# FitClass Manager

64132265 - NGUYỄN THÔNG THIÊN Môn WEB 2



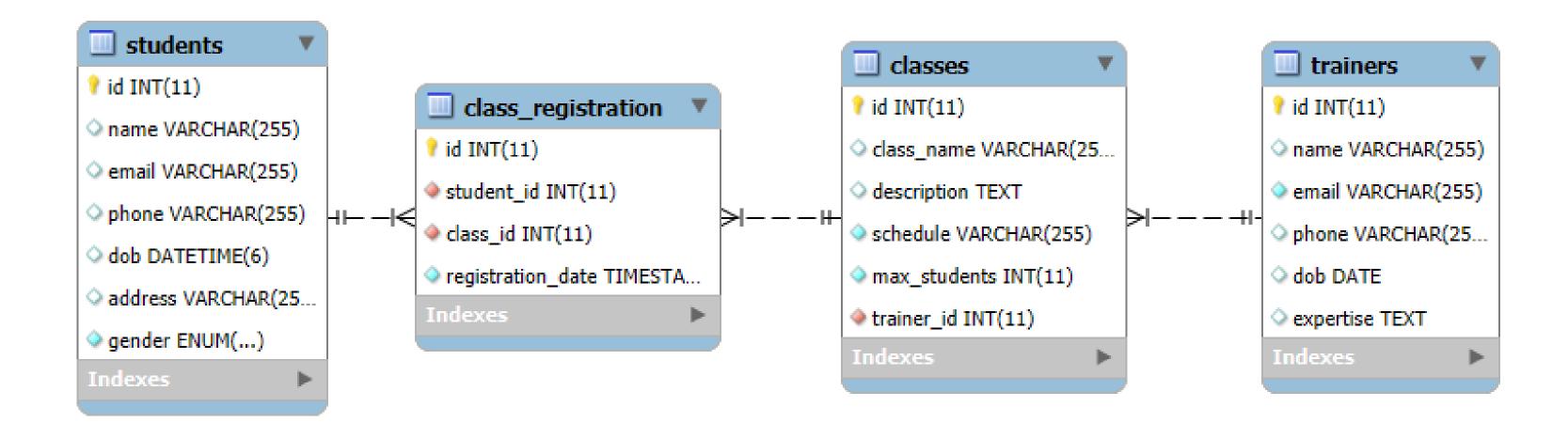
## I. Giới thiệu

Dự án Fitness Manager nhằm xây dựng một hệ thống quản lý lớp học thể thao. Hệ thống giúp trung tâm dễ dàng quản lý thông tin học viên, huấn luyện viên, các lớp học và việc đăng ký lớp.

Tính năng chính: Quản lý thông tin học viên, huấn luyện viên, lớp học và tạo đăng ký, gia hạn. (CRUD)

## II. Schema database

### 1. Schema database:



## II. Database schema

### 2. Giải thích

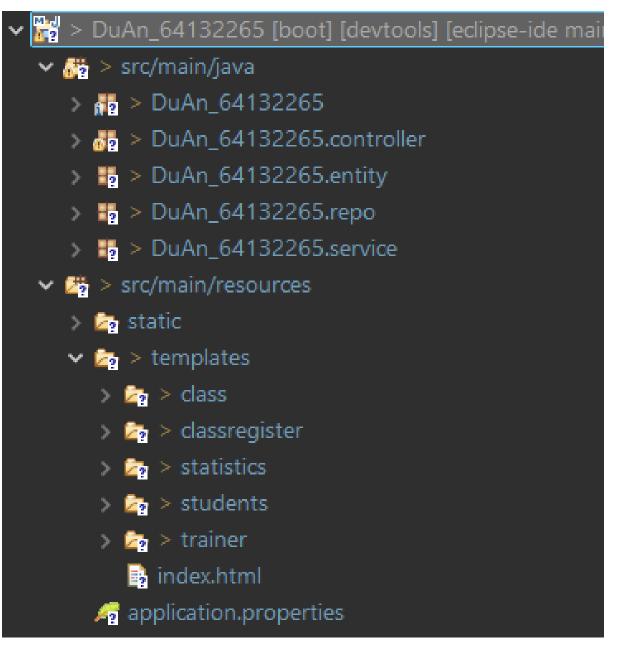
### Các bảng chính:

- students: lưu thông tin cá nhân học viên.
- trainers: thông tin huấn luyện viên và chuyên môn.
- classes: mô tả các lớp học, lịch trình, số lượng học viên, liên kết với hlv.
- class\_registration: lưu lịch sử đăng ký lớp của học viên.

