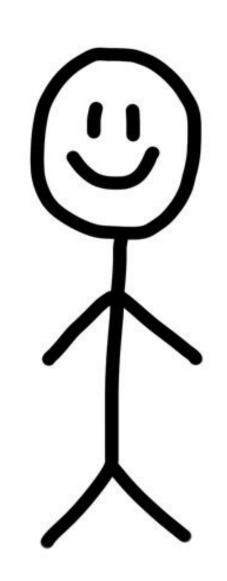
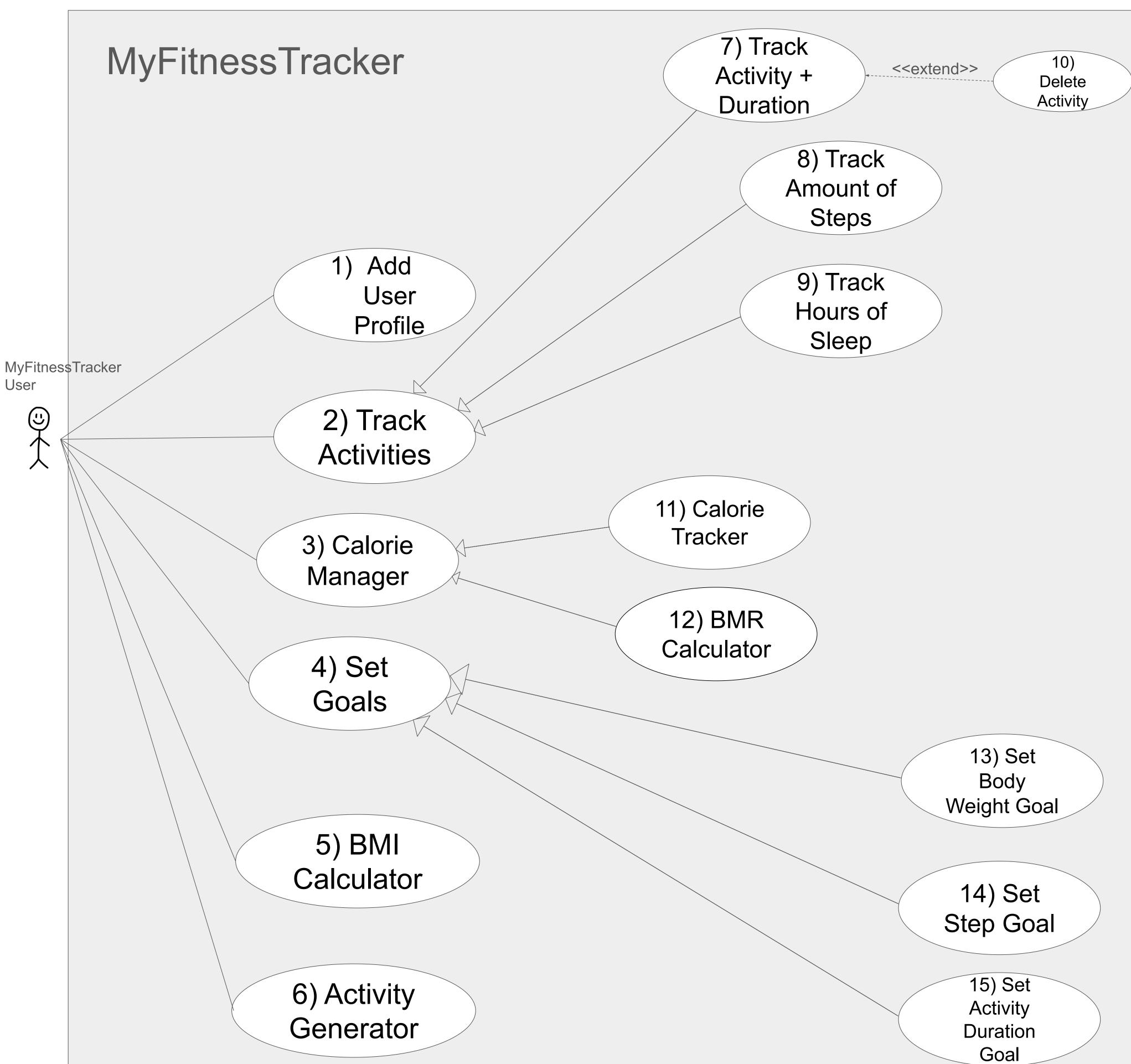
My Personalized Fitness Tracker

Rachel Ren (rr4000), Brynja Schultz (bes992), Andrew Zheng (az2156)



Usecase Diagram



Use Case Diagram Description (Part 1)

1: Add User Profile	
Overview	This creates a profile for the user, which includes their name, age, weight, and height. This information is stored in a text file.
Related use cases:	N/A
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

2: Track Activities	
Overview	Allows user to track activity+duration, step count, and hours slept. This information is stored in a text file.
Related use cases:	Generalization of: (7) Track Activities + Duration (8) Track Amount of Steps (9) Track Hours of Sleep
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

3: Calorie Manager	
Overview	Manages both BMR Calculator and Calorie Tracker allowing the user to choose between these actions.
Related use cases:	Generalization of (11) Calorie Tracker (12) BMR Calculator
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

4 Set Goals		
Overview	This allows the user to set their weight, step, and activity duration goals. All of this information is stored in a text file for the user's convenience and helps the user keep track of their fitness progress.	
Related use cases:	Generalization of (12) Set Body Weight Goal (13) Set Step Goal (14) Set Activity Duration Goal	
Actors	MyFitnessTracker User	
Pre Conditions (Optional)		
Post Conditions (Optional)		

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5: BMI Calculator	
Overview	Uses data based on user input or previously existing profile files and calculates BMI. Generates brief description along with BMI.
Related use cases:	N/A
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

6: Activity Generator		
Overview	Uses a random number generator to randomly generate an activity as a suggestion to the user from an array. The activity generated has three levels of difficulty: beginner, intermediate, and advanced.	
Related use cases:	N/a	
Actors	MyFitnessTracker User	
Pre Conditions (Optional)		
Post Conditions (Optional)		

7: Track Activity + Duration	
Overview	Allows the user to record the name of the fitness activity that they did and the duration in minutes. Activities are assigned an id number. This information is saved to a text file.
Related use cases:	Generalized by: (2) Track Activities Extended by: (10) Delete Activity
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

8: Track Amount of Steps	
Overview	Allows the user to record their step count. This also converts their step count to distance in miles. This information is saved in a text file.
Related use cases:	Generalized by: (2) Track Activities
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

9: Track Hours of Sleep		
Overview	Allows the user to record the hours they slept by letting users enter their bedtime and awake time in military time format, which then calculates the hours slept. This information is then saved to a text file.	
Related use cases:	Generalized by: (2) Track Activities	
Actors	MyFitnessTracker User	
Pre Conditions (Optional)		
Post Conditions (Optional)		

Use Case Diagram Description (Part 2)

10: Delete Activity	
Overview	Deletes the activity and duration saved by the user using the activity's id. Also updates the deletion in a text file.
Related use cases:	Extends: (7) Track Activity and Duration
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

11: Calorie Tracker	
Overview	Allows user to input their caloric intakes and keeps track of their daily caloric intake. Updates/creates text file storing this information.
Related use cases:	Generalized by (3) Calorie Manager
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

