

# Input user information

Note:

- First page asking for user's personal information

Thank you for participating the experiment. The data you provided will be kept confidential and only for research use.

Please enter your

1. Gender: Male/Female
2. Height: ft

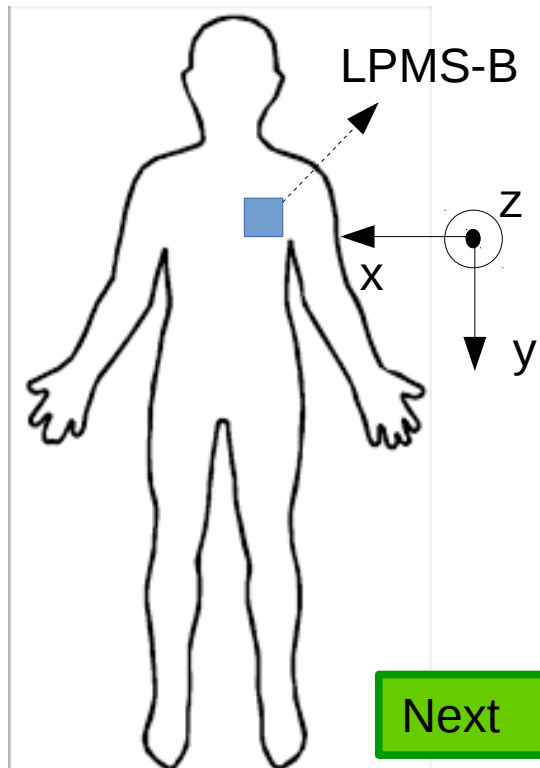
Next

# Setup sensor

Note:

- A page to teach user how to attach sensor
- Another page let user connect the sensor with phone when pressing button

Please attach the LPMS-B sensor at your left chest with the labeled orientation.



Next

Please press the gray button on the sensor to power it on.

Make sure the green light LED is blinking.

Press the “Connect” button to connect the sensor to phone.

**Connect**

Next

# Start Activity

Note:

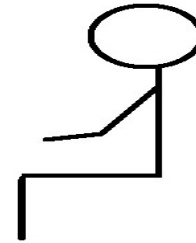
- A list of desired activity will be listed first
- A general instruction page will be showed teaching users how to interact with app

Below is the list of the activity we'd like you to perform. Press "Next" for general instruction.

- Sitting (60s)
- Relative motion when sitting
- Standing(60s)
- Relative motion when standing
- Lying(60s)
- Relative motion when Lying
- Walking(120s)
- Running(120s)
- Climbing stairs (1F)

Next

Detailed instructions for specific activity which may be accompanied with image.



Press "Start" to start recording

Start

Count down clock states remaining time

30 s remains

Press "Redo" to start over recording.

Redo

Next

# Start Activity

Note:

- List buttons of the desired activity.
- Detailed instruction for certain activity will be showed when pressing the activity button.
- The recording shall end itself and go back to the list button menu.
- Example: Sitting

Press button for detailed instruction and to start.

Sitting (60s)

Relative motion in Sitting

Standing (60s)

Relative motion in Standing

Lying (60s)

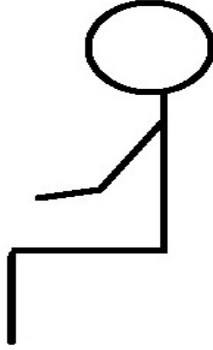
Relative motion in Lying

Walking (120s)

Running (120s)

Climbing Stairs (1F)

Please sit straight for 60 seconds.



Start

30 s remains

Redo

# Relative motion

Note:

- List buttons of the desired relative motion in sitting.
- A Detailed instruction for certain relative motion will be showed when pressing the button. Example: Sitting and lean backward (continue for the next 2 pages)

Relative motion in Sitting  
Press button for detailed  
instruction and to start.

Lean backward

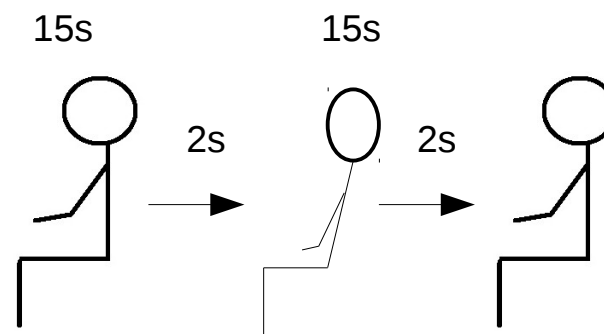
Lean Forward

Rotate trunk to right

Rotate trunk to left

Stand up

Please sit straight for 15s then  
lean back within 2s. Stayed  
leaning back for 15s then sit  
back straight within 2s.



Press Next when ready.

Next

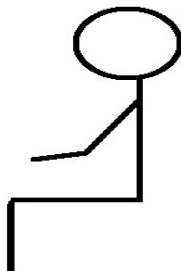
# Relative motion

Note:

- A list on top left showing the current and all the steps.
- Once started, the steps go on automatically. The clock count down in every step. Instruction and image updated every step teaching the user what to do.

Please sit straight for 15s.  
Be ready to lean back after 15s

- Sit straight
- Lean back
- Sit straight



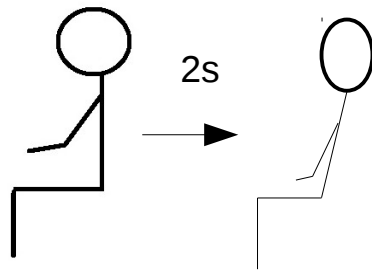
Start

15 s remains

Redo

Slowly leaning back within 2s

- Sit straight
- Lean back
- Sit straight



Start

2 s remains

Redo

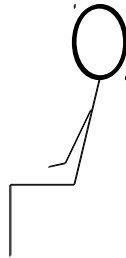
# Relative motion

Note:

- The recording shall end itself when time up and go back to the list button menu for relative motion in sitting

Stay leaning back for 15s.

- Sit straight
- Lean back
- Sit straight



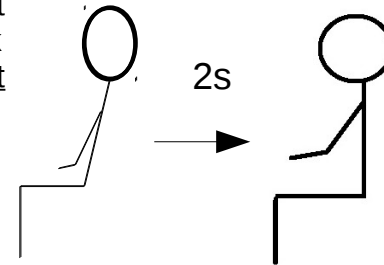
Start

15 s remains

Redo

Slowly sit straight within 2s

- Sit straight
- Lean back
- Sit straight



Start

2 s remains

Redo

Note:

- List button menu for relative motion in Standing and Lying

# Relative motion

Relative motion in Standing

Press button for detailed instruction and to start.

Rotate trunk to right

Rotate trunk to left

Move up and down left arm

Move up and down right arm

Relative motion in Lying

Press button for detailed instruction and to start.

Sit up

Turn to left

Turn to right