### Mô tả:

- 1 students có thể đăng ký được nhiều classes.
- 1 classes có thể có nhiều học viên.
- 1 trainers có thể phụ trách được nhiều classes.

### 1. Cấu trúc dự án:



src/main/java: Thư mục này chứa toàn bộ mã nguồn Java của dự án, bao gồm các package chính như:

- controller: xử lý yêu cầu từ người dùng, điều phối luồng dữ liệu.
- service: chứa logic nghiệp vụ, xử lý dữ liệu.
- entity: định nghĩa các lớp đối tượng tương ứng bảng trong database.
- repository: quản lý truy xuất dữ liệu, kết nối database.

src/main/resources: Thư mục này lưu trữ các tài nguyên hỗ trợ cho ứng dụng, bao gồm:

- static: chứa các file tĩnh như CSS, JS, hình ảnh.
- templates: chứa mã view, file HTML, Thymeleaf.
- application.properties: file cấu hình chính của ứng dụng (cấu hình kết nối database, cài đặt server, v.v).

- 2. Code xử lý cơ bản:
- 2.1. Tạo mới học viên

```
@GetMapping("/new")
     public String showCreateForm(Model model) {
36
         model.addAttribute("student", new Student());
37
         return "students/student_form";
38
39
40
41●
    @PostMapping
     public String createStudent(@ModeLAttribute Student student) {
42
43
         studentService.saveStudent(student);
44
         return "redirect:/students";
45
```

- 2. Code xử lý cơ bản:
- 2.1 Lấy danh sách , thêm HLV mới

```
@GetMapping
       public String listTrainers(Model model) {
29
           List<Trainer> trainers = trainerService.getAllTrainers();
           model.addAttribute("trainers", trainers);
31
           return "trainer/list trainer";
32
33
34
       @GetMapping("/new")
35●
       public String showAddForm(Model model) {
36
           model.addAttribute("trainer", new Trainer());
37
           return "trainer/trainer_form";
       @PostMapping("/new")
       public String saveNewTrainer(@Validated @ModelAttribute("trainer") Trainer trainer,
43
                                     BindingResult result) {
           if (result.hasErrors()) {
               return "trainer/trainer_form";
           trainerService.saveTrainer(trainer);
47
           return "redirect:/trainers";
48
```

- 2. Code xử lý cơ bản:
- 3.1 Đăng ký học viên vào lớp

```
@PostMapping("/add")
49●
        public String saveRegistration(@ModelAttribute("registration") ClassRegistration registration,
250
                                       BindingResult result, Model model) {
51
52
            if (result.hasErrors()) {
                model.addAttribute("students", studentService.getAllStudents());
53
                model.addAttribute("classes", classService.getAllClasses());
54
                return "classregister/add_registration";
55
56
            // Optional: kiểm tra nếu học viên đã đăng ký lớp rồi thì báo lỗi
57
           Optional<ClassRegistration> existed = classRegistrationService.findByStudentAndClass(
58
                registration.getStudent(), registration.getaClass());
59
            if (existed.isPresent()) {
60
                result.rejectValue("student", "error.registration", "Học viên này đã đăng ký lớp này rồi.");
61
                model.addAttribute("students", studentService.getAllStudents());
62
                model.addAttribute("classes", classService.getAllClasses());
63
                return "classregister/add_registration";
 64
 65
 66
            classRegistrationService.saveRegistration(registration);
67
            return "redirect:/classregister";
 68
 69
```

### Home Page

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#### **Student, Class & Trainer Management System**

Fitness Pro Center - Nha Trang, Khanh Hoa

List Student List Class List Trainer Class Registration

Statistics

#### **Hot Fitness Courses**



#### **Gym Training**

Build muscle strength, improve endurance and boost your overall fitness with expert guidance.



#### Calisthenics

Master bodyweight exercises to increase flexibility, balance, and functional strength.



#### Bodybuilding

Focus on muscle hypertrophy with tailored training plans to sculpt your ideal physique.