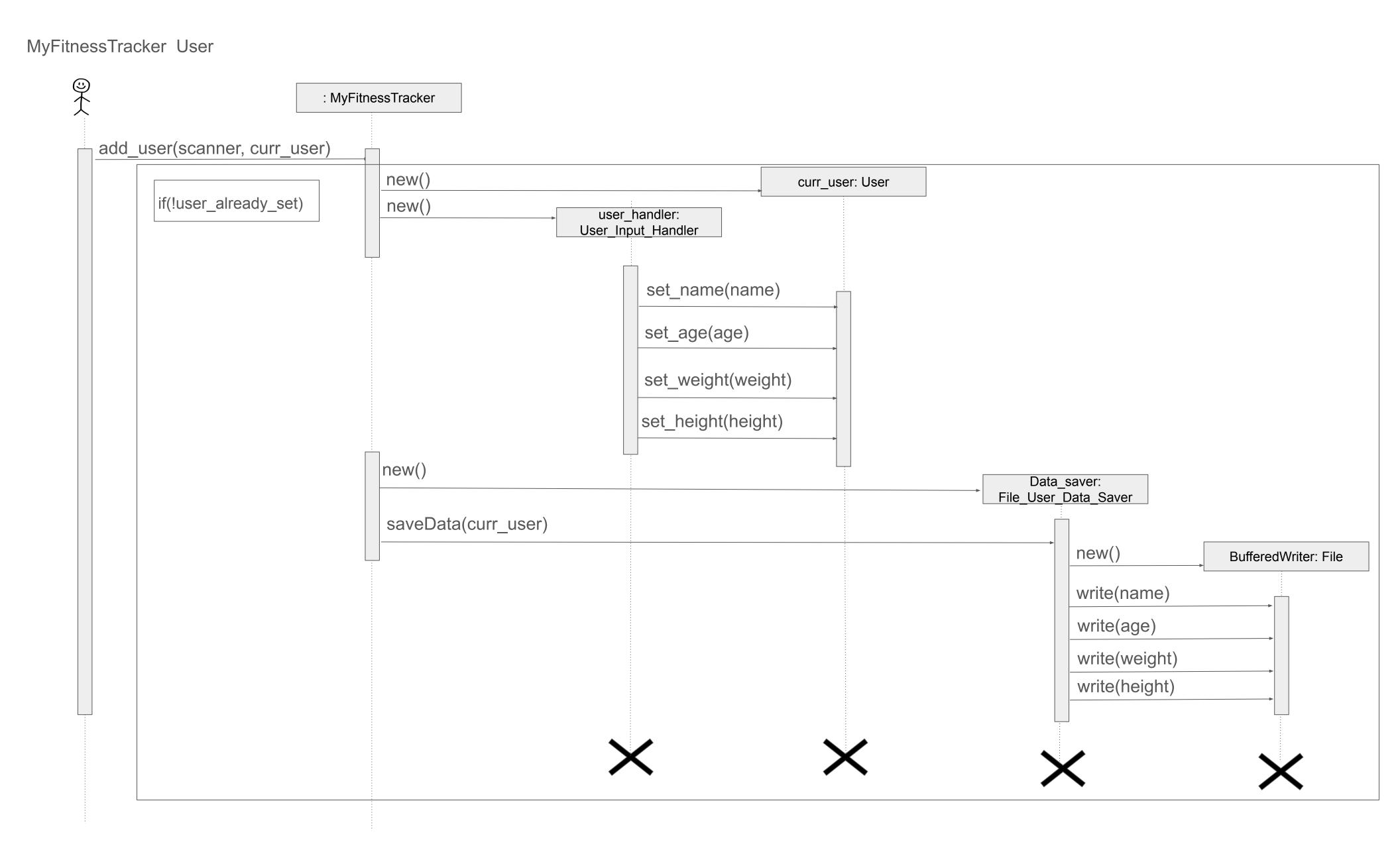
3: Set Body Weight Goal		14:
Overview	This stores the user's body weight goal (in pounds) in a text file and allows the user to record how they progress upon their body weight goals.	Ov
Related use cases:	Generalized by (4) Set Goals	Re ca:
Actors	MyFitnessTracker User	Pre
Pre Conditions (Optional)		(Or
Post Conditions (Optional)		Po (Or

14: Set Step Goal	
Overview	This stores the user's goal step count in a text file and allows the user to record how they progress upon their step count goals.
Related use cases:	Generalized by (4) Set Goals
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

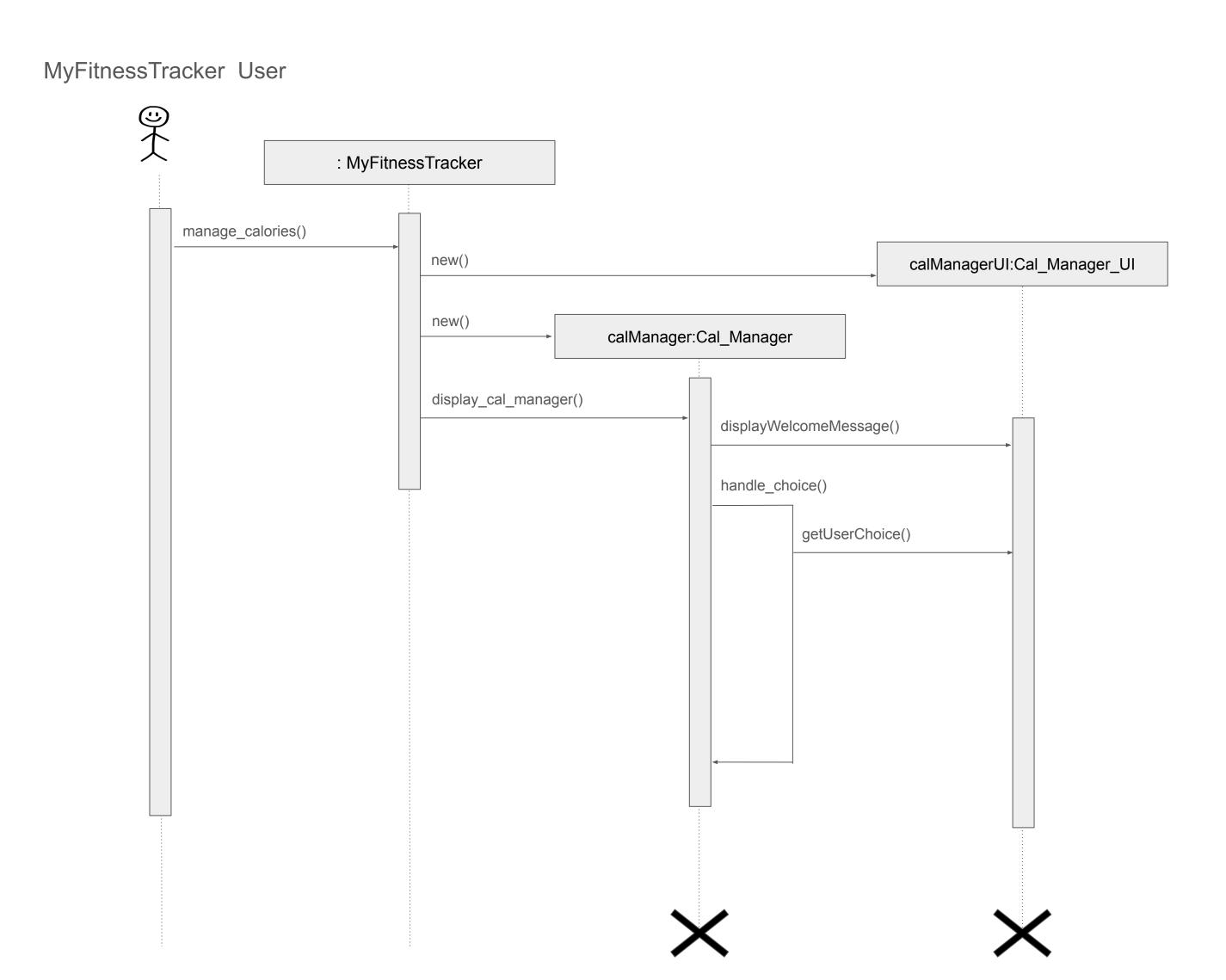
12: BMR Calculator		
Overview	Calculates the user's BMR and daily caloric intake goal to reach their goal weight. Requests user information and retrieves information that may be found in previously created text files.	
Related use cases:	Generalized by (3) Calorie Manager	
Actors	MyFitnessTracker User	
Pre Conditions (Optional)		
Post Conditions (Optional)		

