**Use Cases**

**for**

**FitBuds**

Version 1.0 approved

Prepared by Team SAMMY

Nanyang Technological University

5th September 2022

Revision History

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| **Name** | **Date** | **Reason For Changes** | **Version** |
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**Use Case Description**

# 1: Register User

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| Use Case ID: | 1.1 | | | |
| Use Case Name: | Register user | | | |
| Created By: | Aaron | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | User | | |
| Description: | | The app will prompt for user information during registration. | | |
| Preconditions: | | User has not registered. | | |
| Postconditions: | | Included Use Cases should be triggered | | |
| Priority: | | High | | |
| Frequency of Use: | | Once | | |
| Flow of Events: | | 1. The user launches the app for the first time. 2. The app prompts the user the option to register. 3. The user clicks on the register option 4. The app prompts for the user’s profile information through use case 1.2 5. The app prompts for the user’s personal details through use case 1.3 6. The app prompts for the user’s current fitness abilities through use case 1.4 7. The app prompts for the user’s target fitness abilities through use case 1.5 | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | * 1. Input Profile Information   2. Input Personal Information   3. Input Current Fitness Abilities   4. Input Target Fitness Abilities | | |
| Special Requirements: | | - | | |
| Assumptions: | | The user is eligible for IPPT. | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 1.2 | | | |
| Use Case Name: | INPUT PROFILE INFORMATION | | | |
| Created By: | Aaron | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | User | | |
| Description: | | The app prompts for the user’s login details. | | |
| Preconditions: | | Register user use case triggers this use case | | |
| Postconditions: | | - | | |
| Priority: | | High | | |
| Frequency of Use: | | Once | | |
| Flow of Events: | | 1. The user inputs his username and password. 2. The app validates the inputs and displays the results | | |
| Alternative Flows: | | 1.2.AF.1  If user input is invalid, the app will display an error message stating the error and the app will not proceed until that error is resolved. | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 1.3 | | | |
| Use Case Name: | INPUT PERSONAL INFORMATION | | | |
| Created By: | Aaron | | Last Updated By: |  |
| Date Created: | 05/09/22 | | Date Last Updated: |  |
| Actor: | | User | | |
| Description: | | The app prompts for the user’s personal information to create an individual profile. | | |
| Preconditions: | | Register user use case triggers this use case | | |
| Postconditions: | | - | | |
| Priority: | | High | | |
| Frequency of Use: | | Once | | |
| Flow of Events: | | 1. The user inputs personal details which include his name, date of birth and residential postal code. 2. The appvalidates the inputs and displays the results | | |
| Alternative Flows: | | 1.3.AF.1  If user input is invalid, the app will display an error message stating the error and the app will not proceed until that error is resolved. | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 1.4 | | | |
| Use Case Name: | INPUT CURRENT FITNESS ABILITIES | | | |
| Created By: | Aaron | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | USER | | |
| Description: | | The app prompts for the user’s current fitness abilities | | |
| Preconditions: | | Register user use case triggers this use case | | |
| Postconditions: | | Included Use Cases should be triggered | | |
| Priority: | | High | | |
| Frequency of Use: | | Once | | |
| Flow of Events: | | 1. The user inputs his current Push-ups and Sit-ups counts he can perform within a minute and the duration he takes to perform a 2.4km run. 2. The app validates the inputs 3. The app calculates the associated IPPT score and IPPT grade via use cases 1.6 and 1.7 4. The app displays the results | | |
| Alternative Flows: | | 1.4.AF.1  If user input is invalid, the app will display an error message stating the error and the app will not proceed until that error is resolved. | | |
| Exceptions: | | - | | |
| Includes: | | 1.6 Calculate IPPT Score | | |
| Special Requirements: | | The app must only allow Push-Ups per minute and Sit-Ups per minute to be in the range of 0 to 60, and 2.4km Run Timing in the range of 0 to 1100 seconds | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 1.5 | | | |
| Use Case Name: | INPUT TARGET FITNESS ABILITIES | | | |
| Created By: | Aaron | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | User | | |
| Description: | | The app prompts for the user’s target fitness abilities | | |
| Preconditions: | | Register user use case triggers this use case | | |
| Postconditions: | | Included Use Cases should be triggered | | |
| Priority: | | High | | |
| Frequency of Use: | | Once | | |
| Flow of Events: | | 1. The user inputs his current Push-ups and Sit-ups counts he is looking to perform within a minute and the duration he will need to perform a 2.4km run. 2. The app validates the inputs. 3. The app calculates the associated IPPT score and IPPT grade via use cases 1.6 and 1.7. 4. The app displays the results. | | |
| Alternative Flows: | | 1.5.AF.1  If user input is invalid, the app will display an error message stating the error and the app will not proceed until that error is resolved. | | |
| Exceptions: | | - | | |
| Includes: | | 1.6 Calculate IPPT Score | | |
| Special Requirements: | | The app must only allow Push-Ups per minute and Sit-Ups per minute to be in the range of 0 to 60, and 2.4km Run Timing in the range of 0 to 1100 seconds | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 1.6 | | | |
| Use Case Name: | CALCULATE IPPT SCORE | | | |
| Created By: | Aaron | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | Backend | | |
| Description: | | The app must calculate the IPPT score from fitness abilities | | |
| Preconditions: | | Input current fitness abiliites and input target fitness abilities are use case triggers this use case | | |
| Postconditions: | | Included Use Case should be triggered | | |
| Priority: | | High | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. The app calculates the IPPT score based on the fitness abilities and user age via the IPPT Scoring Metrics 2. The app displays the results | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | 1.7 Calculate IPPT Grade | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
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| Notes and Issues: | | - | | |

