

User Authentication System

SECURE LOGIN SYSTEM USING
JAVA

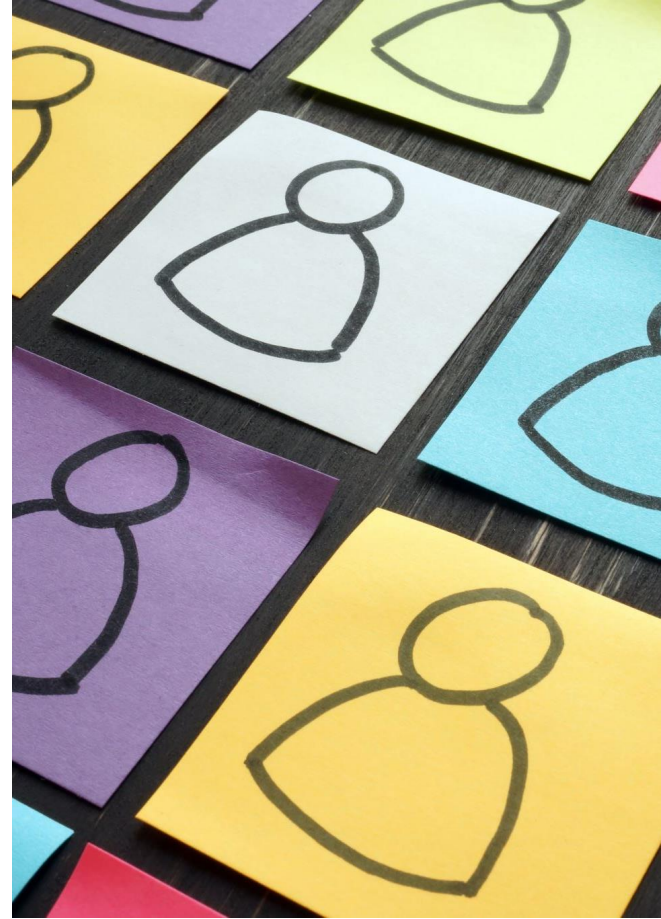
Objective

- Build a secure system where users can log in by entering their credentials. Encapsulation: Manage passwords securely by keeping them private. Goal: Ensure user data is protected and easy to manage.



Steps to Create

- 1. Design Classes: Create a User class with: Private attributes (username and password). Methods to set and verify passwords.
- 2. Implement Authentication Logic: Use a HashMap to store user data. Create methods for: Registering users: Add username and password. Logging in: Validate credentials.



Process Flow



1. Register User:



User enters a unique username and password. System saves credentials securely.



2. Login User:



User enters username and password. System checks data: If correct → Access granted. If incorrect → Error message.

Benefits

- Secure: Keeps passwords private using encapsulation. User-Friendly: Simple to use and easy to implement. Expandable: Can be upgraded with advanced features like OTP or email verification.

