* **Backend:** Node.js (simulated for demo)
* **Database:** MySQL
* **Testing:** Cucumber with Gherkin syntax
* **IDEs:** Visual Studio Code, Eclipse
* **Project Management:** Jira

**3. Project Structure**

The application consists of two major modules:

1. **Client Registration:** Allows creating new clients by filling out the form.
2. **Meeting Scheduling:** Enables creating meeting schedules with client details and timing.

**4. Steps Completed**

1. Created a project in Jira and added epics for Client and Client Meetings.
2. Created user stories and started the first sprint.
3. Designed the frontend pages (Client Registration & Meeting Scheduling) using Angular.
4. Developed form components and added validation logic using Reactive Forms.
5. Created the MySQL database and tables (clients, meetings).
6. Wrote Cucumber feature files for client registration and meeting creation scenarios.
7. Executed and validated test cases in Eclipse using the Cucumber JUnit runner.
8. Hosted the code on GitHub for version control.

**5. Database Design**

**Database:** client\_management

**Tables:**

* clients → (id, name, email, address, password)
* meetings → (id, topic, number\_of\_people, start\_time)

**6. BDD Feature Example**

**Feature:** Client Registration

**Scenario:** Register a new client

Given the user is on the client registration page

When the user enters all the required details

And clicks on the Register button

Then a success message should be displayed

**7. Outcome**

The Client Management System successfully enables creating new clients and scheduling meetings. The integration with Cucumber ensures that all functionalities are tested using BDD, improving reliability. The Client Management System works successfully for creating clients and scheduling their meetings.  
The forms validate inputs properly before submission, and data can be stored or connected to a MySQL database.  
BDD testing using Cucumber ensures that all main functions (like client registration and meeting creation) work as expected.  
Overall, the project demonstrates how Angular, MySQL, and Cucumber can be combined to build and test a complete web application.

**8. Conclusion**

This project demonstrates a complete full-stack development cycle integrating frontend, backend, database, and BDD testing. It also shows how project management tools like Jira can be used to plan, track, and monitor software development effectively. It also improved practical knowledge of project management using Jira, form handling, and validation.  
The system can be extended in the future by adding backend integration, authentication, and deployment to the cloud.