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| Use Case ID: | 1.7 | | | |
| Use Case Name: | CALCULATE IPPT GRADE | | | |
| Created By: | Aaron | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | - | | |
| Description: | | The app must calculate the IPPT Grade from IPPT Score | | |
| Preconditions: | | CALCULATED IPPT SCORE use case triggers this use case | | |
| Postconditions: | | - | | |
| Priority: | | High | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. The app classifies the user’s IPPT score using the calculated IPPT score 2. The app displays the grade achieved | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

# 2: Authenticate User

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| Use Case ID: | 2.1 | | | |
| Use Case Name: | AUTHENTICATE USER | | | |
| Created By: | Aaron | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | Actor | | |
| Description: | | The app will authenticate the user’s username and password before the user can use the app’s functionalities | | |
| Preconditions: | | - | | |
| Postconditions: | | - | | |
| Priority: | | High | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. The user opens the app and is directed to log in page. 2. The app will prompt the user for his username and password. 3. The app will authenticate the user input and returns the result. 4. If successful, the app will redirect the user to the Plans Screen and fetch the user’s details | | |
| Alternative Flows: | | 2.1.AF.1  If user input fails the authentication, the app will display a general error message stating the error and prompt the user to try again. | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

# 3: Create Personalised Training Plan

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| Use Case ID: | 3.1 | | | |
| Use Case Name: | CREATE PERSONALISED TRAINING PLAN | | | |
| Created By: | SUMMIT | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | User | | |
| Description: | | The app presents user with a personalized workout plan consisting of daily training exercises, extra related exercises and nearby training venues. | | |
| Preconditions: | | The user has authenticated himself. | | |
| Postconditions: | | Included Use Cases should be triggered. | | |
| Priority: | | High | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. The user navigates to the Plan Page of the app 2. The app displays the number of days till the user’s IPPT Test via use case 3.2 3. The app recommends the nearest IPPT testing venue for the user via use case 3.7 4. When the user navigates to the daily training section of the page, the app recommends the number of repetitions of Push-ups and Sit-ups to perform within a minute and the duration for a 2.4km run via use case 3.3. 5. When the user navigates to the additional related exercise section of the page, the app recommends a workout of exercises by use case 3.4 as well as a suitable nearby training venue by use case 3.5 | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | 3.2 IPPT Countdown  3.3 Recommend Daily Training  3.4 Recommend Related Exercises  3.5 Recommend Nearby Training Venue  3.6 Complete Exercise  3.7 Recommend Nearest IPPT Venue | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 3.2 | | | |
| Use Case Name: | IPPT Countdown | | | |
| Created By: | SUMMIT | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | - | | |
| Description: | | The app displays the number of days to the user’s IPPT test date. | | |
| Preconditions: | | Create Personalised Training Plan use case triggers this use case | | |
| Postconditions: | | - | | |
| Priority: | | High | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. The user navigates to the daily training section of the Training page. 2. The app determines the number of days left to the user’s IPPT test date. 3. The app displays this information. | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 3.2 | | | |
| Use Case Name: | RECOMMEND DAILY TRAINING | | | |
| Created By: | SUMMIT | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | - | | |
| Description: | | The app generates a recommendation of the number of pushups and sit-ups to complete within a minute and the duration for a 2.4km run for the user, based on his current fitness abilities and target fitness abilities. | | |