### List Student Page

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#### **Student, Class & Trainer Management System**

Fitness Pro Center - Nha Trang, Khanh Hoa

Home List Student List Class List Trainer Class Registration Statistics

### **List of Students**

Add New Student

Tìm theo tên

Search Reset

ID	Name	Email	Phone	DOB	Address	Gender	Actions
2	Emily Johnson	emily.johnson@student.com	0909876543	2001-04-15 07:00:00.0	Los Angeles	Female	Details Edit Delete
3	Daniel Lee	daniel.lee@student.com	0912345678	1999-07-10 07:00:00.0	San Francisco	Male	Details Edit Delete
4	Michael Brown	michael.brown@student.com	0932345679	1998-12-25 07:00:00.0	Houston	Male	Details Edit Delete
5	William Davis	william.davis@student.com	0943456789	2002-03-30 07:00:00.0	Chicago	Male	Details Edit Delete
6	Ethan Wilson	ethan.wilson@student.com	0954567890	1997-01-12 07:00:00.0	Phoenix	Male	Details Edit Delete
7	Olivia Moore	olivia.moore@student.com	0965678901	1998-11-02 07:00:00.0	New York	Female	Details Edit Delete

### Add Student Page

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#### **Student, Class & Trainer Management System**

Fitness Pro Center - Nha Trang, Khanh Hoa

Home List Student List Class List Trainer Class Registration Statistics

### **Add New Student**

Name:	
Email:	
Phone:	
Date of Birth:	
mm/dd/yyyy	
Address:	

### Student Details Page

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**Student, Class & Trainer Management System** 

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### **Student Details**

**ID:** 2

Name: Emily Johnson

Email: emily.johnson@student.com

**Phone:** 0909876543

**DOB:** 2001-04-15 07:00:00.0

**Address:** Los Angeles

**Gender:** Female

Back to List

### Edit Student Page

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#### **Student, Class & Trainer Management System**

Fitness Pro Center - Nha Trang, Khanh Hoa

Home List Student List Class List Trainer Class Registration Statistics

### **Edit Student**

Name:	
Emily Johnson	
Email:	
emily.johnson@student.com	
Phone:	
0909876543	
Date of Birth:	
04/15/2001	
Address:	
Los Angeles	

### Delete Student Page

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Student, Class & Trainer Management System

Fitness Pro Center - Nha Trang, Khanh Hoa

Home List Student List Class List Trainer Class Registration

Statistics

### Are you sure you want to delete this student?

#### **Student Information**

- **ID**: 2
- Name: Emily Johnson
- Email: emily.johnson@student.com
- **Phone:** 0909876543
- Date of Birth: 2001-04-15 07:00:00.0
- Address: Los Angeles
- **Gender:** Female

#### **Enrolled Classes:**

This student is enrolled in the following classes: Yoga



### List Class Page

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#### **Student, Class & Trainer Management System**

Fitness Pro Center - Nha Trang, Khanh Hoa

Home List Student List Class List Trainer Cl

Trainer Class Registration

Statistics

### **List of Classes**

Add New Class

Tìm theo tên lớp

Search Reset

ID	Class Name	Description	Schedule	Max Students	Trainer	Actions
1	Competition Gym	A class for bodybuilding enthusiasts to improve strength and fitness.	2025-06-01 09:00:00	15	Mark Adams	Edit Delete
2	Yoga	Yoga class to relax both body and mind, improve flexibility.	2025-06-01 08:00:00	20	Jessica Parker	Edit Delete
3	Swimming	Swimming class for all levels, learn proper techniques.	2025-06-02 10:00:00	10	Brian Roberts	Edit Delete
4	Bodybuilding	Bodybuilding class for muscle gain and fat loss.	2025-06-03 11:00:00	12	Jason Smith	Edit Delete

### List Trainer Page

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#### **Student, Class & Trainer Management System**

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List Student List Class List Trainer Class Registration

**List of Trainers** 

**Add New Trainer** 

Tìm theo tên trainer

Search

Reset

ID	Name	Email	Phone	Date of Birth	Expertise	Actions
1	Mark Adams	trainer1@gym.com	0932345678	15/06/1985	Professional Gym & Bodybuilding Expert	Edit Delete
2	Jessica Parker	trainer2@gym.com	0908765432	10/04/1990	Yoga and Meditation Specialist	Edit Delete
3	Brian Roberts	trainer3@swim.com	0901234567	22/07/1987	Swimming Instructor for All Levels	Edit Delete
4	Jason Smith	trainer4@bodybuilding.com	0912345678	05/02/1983	Bodybuilding, Muscle Gain & Fat Loss Expert	Edit Delete
5	Kevin Johnson	trainer5@calisthenics.com	0923456789	30/11/1995	Calisthenics and Street Workout Coach	Edit Delete

