**MODELO RELACIONAL**

**User** (facebookID, name, score)

*score* is the sum of all the *ParticipationDetails.score* the user is in.

**Challenge** (id, startTime, endTime, isPublic, exercisePlan→ExercisePlan)

*startTime*  and *endTime* are both dates. *endTime*  must be greater than *startTime.*

*IsPublic –*  boolean (true or false)

**ParticipationDetails** (user→User, challenge→Challenge, score, finalPlanRating)

**Execution** (id, date, duration, user→User, challenge→Challenge)

**WeekDay** (id, dayNumber)

*dayNumber* can hold values in the range [0 , 6], with the following meaning:  
 0 - Sunday1 - Monday  
 2 - Tuesday  
 3 - Wednesday  
 4 - Thursday  
 5 - Friday  
 6 - Saturday

// **TODO**: Ver como fazer a derivação { Complete , Disjoint }

**ExercisePlan** (id, recomendedCooldown, dificulty)

*difficulty* is the average of all the *Exercise.difficulty* associated to this plan.

**CustomPlan** (exercisePlan→ExcercisePlan, lastTimeUsed, isPublic, creator→User)

*isPublic –*  boolean (true or false)

**DefaultPlan** (exercisePlan→ExercisePlan)

// **TODO**: Ver como fazer a derivação { Complete , Disjoint }

**Exercise** (id, videoLink, description, image, difficulty, type→ExerciseType)

*difficulty*  can hold values in the range [1 , 5]

**CustomExercise** (exercise→Exercise, isPublic, creator→User)

*isPublic –*  boolean (true or false)

**DefaultExercise** (exercise→Exercise)

**ExerciseParameters** (exercisePlan→ExercisePlan, exercise→Exercise, numRepetitions, numSets)

**ExerciseType** (id, name)

*name* can hold one of the following strings:

Endurance

Strength

Flexibility

Balance

**ChallengeDay** (challenge→Challenge, weekDay→WeekDay)