| Preconditions: | | Create Personalised Training Plan use case triggers this use case | | |
| Postconditions: | | Included Use Cases should be triggered. | | |
| Priority: | | High | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. The user navigates to the daily training section of the Training page 2. The app generates the number of pushups and sit-ups to complete within a minute and the duration for a 2.4km run the user should do for that day. 3. The app displays this information. 4. The user can mark the exercises as complete via use case 3.6. | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 3.4 | | | |
| Use Case Name: | RECOMMEND RELATED EXERCISES | | | |
| Created By: | SUMMIT | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | - | | |
| Description: | | The app generates a recommendation of a workout the user can perform to improve his fitness abilities | | |
| Preconditions: | | Create Personalised Training Plan use case triggers this use case and the user has completed his Daily Training Plans. | | |
| Postconditions: | | Included Use Cases should be triggered. | | |
| Priority: | | High | | |
| Frequency of Use: | | When required | | |
| Flow of Events: | | 1. The user completes the daily training on the Training page 2. The app generates a workout plan the user can perform, consisting of the different exercises to do and repetitions to complete. 3. The app also recommends a suitable training venue for that workout plan via use case 3.4. 4. The app displays the information for the user. 5. The user can mark the exercises as complete via use case 3.6. | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | 3.5 Recommend Nearby Training Venue | | |
| Special Requirements: | | - | | |
| Assumptions: | | 1. The user can perform the recommended exercises. | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 3.5 | | | |
| Use Case Name: | RECOMMEND NEARBY TRAINING VENUES | | | |
| Created By: | SUMMIT | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | Backend | | |
| Description: | | The app recommends the nearest suitable training venue that contains the required equipment for the user to perform the additional related exercises. | | |
| Preconditions: | | Recommend Related Exercises use case triggers this use case. | | |
| Postconditions: | | - | | |
| Priority: | | High | | |
| Frequency of Use: | | When required | | |
| Flow of Events: | | 1. The app recommends the nearest training venue with the required equipment, alongside the workout plan for the user to perform the recommended exercises at. | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 3.6 | | | |
| Use Case Name: | COMPLETE EXERCISE | | | |
| Created By: | SUMMIT | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | - | | |
| Description: | | The app allows users to mark the completion of their exercise. | | |
| Preconditions: | | Recommend Related Exercises and Recommend Daily Training use cases trigger this use case. | | |
| Postconditions: | | - | | |
| Priority: | | High | | |
| Frequency of Use: | | When required | | |
| Flow of Events: | | 1. The user clicks on the status of any exercise. 2. The app registers the completion of that exercise and changes the status to complete. | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | The user has fully completed the indicated exercise. | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 3.7 | | | |
| Use Case Name: | RECOMMEND NEAREST IPPT VENUE | | | |
| Created By: | Aaron | | Last Updated By: | Yu Fei |
| Date Created: | 05/09/22 | | Date Last Updated: | 30/10/22 |
| Actor: | | Backend | | |
| Description: | | The app will recommend the nearest IPPT testing venue to the user’s residential address | | |
| Preconditions: | | REGISTER USER use case triggers this use case | | |
| Postconditions: | | - | | |
| Priority: | | High | | |
| Frequency of Use: | | One-Time | | |
| Flow of Events: | | 1. The app will use Euclidean distance to calculate the nearest IPPT venue based on the user’s residential address 2. The app will return the calculated recommendations to the calling use case | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

