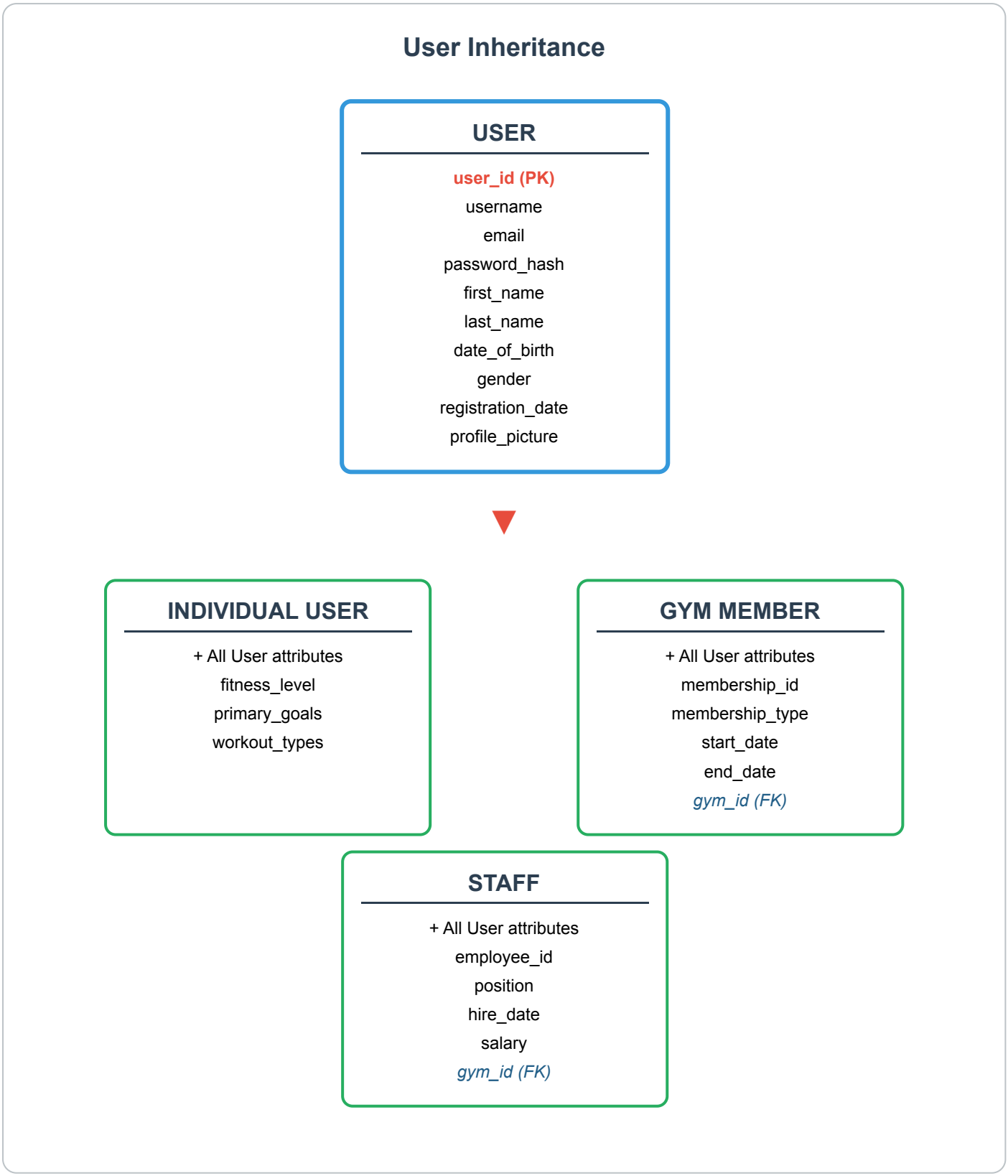
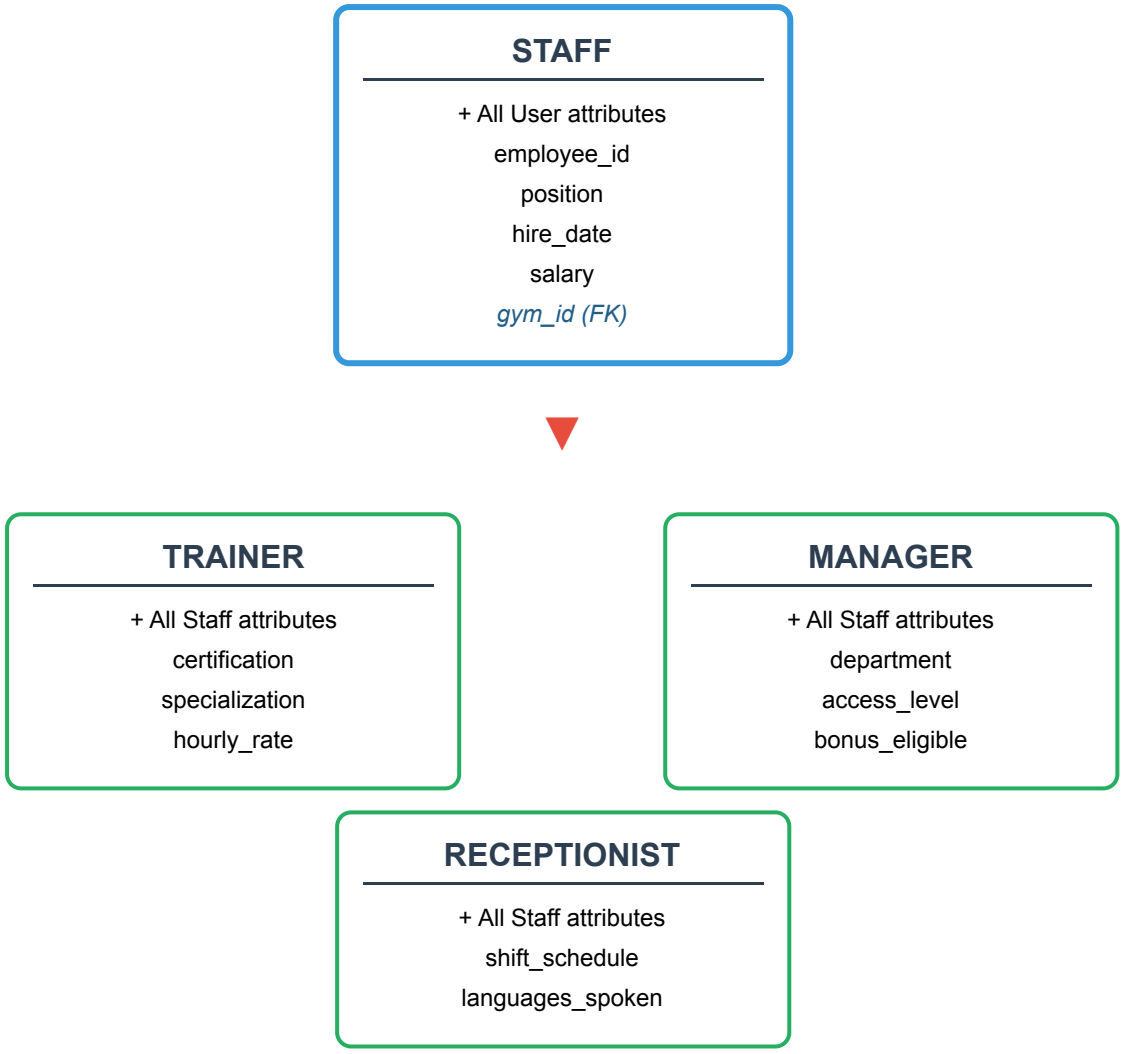
FitTrack Pro - Entity Relationship Diagram