### Class Registration Page

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#### **Student, Class & Trainer Management System**

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### **List of Class Registrations**

Add Registration

Tìm theo tên học viên Reset

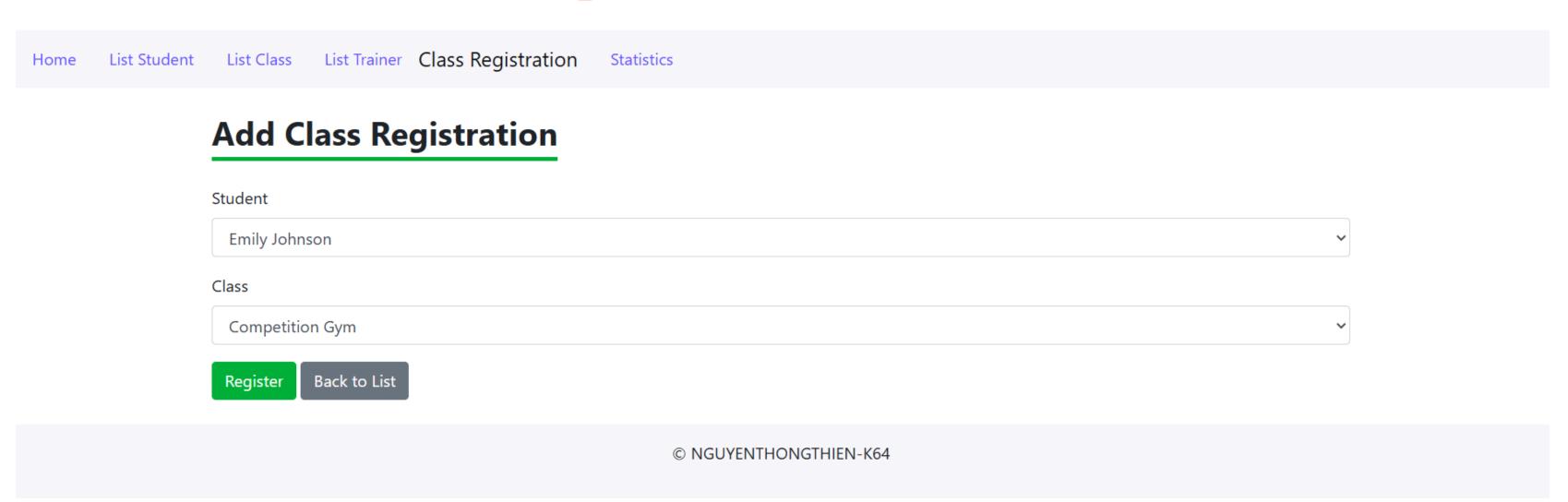
ID	Student Name	Class Name	Registration Date	Expired Date	Action
66	James Miller	Competition Gym	06/06/2025 14:19	19/09/2025	Delete +15 ngày ➤ Gia hạn
67	Emily Johnson	Yoga	06/06/2025 14:19	06/07/2025	Delete +15 ngày ➤ Gia hạn
68	Daniel Lee	Swimming	06/06/2025 14:19	06/07/2025	Delete +15 ngày ➤ Gia hạn
69	Michael Brown	Bodybuilding	06/06/2025 14:19	06/07/2025	Delete +15 ngày ➤ Gia hạn
70	William Davis	Calisthenics	06/06/2025 14:19	06/07/2025	Delete +15 ngày ➤ Gia hạn
71	Ethan Wilson	Competition Gym	06/06/2025 14:19	06/07/2025	Delete

### Add Class Registration Page



#### Student, Class & Trainer Management System

Fitness Pro Center - Nha Trang, Khanh Hoa



### Statistics Page

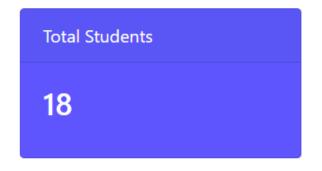


#### Student, Class & Trainer Management System

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### **Statistics Dashboard**



Registration Rate (%)
77.78

Total Classes
4

Total Trainers

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