



## Participation Reference Guide For Cabin Crew

SIA-NUS Digital Aviation Corp Lab  
Employee Wellness Study  
NUS-IRB-2020-255



# About the Study

## Introduction

The goal of this study is to develop for SIA a novel fatigue modelling and prediction model with consideration of individual heterogeneity and complex interactions that exist among fatigue factors to provide more accurate fatigue predictions and to enhance pilot and cabin crew safety and well-being while upholding levels of performance.

# About the Study

## Reimbursement

Reimbursement includes redemption of (a) Fitbit Sense 2 (worth S\$428) and (b) KrisPay Miles (Worth up to S\$100 worth of KrisPay Miles).

(a) To keep your Fitbit Sense 2:

- Complete **at least 70% of the minimum questionnaire-based tasks**  
(per rostered flight)
- Wear tracker for **at least 70% of the time**

(b) To earn the KrisPay Miles:

- Complete **additional Fatigue Questionnaire and Psychomotor Vigilance Task (PVT)** during rostered flights

# Minimum Tasks Requirements

Tasks to Complete	Short Haul Flights (Duration less than 3 hours)
(i) Pre-Flight (Within 4 hours before departure time)	
Fatigue Questionnaire Mobile App x 01	✓
PVT Task Mobile App x 01	✓
(ii) Before Service (Anytime when feasible)	
Fatigue Questionnaire Watch App x 01	
PVT Task Watch App x 01	
(iii) After Service (Anytime when feasible)	
Fatigue Questionnaire Watch App x 01	
PVT Task Watch App x 01	
(iv) Post-Flight (Within 3 hours after landing)	
Fatigue Questionnaire Mobile App x 01	✓
PVT Task Mobile App x 01	✓
NASA Task Load Index Mobile App x 01	✓
(v) Once a Week (Between Monday - Sunday)	
Positive Affect & Wellbeing Questionnaire Mobile App x 01	

\*Turnaround flights are considered as two separate flights.

Watch App: Submit Task via the Wellness Buddy Watch App

# Minimum Tasks Requirements

Tasks to Complete	Long Haul Flights (Duration 3 hours and longer)
(i) Pre-Flight (Within 4 hours before departure time)	
Fatigue Questionnaire Mobile App x 01	✓
PVT Task Mobile App x 01	✓
(ii) Before Service (Anytime when feasible)	
Fatigue Questionnaire Watch App x 01	✓
PVT Task Watch App x 01	✓
(iii) After Service (Anytime when feasible)	
Fatigue Questionnaire Watch App x 01	✓
PVT Task Watch App x 01	✓
(iv) Post-Flight (Within 3 hours after landing)	
Fatigue Questionnaire Mobile App x 01	✓
PVT Task Mobile App x 01	✓
NASA Task Load Index Mobile App x 01	✓
(v) Once a Week (Between Monday - Sunday)	
Positive Affect & Wellbeing Questionnaire Mobile App x 01	

\*Turnaround flights are considered as two separate flights.

Watch App: Submit Task via the Wellness Buddy Watch App

# Frequently Asked Questions

## What is the duration of this study?

6 months

## Can I exceed the minimum tasks during flight?

Yes. This includes the Positive Affect & Wellbeing Questionnaire and additional questionnaire attempts (up to a cap per task and flight); you will receive additional KrisPay Miles.

## Frequency of wearing tracker

24/7, including sleep time

## How long is each Psychomotor Vigilance Task (PVT) test?

3 minutes per attempt (Both Mobile App & Watch App)<sup>1</sup>

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<sup>1</sup> 3 minutes is the minimum scientifically proven duration for the accurate capture of attention span

# Frequently Asked Questions

## How much KrisPay Miles do I earn per task?

Fatigue Questionnaire	2 KrisPay Miles
Psychomotor Vigilance Task (PVT)	10 KrisPay Miles
NASA Task Load Index	4 KrisPay Miles
Positive Affect & Wellbeing Questionnaire	10 KrisPay Miles
Wearing Tracker Daily	10 KrisPay Miles
Wearing Tracker to Sleep Daily	10 KrisPay Miles

## Where can I check my task submission records & accumulated rewards?

Wellness Buddy mobile app → “Rewards”

# Frequently Asked Questions

How often should I sync my Fitbit (Sense 2) to the Fitbit app on my device?