Staff Specialization



Exercise Categories

EXERCISE

exercise_id (PK)
name
category
muscle_groups
difficulty
instructions
equipment_needed

▼

CARDIO

+ All Exercise attributes
target_heart_rate
intensity_level

STRENGTH

+ All Exercise attributes
weight_range
rep_range
muscle_focus

FLEXIBILITY

+ All Exercise attributes
stretch_duration
flexibility_level

Core Entities and Relationships

WORKOUT

workout_id (PK)
user_id (FK)
workout_name
date
duration
calories_burned
notes

EXERCISE

exercise_id (PK)
name
category
muscle_groups
difficulty
instructions
equipment_needed

↕️ Many-to-Many (M:N) ↕️

WORKOUT_EXERCISE

workout_id (FK)
exercise_id (FK)
sets
reps
weight
duration
rest_time

EQUIPMENT

equipment_id (PK)
gym_id (FK)
name
type
status
purchase_date
maintenance_schedule

GYM

gym_id (PK)
name
address
phone
email
operating_hours
facilities

CLASS

class_id (PK)
gym_id (FK)
trainer_id (FK)
name
description
schedule_time
duration
max_capacity

↕️ Many-to-Many (M:N) ↕️

CLASS_BOOKING

booking_id (PK)
class_id (FK)
member_id (FK)
booking_date
status

PROGRESS_TRACKING

tracking_id (PK)
user_id (FK)
date
weight
body_fat_percentage
muscle_mass
measurements

Legend & ISA Summary

Red = Primary Key (PK) | *Blue = Foreign Key (FK)* | **Blue Border = Superclass** | **Green Border = Subclass**

✅ **3 ISA Hierarchies (Required for 3-Person Team):**

1. User → Individual User, Gym Member, Staff
2. Staff → Trainer, Manager, Receptionist
3. Exercise → Cardio, Strength, Flexibility