# 4: Track Fitness Progress

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| Use Case ID: | 4.1 | | | |
| Use Case Name: | TRACK Fitness Progress | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | User | | |
| Description: | | The app must have the option for the user to log any of the 3 exercises of Push-ups, Sit-ups and 2.4km run for progress tracking. | | |
| Preconditions: | | - | | |
| Postconditions: | | Included Use Cases should be triggered. | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. The user navigates to the training page of the app 2. The app provides options for Push-ups, Sit-ups and 2.4km run 3. When push-ups is selected, the app will track the number of proper push-ups the user completes within 1 minute, while providing live-feedback during that 1 minute via use cases 4.2,4.6 and 4.7. 4. When sit-ups is selected, the app will track the number of proper sit-ups the user completes within 1 minute, while providing live-feedback during that 1 minute via use cases 4.3,4.6 and 4.7. 5. When 2.4km run is selected, the app will obtain the user’s latest run data from Strava by use case 4.4 and calculate the estimated duration to complete a 2.4km run via use case 4.5 | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | 4.2 Analyse push-ups  4.3Analyse sit-ups  4.4 Obtain latest run details | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 4.2 | | | |
| Use Case Name: | ANALYSE PUSH-UPS | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | User | | |
| Description: | | The app will analyse the user’s push-up form within 1-minute attempts | | |
| Preconditions: | | User must allow the app to access the camera  Recommend Related Exercises use case triggers this use case. | | |
| Postconditions: | | Included Use Cases should be triggered. | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | * + - 1. The user selects the Push-ups option.       2. The app requests permission from the user to access the camera       3. The user places the camera at a position such that it can capture the user’s entire body       4. The user selects start which starts the 1-minute timer.       5. The user begins doing his Push-Up when instructed by the app and before the timer ends | | |
| Alternative Flows: | | - | | |
| Exceptions: | | 4.2.EX.1  If the user does not allow the app to use the camera, prompt the user that the functionality will not work. | | |
| Includes: | | Count Repetitions  Correct form | | |
| Special Requirements: | | - | | |
| Assumptions: | | User can perform correct-form push-ups | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 4.3 | | | |
| Use Case Name: | TRACK SIT-UPS | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | User | | |
| Description: | | The app will analyse the user’s sit-up form within 1-minute attempts. | | |
| Preconditions: | | User must allow the app to access the camera  Recommend Related Exercises use case triggers this use case. | | |
| Postconditions: | | Included Use Cases should be triggered. | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | * + - 1. The user selects the Sit-ups option.       2. The app requests permission from the user to access the camera       3. The user places the camera at a position such that it can capture the user’s entire body.       4. The user selects start which starts the 1-minute timer.  1. The user begins doing his Sit- Up when instructed by the app and before the timer ends | | |
| Alternative Flows: | | - | | |
| Exceptions: | | 4.3.EX.1  If the user does not allow the app to use the camera, prompt the user that the functionality will not work. | | |
| Includes: | | 4.6 Count Repetitions  4.7 Correct form | | |
| Special Requirements: | | - | | |
| Assumptions: | | User can perform correct-form push-ups  The user’s mobile device can support the processing model | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 4.4 | | | |
| Use Case Name: | Obtain latest run details | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | Strava | | |
| Description: | | The app will retrieve data from Strava, a third party fitness app for the user’s latest running data. | | |
| Preconditions: | | User must allow the app to access his Strava account details  Recommend Related Exercises use case triggers this use case. | | |
| Postconditions: | | Included Use Cases should be triggered. | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. The user selects the 2.4km Run option. 2. The user will be redirected to authenticate on Strava. 3. The app will pull information from Strava regarding the user’s latest run which includes the distance covered and time taken for the run. | | |
| Alternative Flows: | | 4.4.EX.1  If the user has not recorded any runs within the last 7 days on Strava, the app will display a message stating the issue and advice the user to record a run on Strava before retrieving data | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | The user has a Strava account. | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 4.5 | | | |
| Use Case Name: | Calculate duration for 2.4km run | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | - | | |
| Description: | | The app will process the data obtained from Strava to estimate the time taken for the user to complete a 2.4km run | | |
| Preconditions: | | Obtain Latest Run Details use case triggers this use case. | | |
| Postconditions: | | - | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. The app will calculate the estimated time taken for the user to complete a 2.4km based on information retrieved from Strava 2. The app will display and record the calculated time taken for a 2.4km run for the user. | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 4.6 | | | |
| Use Case Name: | COUNT REPTITIONs | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | - | | |
| Description: | | The app will monitor and report the number of push-ups or sit-ups done by the user within 1-minute attempts. | | |
| Preconditions: | | Analyse Push-ups and Analyse Sit-ups use case triggers this use case. | | |
| Postconditions: | | - | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. While the timer is running, the app will record the occurrence of the exercise being completed in the correct form. 2. The app will return the number of counts of exercise completed by the user at the end of the attempt | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 4.7 | | | |
| Use Case Name: | CORRECT FORM | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | - | | |
| Description: | | The app will provide feedback to correct the form of the user when performing push-ups or sit-ups. | | |
| Preconditions: | | Analyse Push-ups and Analyse Sit-ups use cases trigger this use case. | | |
| Postconditions: | | - | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | Daily | | |
| Flow of Events: | | 1. While the timer is running, the app will determine aspects of the form the user lacks in when performing the exercise. 2. The feedback to correct the user’s form will be displayed for the user. | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

