*Biometrix*

***Use Case: "Enter Sleep"***

Version <1.0>

Revision History

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| **Date** | **Version** | **Description** | **Author** |
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Use Case: "Enter Sleep"

# 

# Overview

## Brief Description

This use case is for the user entering sleep time/quality information.

## Requirements Trace

This use case maps to the following requirements: 3.1, 3.1.1, 3.1.2, 3.1.4, 3.2, 3.4, 3.5.

## Involved Actors

User, System, Fitbit, and Timer.

## Preconditions

* The user must be logged into the system if log-in is configured to be required

## Post conditions

* N/A

## Invariants

* N/A

# Flow of Events

## Basic Flow

This use case starts when the user wants to enter sleep information.

1. User is brought to new sleep entry screen (either by user, fitbit, or timer).
2. System brings up options based on entry type.
3. User enters information and chooses to submit it.
4. The system stores the information (see extension point).
5. The system then asks the user if they would like to enter another sleep entry (if user entered module manually).
6. User chooses yes or no.
7. The system takes the user back to the main menu of the sleep module, or clears the sleep input depending on choice

## Alternate Course – None

# Extension Points

Use case – Store Information

# Scenarios

## Happy Day - “Manual Entry”

Assumptions:

User Sarah wants to manually enter a sleep time entry.

Steps:

1. Sarah opens the sleep module
2. The system opens the sleep module main menu.
3. Sarah chooses new sleep entry.
4. The system provides date, time, and possible quality options for sleep.
5. Sarah chooses that she fell asleep around 9pm the night before and woke up at 5am.
6. The system stores that information (see extension point Store Information).
7. The system asks Sarah if she would like to enter another sleep time entry.
8. Sarah chooses yes.
9. The system refreshes the new sleep entry screen for more input.
10. Sarah chooses that she fell asleep 2 days ago at 10pm and woke up at 6:30am.
11. The system stores the entered information (see extension point Store Information)
12. The system asks Sarah if she would like to enter another sleep time entry.
13. Sarah chooses no.
14. The system takes Sarah back to the main menu.

## Rainy Day – “Invalid Entry”

Assumptions:

User Felipe does not want to actually enter a sleep time.

Steps:

1. Felipe opens the sleep module
2. The system opens the sleep module main menu.
3. Felipe accidentally chooses new entry.
4. The system provides options for John to enter how long he slept.
5. Felipe tries to confirm without choosing a start or end time.
6. The system informs Felipe that a sleep entry cannot be made without selecting a start or end time.
7. Felipe presses cancel.
8. The system goes back to the sleep module main menu.

## Happy Day - “Timer Triggered”

Assumptions:

User Troy sets a timer at 11:00pm

Steps:

1. Troy wakes up and turns off the timer at 6:00am.
2. The timer sends the total time slept (7 hours) to the system.
3. The system creates a sleep entry with the current date as well as the time slept.
4. The system stores the sleep time (see extension point store information)
5. The system deactivates the timer.

## Happy Day - “Fitbit Triggered”

Assumptions:

User Jose has Fitbit Integration setup for sleep.

Steps:

1. Jose falls asleep at 10:53pm with the Fitbit on.
2. Jose wakes up at 7:00am.
3. Fitbit registers that Jose woke up
4. Fitbit sends sleep information to the system
5. The system reads the information sent by the Fitbit and sorts the information
6. The system stores the sleep information (see extension point store information)