

Test Task for Full-Stack Web Developer (3 Hours)

Objective:

Build a login and registration system with added complexities, including dynamic validations, secure data handling, and logical constraints.

Task Description:

Frontend (React/Angular):

- 1. Create two pages:
 - Registration Page:
 - Fields: Name, Email, Password, Confirm Password, Date of Birth.
 - Dynamic Validation Logic:
 - Name: Must not contain any numbers or special characters.
 - Email: Must be unique (backend validation required).
 - Password:
 - Must contain at least 8 characters, including uppercase, lowercase, a number, and a special character.
 - Cannot include the user's name or email substring.
 - Date of Birth: Must verify that the user is at least 18 years old.
 - Style using Bootstrap.
 - o Login Page:
 - Fields: Email, Password.
 - Backend validation required.
 - Include a "Forgot Password" link (logic handled by backend, but only a stub implementation is required).





Backend (Laravel or PHP):

- 1. API Endpoints:
 - Registration (POST /api/register):
 - Accept Name, Email, Password, and DOB.
 - Validate all fields as per the frontend requirements.
 - Hash the password securely before saving.
 - Store the user data in the database.
 - Respond with appropriate error messages for validation failures.
 - o Login (POST /api/login):
 - Accept Email and Password.
 - Validate against stored user data.

If the user enters the wrong password **three times consecutively**, lock their account for 15 minutes and return an error message like:

{ "message": "Account locked. Try again after 15 minutes." }

- If login is successful, return a token for session management.
- Check Email Uniqueness (GET

/api/check-email?email=example@mail.com):

Validate if the provided email is already registered.





- 2. Database Structure:
 - users Table/Collection:
 - ID
 - Name
 - Email
 - Password (hashed)
 - Date of Birth
 - Failed Login Attempts (default: 0)
 - Account Lock Time (nullable)

Additional Challenges:

Optional (Bonus):

- 1. During **registration**, implement logic to generate a unique **User ID** that starts with the user's initials and includes a random 4-digit number (e.g., for John Doe, the ID could be JD8734).
- 2. Implement a backend utility function to periodically clear account locks after 15 minutes.

- 1. Add a "Forgot Password" feature:
 - Endpoint: POST /api/forgot-password
 - Accept Email.
 - Return a mock response with a randomly generated password reset token
- 2. Write test cases to validate the backend logic.





Submission Guidelines:

- 1. Submit the source code in a **GitHub repository** with "Yourname-test-task-jdg". Mail to: dev@justdigitalgurus.com, cc: nishchay@justdigitalgurus.com
- 2. Include a **README.md** explaining:
 - How to set up and run the application.
 - Any challenges faced or assumptions made.

Evaluation Criteria:

- Logical correctness of registration and login features.
- Proper handling of edge cases (e.g., email uniqueness, account lock logic).
- Code quality, readability, and security practices (e.g., password hashing).
- Efficient use of frontend and backend integration.
- Bonus points for implementing optional features.



