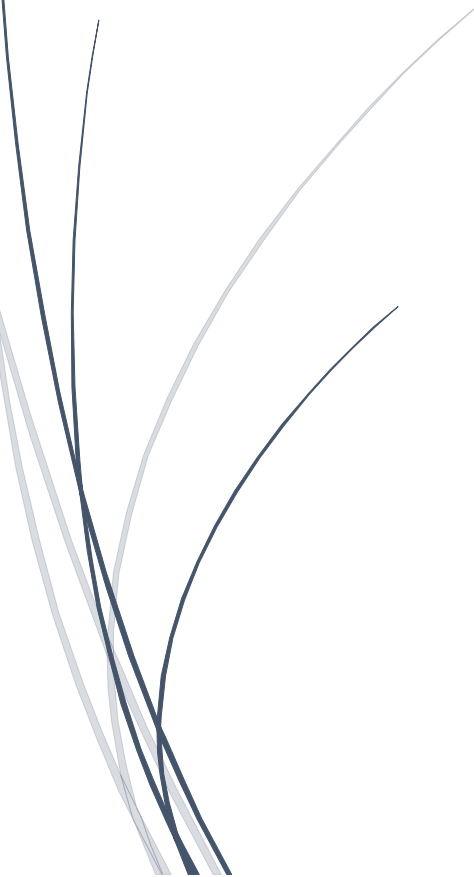


4/7/2025

JAVA FINAL SPRINT

GYM MANAGEMENT SYSTEM



Stephen Badcock
GROUP 7

Individual Report – Stephen Badcock

Project: Gym Management System

Course: Final Sprint – Winter 2025

GitHub Repo: <https://github.com/stepbad/group7-gym-membership>

Contributions

Code Contributions:

- Developed and refactored core classes for User and Trainer
- Worked on main app
- Installed maven
- Separated out menus and implemented the full TrainerMenu system
- Create, update, delete, assign, and unassign classes.
- View assigned workoutclasses and view class rosters.
- Improved user registration output by displaying the new user ID immediately after sign-up for trainer accounts.
- Standardized all DAO classes (e.g., UserDao, TrainerDao, AdminDao) to use DatabaseConnection.getConnection() for centralized, maintainable DB access.
- Updated all test user accounts in JavaFinal.sql to use consistent hashed passwords (12345678), with BCrypt integration working successfully across all roles.
- Helped test and verify the login, registration, and workout scheduling logic for the trainer role.

Team Collaboration:

- Actively participated in daily stand-ups and testing sessions.
- Coordinated with team members working on Member and Admin roles
- Reviewed teammate PRs and offered support during bug fixing and UI planning discussions.
- Preparation and planning sessions

Challenges Faced

- **Password Hashing & Authentication:** During testing, I could register but not sign in. Fixing this required generating new bcrypt hashes and updating both Java and SQL files to align.
- **Trainer Menu Testing:** Ensuring all class-related features worked correctly in different scenarios (assigning, updating, and deleting classes with trainer linkage) took time, especially with the database syncing process.
- **UI/UX via Console:** Designing a clean and user-friendly experience through a console-only interface introduced limitations in navigation and output formatting.
- **DAO Centralization:** Refactoring DAOs for standardized connection handling introduced subtle bugs when replacing direct DriverManager usage, requiring careful testing across modules.