15: Set Activity Duration Goal	
Overview	This stores the user's activity duration goal in a text file. Activity duration is subdivided into three categories: move, stand, and exercise hours. This allows the user to record how they progress upon their activity duration goals.
Related use cases:	Generalized by (4) Set Goals
Actors	MyFitnessTracker User
Pre Conditions (Optional)	
Post Conditions (Optional)	

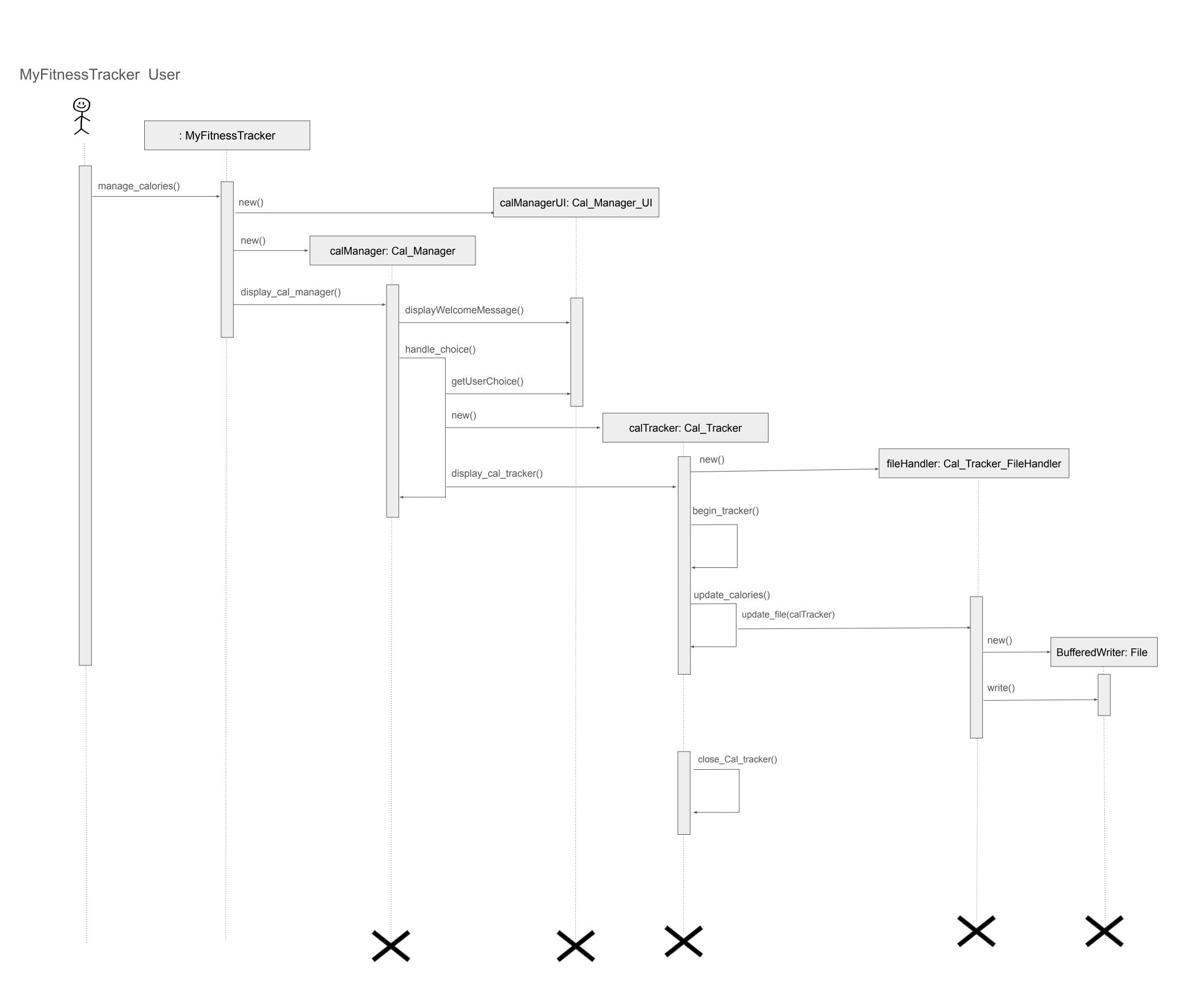
Sequence Diagram: Add User Profile



Sequence Diagram: Calorie Manager



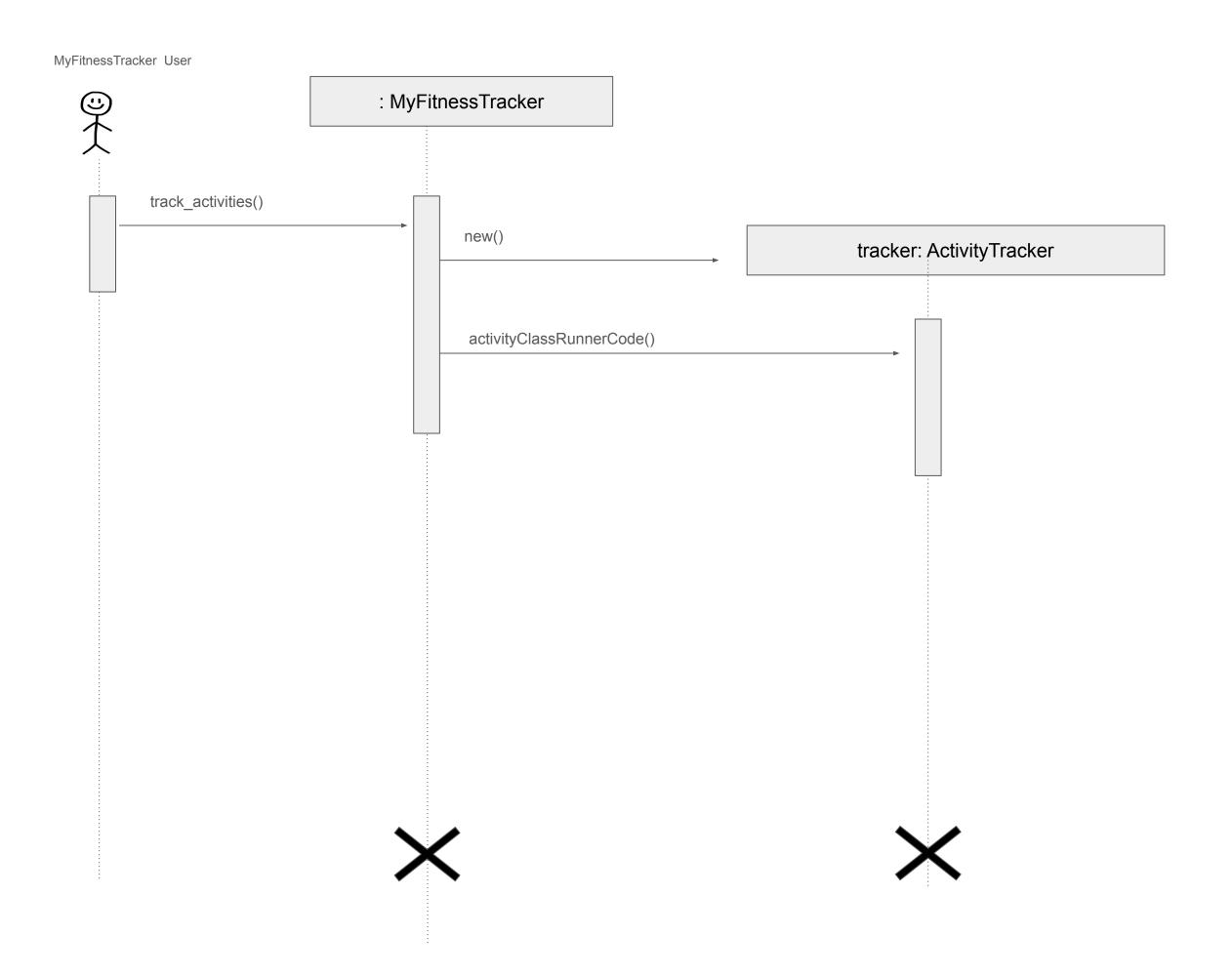
Sequence Diagram: Calorie Tracker



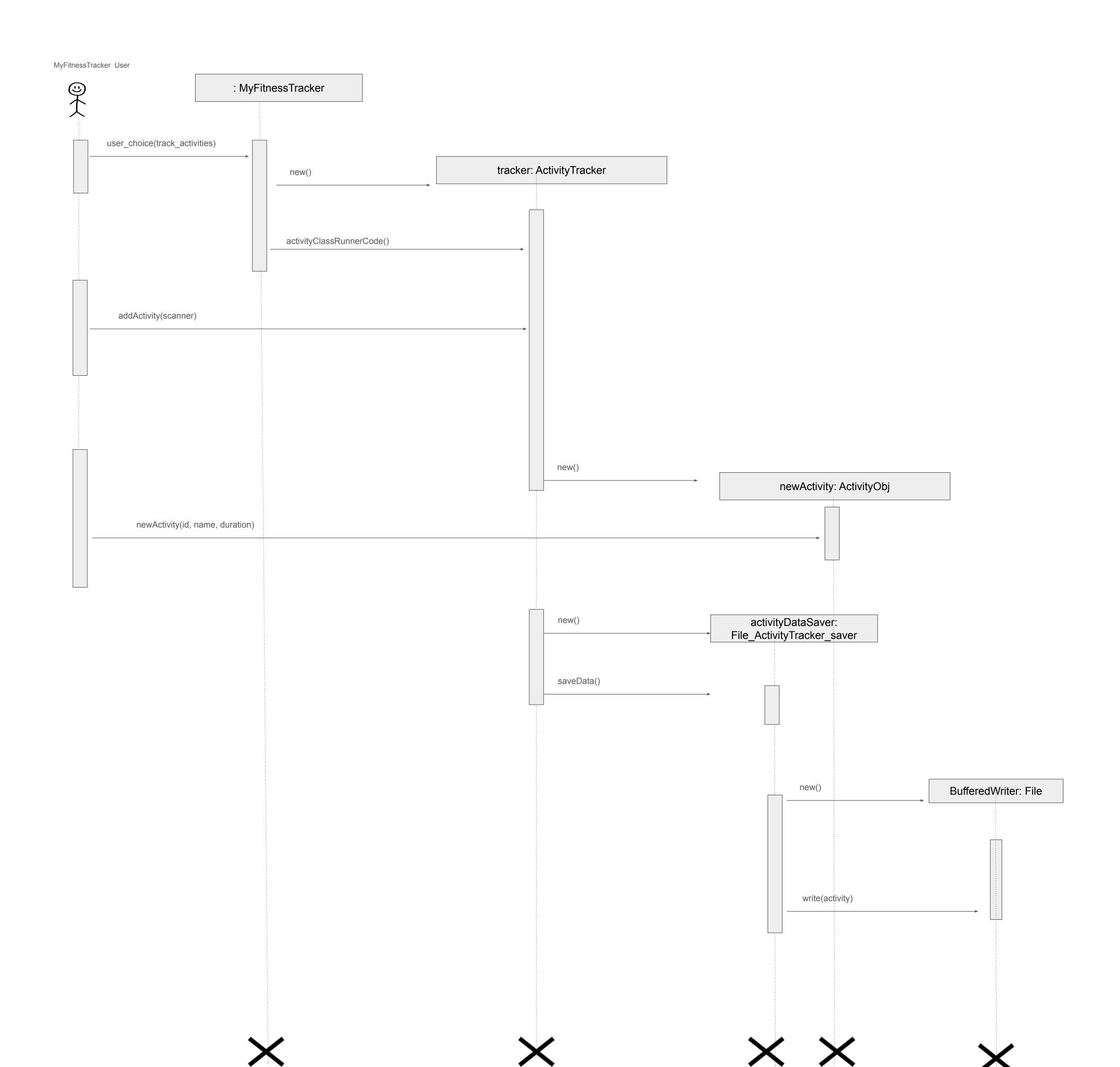
Sequence Diagram: BMR Calculator

MyFitnessTracker User : MyFitnessTracker manage_calories() new() calManagerUI: Cal_Manager_UI new() calManager:Cal_Manager display_cal_manager() displayWelcomeMessage() handle_choice() getUserChoice() new() bmrCalc: BMR_Calc_Handler display_bmr_calc() new() fileHandler:BMR_FileHandler displayWelcomeMessage() loadProfile("user_profile.txt") new() BufferedReader: File readLine() profileData if(age == 0 || weight == 0 || height == 0) getIntInput("Age:") getIntInput("Weight:") getIntInput("Height:") getOptionInput("Enter(1) for Female: and (2) for Male") getOptionInput("Enter your activity level", 1, 5) loadGoal("user_profile.txt") hew() BufferedReader: File goalWeight readLine() getIntInput("Goal Weight: ") if(goalWeight == 0) calculator:BMR_Calculator new() calculateBMR() getBMR() getGoalCalories() displayBMRResults(BMR, goal_Calories) closeBMRCalc()