# 5: Discover nearby users

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| Use Case ID: | 5.1 | | | |
| Use Case Name: | DISCOVER NEARY UsERS | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | User | | |
| Description: | | The app will allow the user to discover other nearby and message one another to arrange meet-ups to exercise together | | |
| Preconditions: | | - | | |
| Postconditions: | | Included Use Cases should be triggered. | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | Once | | |
| Flow of Events: | | 1. The user navigates to the social page of the app 2. The app will display a list of users generated by use case 5.2 for the user 3. The user has the option to message with any user on the list via use case 5.3 to arrange for an exercise meet-up | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | 5.2 Recommend Suitable Users  5.3 Message Other Users | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 5.2 | | | |
| Use Case Name: | RECOMMEND SUITABLE USERS | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | - | | |
| Description: | | The app will identify other users whose residential addresses are near that of the user’s. | | |
| Preconditions: | | Discover Nearby Users use case triggers this use case. | | |
| Postconditions: | | - | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | ONCE | | |
| Flow of Events: | | 1. The app will recommend no more than 10 users who have residential addresses within a 300m range from that of the user. 2. The app displays the list of identified users. | | |
| Alternative Flows: | | 5.2.AF.1  If there are no other users with residential addresses within 300m of the users, the app will expand the search radius to include the nearest 3 users. | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |

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| Use Case ID: | 5.3 | | | |
| Use Case Name: | MESSAGE OTHER USERS | | | |
| Created By: | Marc | | Last Updated By: | Marc |
| Date Created: | 24/08/22 | | Date Last Updated: | 05/09/22 |
| Actor: | | Other users | | |
| Description: | | The user will be able to message other users to connect with them | | |
| Preconditions: | | Discover Nearby Users use case triggers this use case. | | |
| Postconditions: | | - | | |
| Priority: | | HIGH | | |
| Frequency of Use: | | When required | | |
| Flow of Events: | | 1. The user identifies other users he is interested in arranging a meet-up 2. The user can send a message to other suitable users using the in-app message function to arrange for the meet-up. | | |
| Alternative Flows: | | - | | |
| Exceptions: | | - | | |
| Includes: | | - | | |
| Special Requirements: | | - | | |
| Assumptions: | | - | | |
| Notes and Issues: | | - | | |