Model: Main

Model

UserManagement

User
+Id
+Name
+Age
+WorkoutRecord
+PersonalTrainers

«Abstract Observer»
Observer

«Concrete Observer A»
Trainee

«Concrete Observer B»
Personal Trainer
+FollowedUsers
+WorkoutPlans

Workout Management

«Subject»
WorkoutSubject
+Observers
+Id

«Abstract Factory»
WorkoutFactory

«Concrete Subject»
Workout Record
+User
+N_Workouts
+LastEditDate
+Workouts

«Concrete Subject»
Workout Plan
+Workouts
+LastEditDate

«Concrete Factory»
Workout4PlanFactory
+day
+strategy

«Concrete Factory»
Workout4RecordFactory
+date

«Abstract Product»
Workout
+Id

Workout4Plan
+Day
+Exercises
+Strategy

Workout4Record
+Date
+Exercises

«Context»
Exercise
+Name
+Description
+Equipment
+N_Sets
+N_Reps
+Weight
+Strategy

«Abstract Strategy»
ExerciseIntensitySetter

«Strategy»
StrengthExercise

«Strategy»
HypertrophyExercise

«Strategy»
EnduranceExercise

ExerciseStrategyFactory
+CreateStrategy()

+creates

ORM

ConcreteExerciseDAO
+connection
+addExercise()
+addExercise4Plan()
+getAllExercise()
+getExercisebyId()
+updateExercise()
+deleteExercise()

ConcreteTraineeDAO
+connection
+addTrainee()
+getAllTrainees()
+getWorkoutPlanFromUserId()
+getPTForUserId()
+editUser()
+deleteUser()

ConcretePersonalTrainerDAO
+connection
+addPersonalTrainer()
+getAllPersonalTrainers()
+getPersonalTrainerById()
+getPlansMadeByPT()
+getTraineesOfPT()
+editPersonalTrainer()
+deletePersonalTrainer()
+isFollowing()

ConcreteWorkoutPlanDAO
+connection
+addWorkoutPlan()
+getAllWorkoutPlans()
+getWorkoutPlanById()
+updateLastEditDate()
+getWorkoutPlan()
+getWorkout4PlansByWorkoutPlanId()
+addWorkout4PlanToWorkoutPlan()
+removeWorkout4PlanFromWorkoutPlan()
+assignWorkoutPlanToUser()
+unassignWorkoutPlan()
+getWorkoutPlansByTrainerId()

ConcreteWorkoutRecordDAO
+connection
+addWorkoutRecord()
+linkWorkoutRecordToUser()
+getWorkoutRecordByUserId()
+getWorkoutRecordById()
+deleteWorkoutRecord()
+getWorkout4RecordsByWorkoutRecordId()
+addWorkout4RecordToWorkoutRecord()

ConcreteWorkout4PlanDAO
+connection
+addWorkout4Plan()
+getAllWorkout4Plans()
+getWorkout4PlanById()
+updateWorkout4Plan()
+deleteWorkout4Plan()
+addExerciseToWorkout4Plan()
+getExercisesForWorkout4Plan()

ConcreteWorkout4RecordDAO
+connection
+addWorkout4Record()
+getAllWorkout4Records()
+getWorkout4RecordById()
+updateWorkout4RecordDate()
+deleteWorkout4Record()
+addExerciseToWorkout4Record()
+getExercisesForWorkout4Record()

«interface»
ExerciseDAO
+connection
+addExercise()
+addExercise4Plan()
+getAllExercise()
+getExercisesbyId()
+updateExercise()
+deleteExercise()

«interface»
TraineeDAO
+connection
+addTrainee()
+getAllTrainees()
+getWorkoutPlanFromUserId()
+getPTForUserId()
+editUser()
+deleteUser()
+getWorkoutRecordByUserId()
+Operation1()

«interface»
PersonalTrainerDAO
+connection
+addPersonalTrainer()
+getAllPersonalTrainers()
+getPersonalTrainerById()
+getPlansMadeByPT()
+getTraineesOfPT()
+editPersonalTrainer()
+deletePersonalTrainer()
+isFollowing()

«interface»
WorkoutPlanDAO
+connection
+addWorkoutPlan()
+getAllWorkoutPlans()
+Operation2()
+getWorkoutPlanById()
+updateLastEditDate()
+getWorkoutPlan()
+getWorkout4PlansByWorkoutPlanId()
+addWorkout4PlanToWorkoutPlan()
+removeWorkout4PlanFromWorkoutPlan()
+assignWorkoutPlanToUser()
+unassignWorkoutPlan()
+getWorkoutPlansByTrainerId()

«interface»
WorkoutRecordDAO
+connection
+addWorkoutRecord()
+linkWorkoutRecordToUser()
+getWorkoutRecordByUserId()
+getWorkoutRecordById()
+deleteWorkoutRecord()
+getWorkout4RecordsByWorkoutRecordId()
+addWorkout4RecordToWorkoutRecord()

«interface»
Workout4PlanDAO
+connection
+addWorkout4Plan()
+getAllWorkout4Plans()
+getWorkout4PlanById()
+updateWorkout4Plan()
+deleteWorkout4Plan()
+addExerciseToWorkout4Plan()
+getExercisesForWorkout4Plan()

«interface»
Workout4RecordDAO
+connection
+addWorkout4Record()
+getAllWorkout4Records()
+getWorkout4RecordById()
+updateWorkout4RecordDate()
+deleteWorkout4Record()
+addExerciseToWorkout4Record()
+getExercisesForWorkout4Record()

DBManager
+connection
+getConnection()
+closeConnection()

Business

ExerciseController
+exerciseDAO
+createExercise()
+createExerciseForPlan()
+getAllExercises()
+getExercisebyId()
+updateExercise()
+deleteExercise()

TraineeController
+traineeDAO
+workoutRecordDAO
+workoutPlanDAO
+registerTrainee()
+getAllTrainees()
+getWorkoutPlansByTraineeId()
+getWorkoutRecordForTrainee()
+updateTrainee()
+deleteTrainee()
+getWorkoutRecordByTraineeId()

PersonalTrainerController
+personalTrainerDAO
+workoutPlanDAO
+workoutRecordDAO
+registerPersonalTrainer()
+followTrainee()
+getAllPersonalTrainers()
+getPersonalTrainerById()
+getPlansMadeByPT()
+deletePersonalTrainer()
+getTraineesOfPT()
+getWorkoutRecordForTrainee()

WorkoutPlanController
+workoutPlanDAO
+createWorkoutPlan()
+getAllWorkoutPlans()
+getWorkoutPlanById()
+deleteWorkoutPlan()
+addWorkout4PlanToWorkoutPlan()

WorkoutRecordController
+workoutRecordDAO
+createWorkoutRecord()
+getAllWorkoutRecords()
+deleteWorkoutRecord()
+linkWorkoutRecordToWorkoutRecord()
+getWorkout4RecordsForWorkoutRecord()

Workout4PlanController
+workout4PlanDAO
+createWorkout4Plan()
+getAllWorkout4Plans()
+getWorkout4PlanById()
+updateWorkout4Plan()
+deleteWorkout4Plan()
+addExerciseToWorkout4Plan()
+getExercisesForWorkout4Plan()

Workout4RecordController
+workout4RecordDAO
+createWorkout4Record()
+getAllWorkout4Records()
+getWorkout4RecordById()
+updateWorkout4RecordDate()
+deleteWorkout4Record()
+addExerciseToWorkout4Record()
+getExercisesForWorkout4Record()