ERD:

COMMUNITY
PK	Community ID
FK	UserID
	Post
	PostDate
	Achievement

engages with

USER
PK	UserID
	UserName
	UserDOB
	UserGender
	UserEmailID
	UserPhoneNumber

WORKOUT SESSION
PK	SessionID
FK	User_ID
	Session_Data
	Session_Start_Time
	Session_End_Time

includes

TRAINING PLAN
| PK | TrainingPlanID |
| | TrainingTimeinhrs |

includes

WORKOUT INFO
TrainingPlanID
ExerciseID
Weights
Sets
Repetitions

Each Training Plan can have many exercises but gets its plan target is achieved through sets, weights and rep

plans

reviews

PROGRESS REPORT
PK	ReportID
FK	UserID
	Report_Weight
	Report_Height
	Report_BMI
	ReportDate

follows

sets

can be achieved by

Training may be cardio or strength training

d

CARDIO
| | milescovered |

STRENGTH TRAINING
| | equipmentUsed |

EXERCISE
PK	ExerciseID
	ExerciseName
	ExerciseDescription

DIET PLAN
PK	PlanID
FK	UserID
	PlanName
	PlanDescription

FITNESS GOALS
PK	GoalID
FK	UserID
	Goal_Target_Duration

Goal Types may be weight loss, strength or shredding

D

WEIGHT LOSS
| | waist_measurement |

STRENGTH
| | one_rep_maximum |

SHREDDING
| | Fat_percentage |

Each Plan contains many food with different portion sizes

FOOD PORTION
Plan ID
FoodID
PortionSize

FOOD
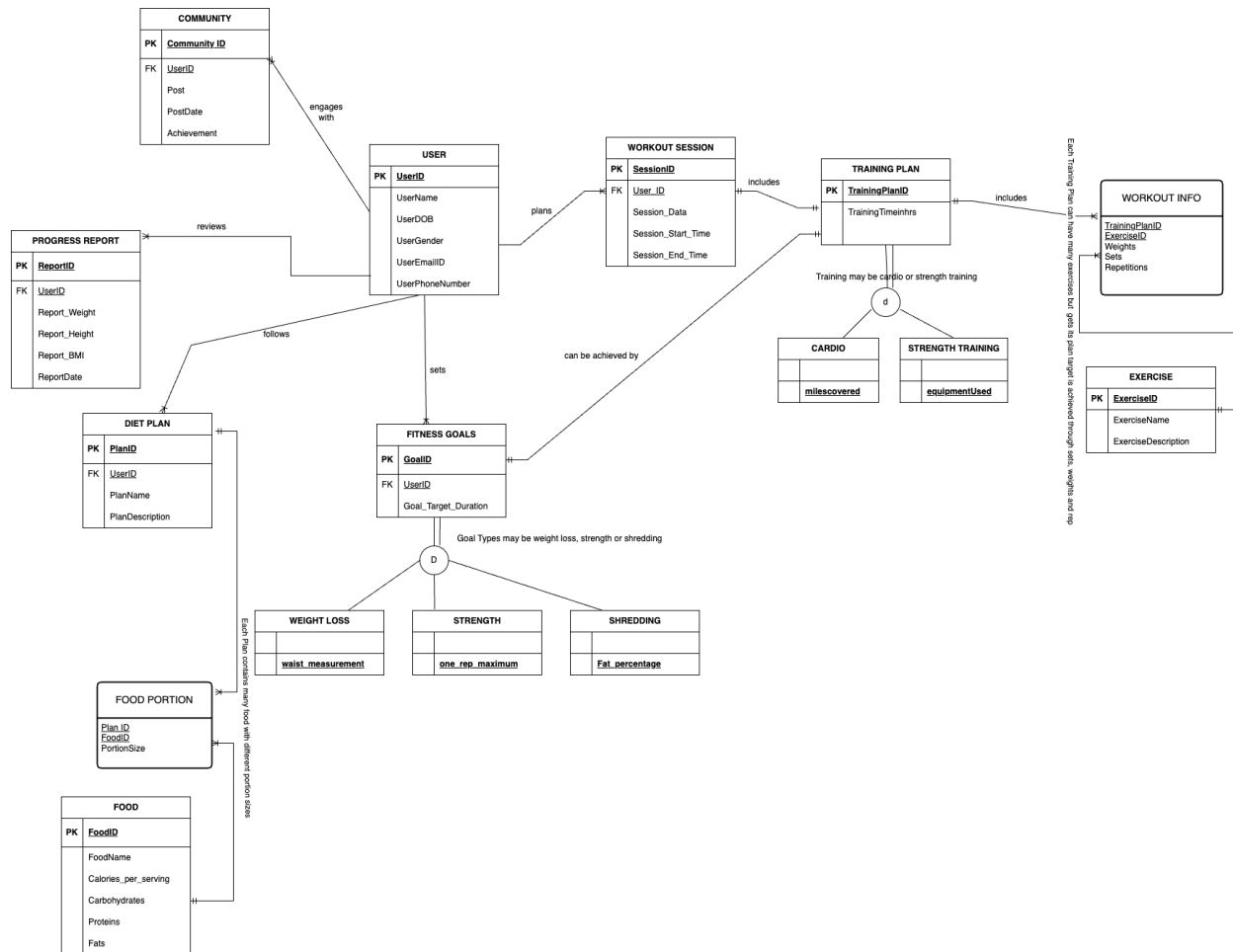| PK | FoodID |
	FoodName
	Calories_per_serving
	Carbohydrates
	Proteins
	Fats

Changes:
1. Decomposing a multivalued attribute ie. Goal_Type into WeightLoss, Strength, Shredding.
2. Applied a total specialization rule over Goal_Type, wherein disjoint constraint is specified and user can either choose weightloss, strength or shredding
3. Decomposing the many to many relationship between diet plan and food by creating a weak entity potion_size
4. Applied total specialization rule over training plan, wherein disjoint constraint is specified and user can either choose cardio or strength training

Relationships

1) User engages with the one or more community.
2) User plans one or many workout sessions
3) User reviews Progress report
4) User follows a diet plan
5) User sets one or many fitness goals

6)   Decomposing a multivalued attribute ie. Goal_Type into 3 sub types – Weight loss, strength, shredding with a disjoint constraint and partial specialization

7)   A diet plan contains many foods with different portion sizes.

8)   A workout session includes a training plan.

9)   The training plan is of 2 subtypes – cardio and strength training with a disjoint constraint and total specialization

10)   Fitness goals can be achieved by having a training plan.

11)   A training plan can have many excercises but gets it's plan target is achieved through set, weights and reps