Model::Main

User Management

User *(abstract)*
+Id
+Name
+Age
+WorkoutRecord

«Abstract Observer»
Observer
+Update()

«Concrete Observer A»
Trained
+PersonalTrainers
+AddPersonalTrainer()
+RemovePersonalTrainer()
+Update()

UpdatePlan

«Concrete Observer B»
Personal Trainer
+FollowedUsers
+PersonalTrainers
+WorkoutPlans
+CreateWorkoutPlan()
+EditWorkoutPlan()
+DeleteWorkoutPlan()
+AddUser()
+RemoveUser()
+AddPersonalTrainer()
+RemovePersonalTrainer()
+ViewUserWorkoutRecord()
+Update()

UpdateProgress

Workout Management

«Subject»
WorkoutSubject
+Observers
+Id
+Attach()
+Detach()
+Notify()

«Abstract Factory»
WorkoutFactory *(abstract)*
+CreateWorkout()

«Concrete Subject»
Workout Record
+User
+N_Workouts
+LastEditDate
+Workouts
+AddWorkout()
+EditWorkout()
+RemoveWorkout()
+Notify()

«Concrete Subject»
Workout Plan
+Workouts
+LastEditDate
+AddWorkout()
+EditWorkout()
+RemoveWorkout()
+Notify()

«Concrete Factory»
Workout4PlanFactory
+day
+strategy
+CreateWorkout()

returns Workout4Plan

«Concrete Factory»
Workout4RecordFactory
+date
+CreateWorkout()

returns Workout4Record

«Abstract Product»
Workout
+Id
+AddExercise()
+EditExercise()
+RemoveExercise()

Workout4Plan
+Day
+Exercises
+Strategy
+AddExercise()
+EditExercise()
+RemoveExercise()

+creates

Workout4Record
+Date
+Exercises
+AddExercise()
+EditExercise()
+RemoveExercise()

«Context»
Exercise
+Name
+Description
+Equipment
+N_Sets
+N_Reps
+Weight
+Strategy
+SetN_Sets()
+SetN_Reps()

«Abstract Strategy»
ExerciseIntensitySetter *(abstract)*
+SetN_Sets()
+SetN_Reps()

«Strategy»
StrengthExercise
+SetN_Sets()
+SetN_Reps()

«Strategy»
HypertrophyExercise
+SetN_Sets()
+SetN_Reps()

«Strategy»
EnduranceExercise
+SetN_Sets()
+SetN_Reps()

+creates

+creates

+creates

ExerciseStrategyFactory
+CreateStrategy()