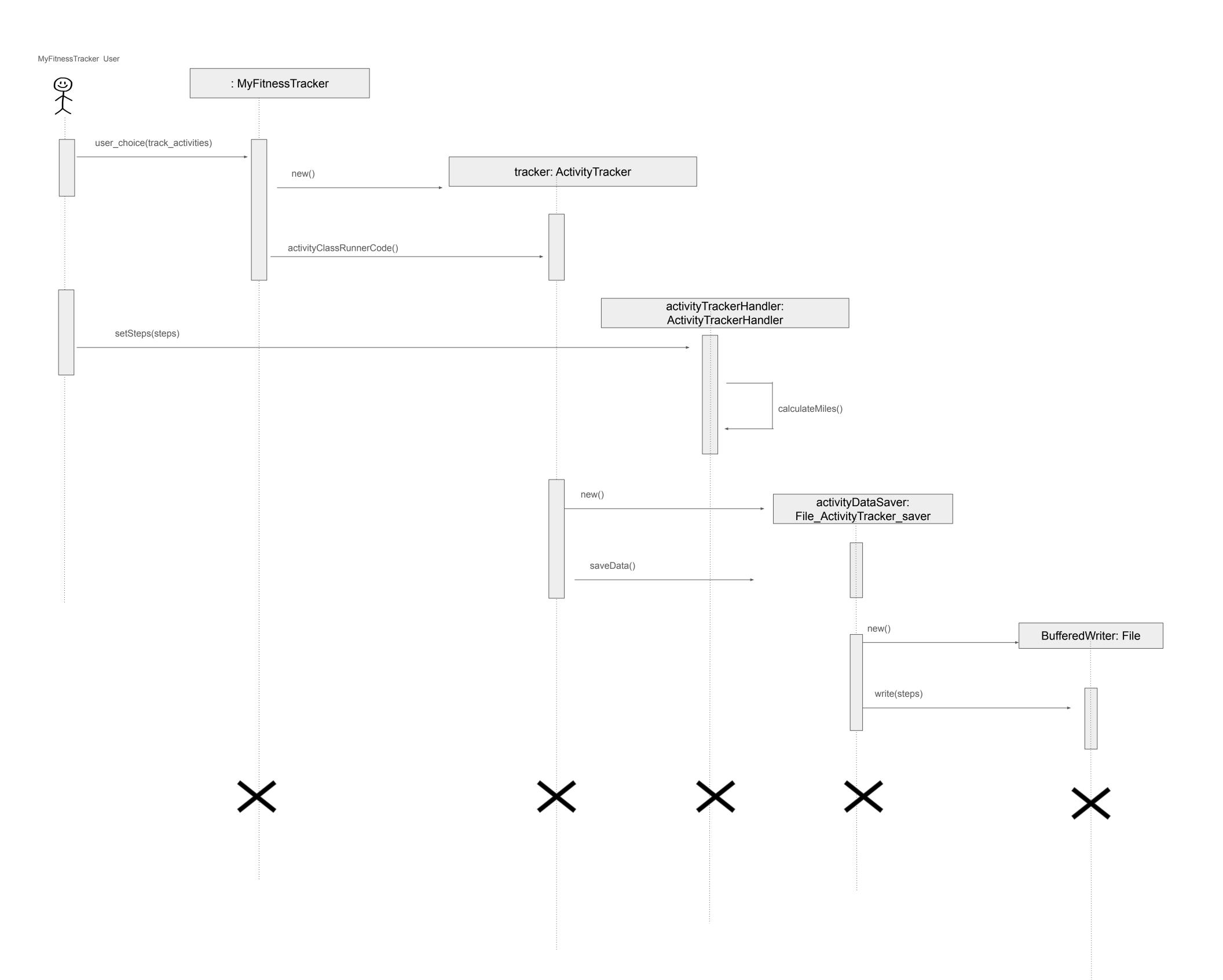
Sequence Diagram: Track Activities



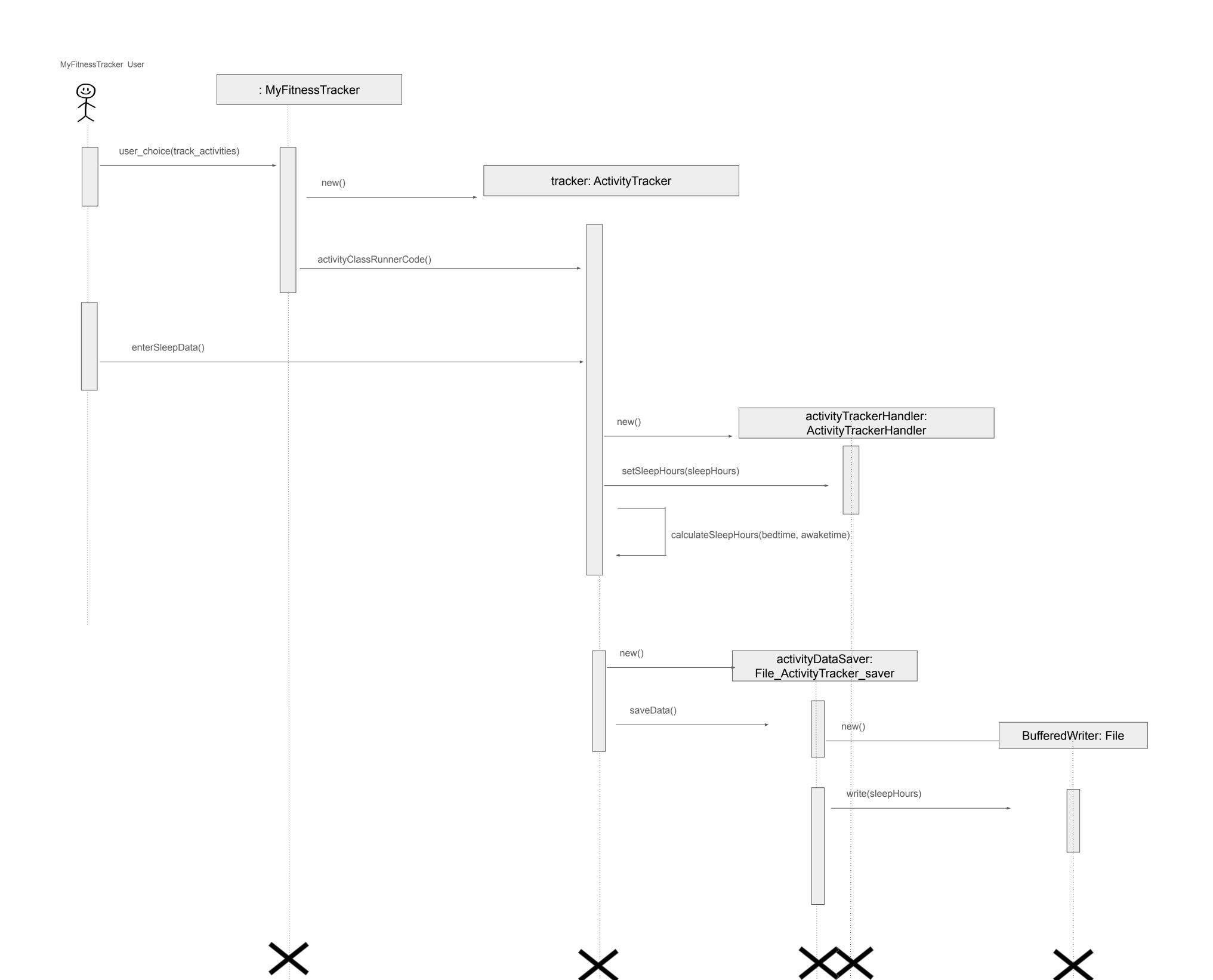
Sequence Diagram: Track Activity + Duration