Once a day at minimum, as often as possible

Can I attempt the tasks while my device is offline during flight?

Yes. Your device will store local records of completed tasks.

When you reconnect back online:

- Phone: Stored data will be automatically pushed to the Wellness Buddy mobile app
- Fitbit (Sense 2): Manually sync your data on the Wellness Buddy watch app & update the data on your Fitbit mobile app

# Frequently Asked Questions

## How do I sync my Fitbit (Sense 2) to the Fitbit app on my device?

- 1) At the home page of the Fitbit mobile app, tap on the 'Devices' icon on the top-left corner (Fig 1.1).
- 2) Tap on your tracker (i.e. Sense 2) (Fig 1.2).

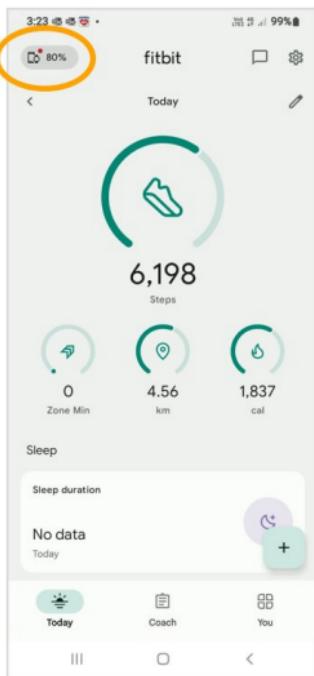


Fig 1.1

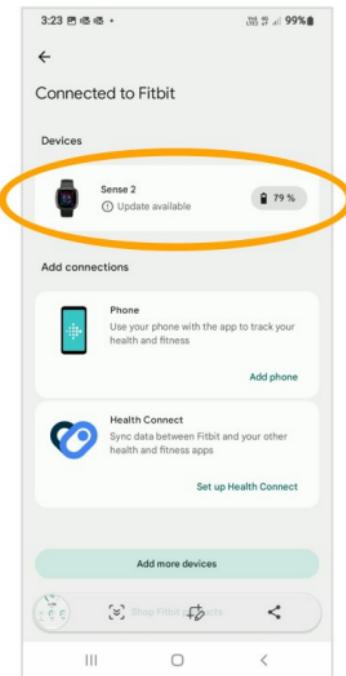


Fig 1.2

# Frequently Asked Questions

## How do I sync my Fitbit (Sense 2) to the Fitbit app on my device? (Con't)

- 3) Tap on the ‘**Gallery**’ button (Fig 1.3).
- 4) Scroll through the list of installed apps in your tracker and find ‘**wellnessbuddy**’ (Fig 1.4). Tap on it.