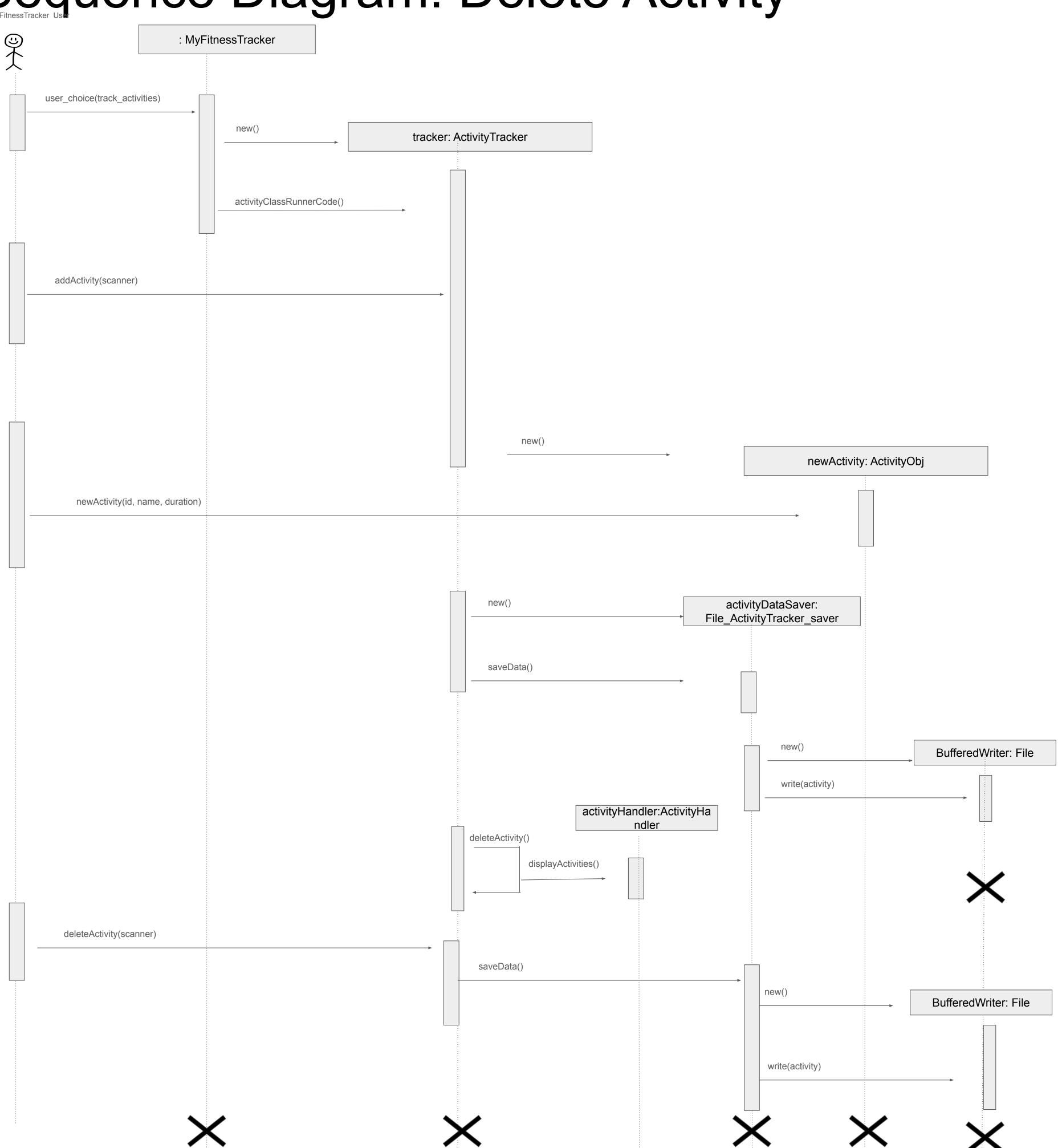
Sequence Diagram: Track Amount of Steps



Sequence Diagram: Track Hours of Sleep



Sequence Diagram: Delete Activity



Sequence Diagram: Set Goals

Set_goals()

new()

goal_handler:
Goal Input Handler

set_goals(curr_goals)

new()

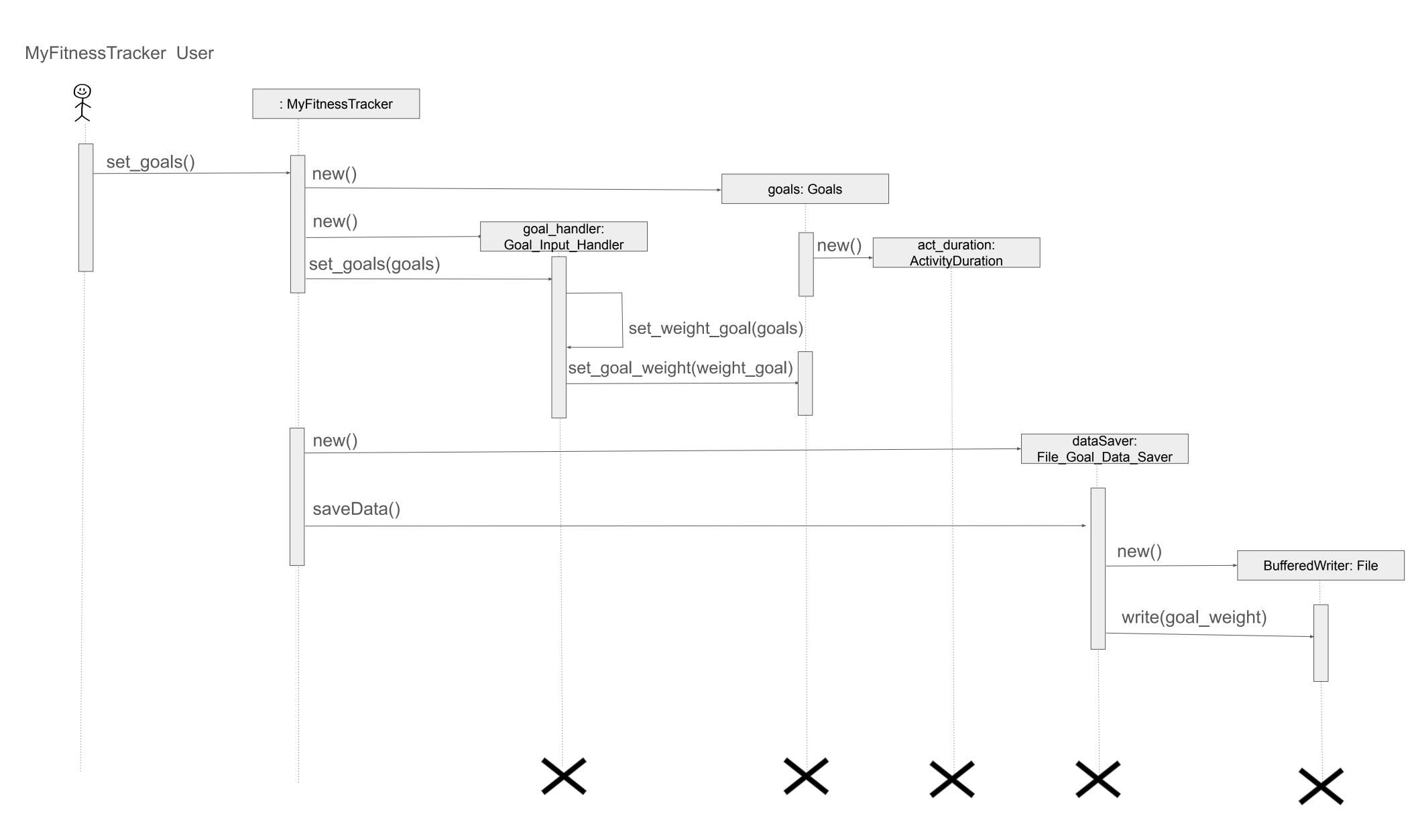
new()

set_goals(curr_goals)

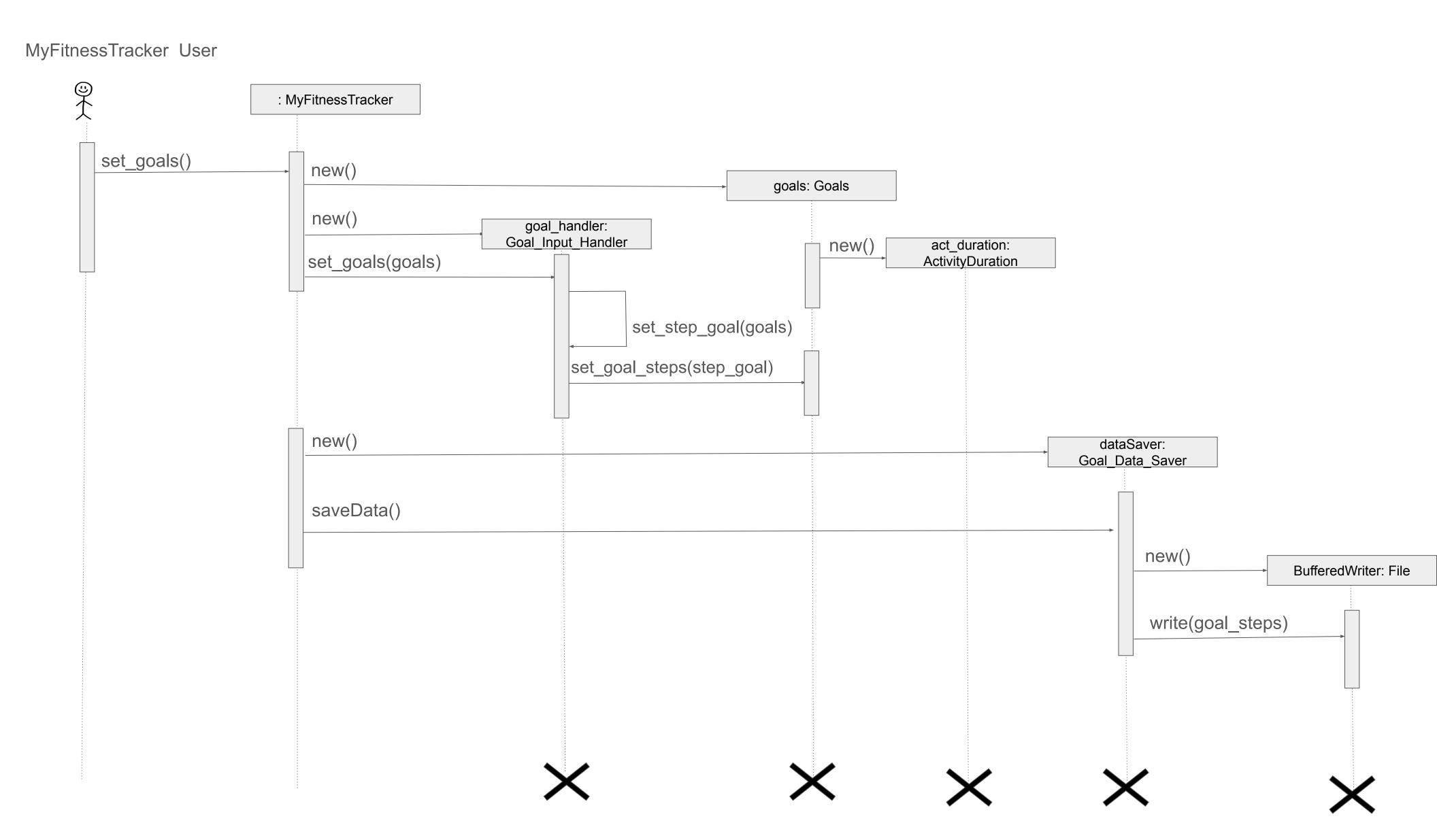
new()