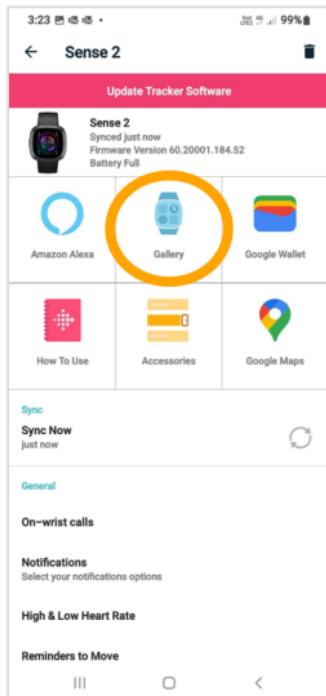


Fig 1.3

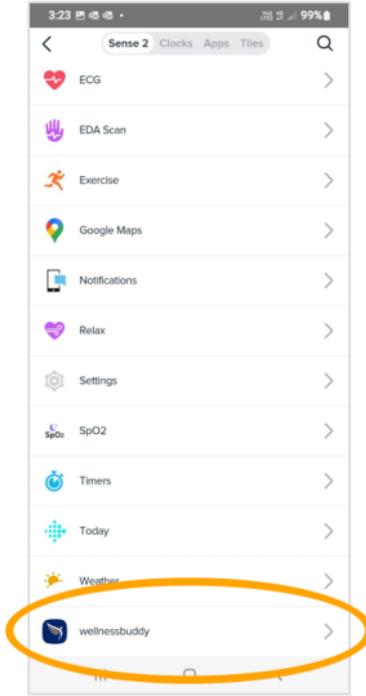


Fig 1.4

# Frequently Asked Questions

## | How do I sync my Fitbit (Sense 2) to the Fitbit app on my device? (Con't)

5) Tap 'Settings' (Fig 1.5) & check your Fitbit ID is displayed in 'Basic Information' (Fig 1.6). Key in your ID if otherwise.

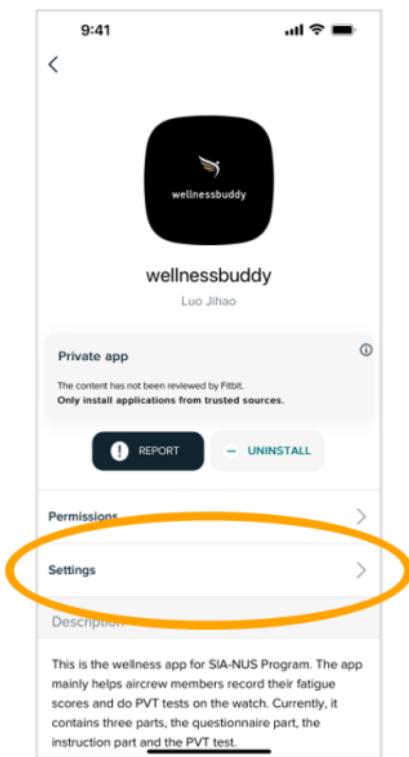


Fig 1.5

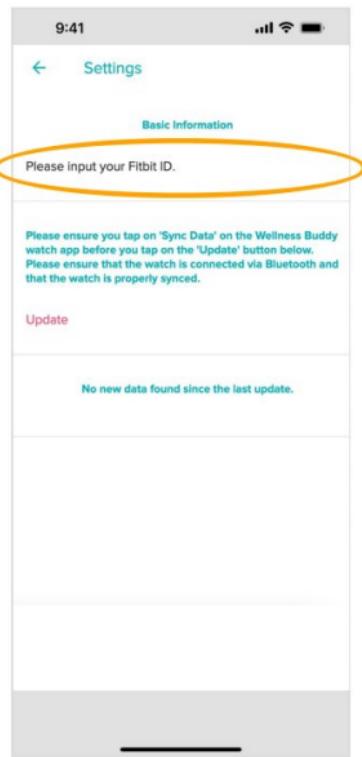


Fig 1.6

# Frequently Asked Questions

6) Launch the Wellness Buddy watch app on your Fitbit Sense 2 & tap the ‘Sync Data’ button (Fig 1.7).



Fig 1.7

7) Return to the Fitbit mobile app & tap the ‘Update’ button in ‘Settings’ (Fig 1.8). The Fitbit mobile app will complete updating of your task data.

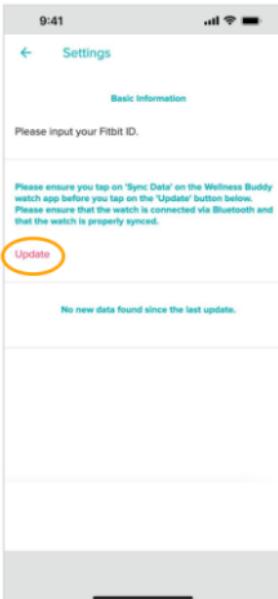


Fig 1.8

# Personal Notes

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Thank You for  
Your Participation!



National University  
of Singapore