set_duration:
ActivityDuration

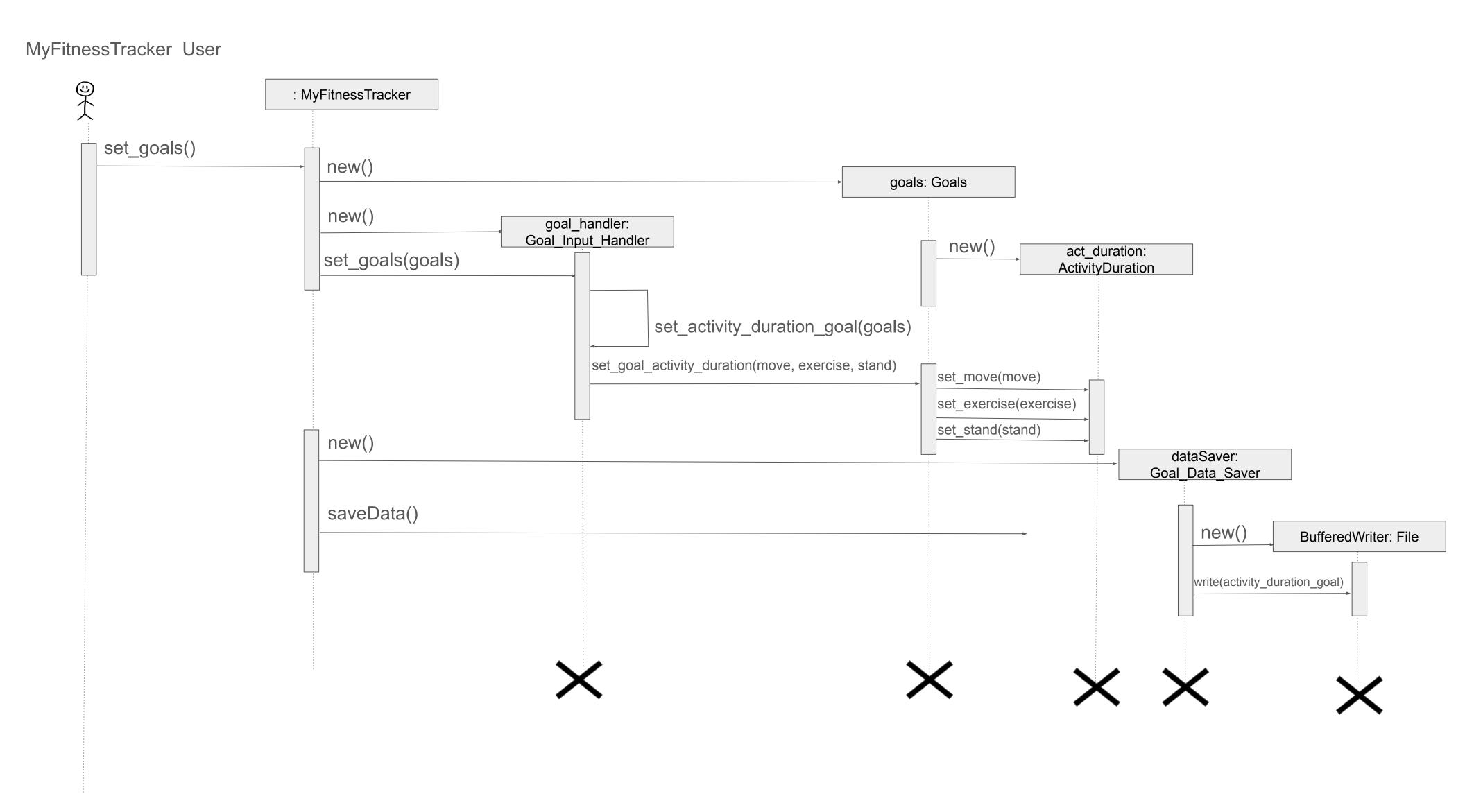
Sequence Diagram: Set Body Weight Goal



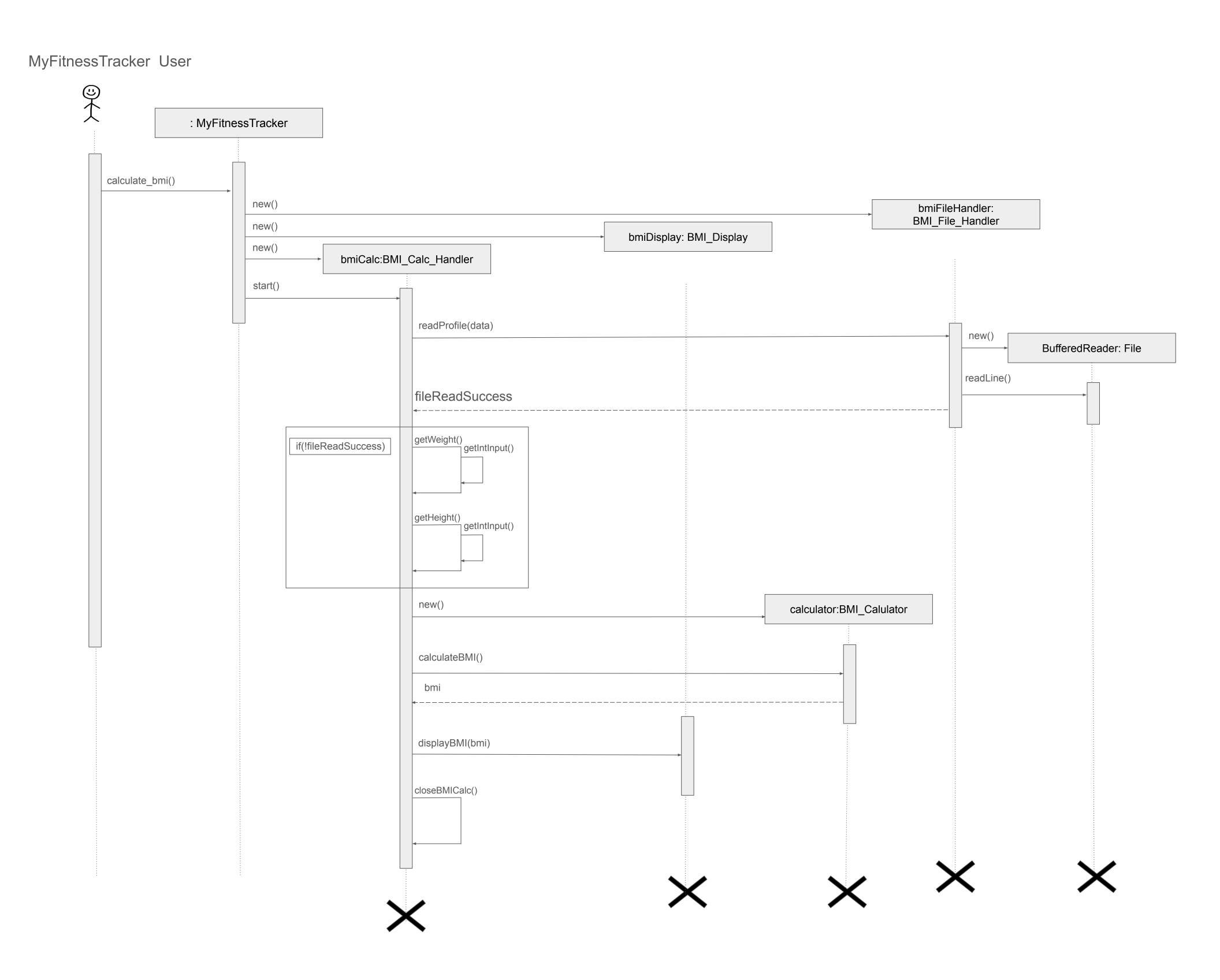
Sequence Diagram: Set Step Goal



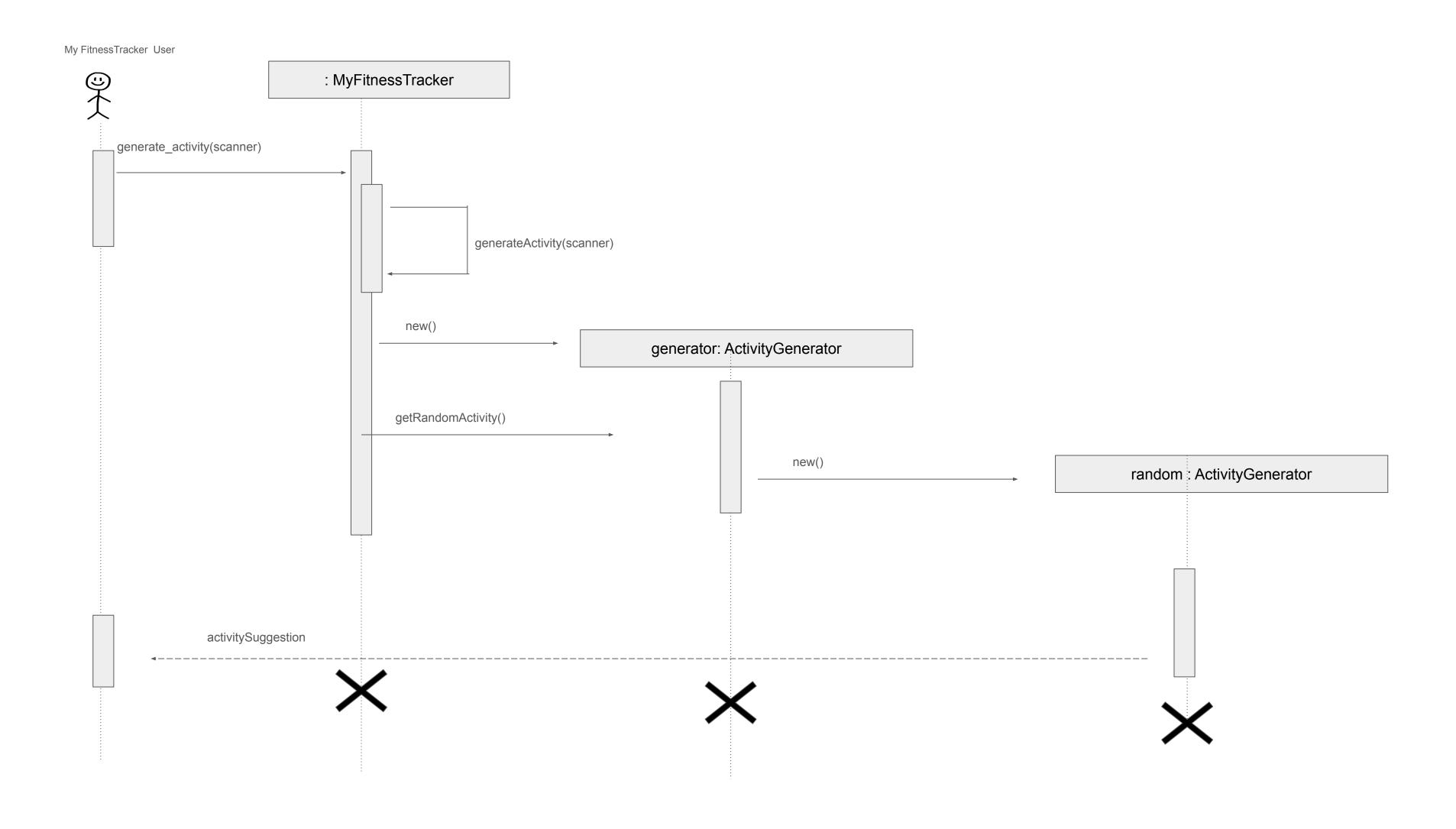
Sequence Diagram: Set Activity Duration Goal



Sequence Diagram: BMI Calculator



Sequence Diagram: Activity Generator



https://docs.google.com/drawings/d/19 zQjG0CeePRY_CB40WqjA8a-brXLIcE DukyXIZ5riLE/edit?usp=sharing Zoom in to read + link to original

