Use Cases: Team

**Device Operation:**

**Use Case 1: Completing a Session:**

Actors: User, Sensor, and Device

Pre-condition: The device is in the user’s hand and turned on.

Post-condition: The user completed a session.

Main Success Scenario:

1. Use the arrow buttons to highlight “New Session” in the menu.
2. Presses the select button to start a new session.
3. The session starts: graph and numbers update every 5 seconds. (Loop)
   1. The user will match their breath with the breath pacer.
   2. A coloured light will turn on according to the users Coherence level.
4. User presses the select button to end the session.
5. Once the session is ended, a summary of the session is shown and it saves and logs the session.

Extensions:

2a. The sensor isn’t attached to anything. The device tells the user that it isn’t receiving a signal.

3a. If a session is running and the battery goes below 5%, the session ends.

3b. If the sensor is disconnected during the session the session ends.

**Use Case 2: Change Challenge Level:**

Actors: User and Device

Pre-condition: The Device is turned on and the User is on the Main Menu.

Post-condition: The user has changed the challenge level.

Main Success Scenario:

1. The user uses the arrow button to highlight settings in the Main Menu.
2. The user presses select.
3. The user is brought to the setting menu.
4. The user highlights the Challenge Level in the settings menu using the arrow buttons.
5. The user presses the select button.
6. The user uses the arrow buttons to highlight their desired challenge level.
7. The user presses the select button.

Extensions:

6a. the users desired challenge level was already select. User presses the back button.

**Use Case 3: Change Breath Pacer:**

Actors: User and Device.

Pre-condition: The user is on the Main Menu and the device is turned on.

Post-condition: The user has changed the Breath Pacer setting.

Main Success Scenario:

1. The user uses the arrow buttons to highlight settings in the main menu.
2. The user presses the select button.
3. The user uses the arrow buttons to highlight the Breath pacer settings.
4. The user presses the select button.
5. The user changed the breath pacer to the desired number of seconds between one and thirty.
6. The user confirms the change.

Extensions:

5a. The breath pacer is already set to the desired number of second. The use presses the back button.

**Use Case 4: View a Logged Session:**

Actors: User and Device.

Pre-condition: The device is turned on and the User is on the Main Menu.

Post-condition: The user is viewing a logged session.

Main Success Scenario:

1. The user uses the arrow buttons to highlight Log/History.
2. The user presses the select button.
3. The user choses their desire session by date and uses the arrow buttons to highlight it.
4. The user presses the select button to view it.

Extensions:

3a. The session that the user is looking for doesn’t exist. It was never saved, or it was already deleted.

**Use Case 5: Delete a Logged Session:**

Actors: User and Device.

Pre-condition: The device is turned on and the user is already in the Log/History menu (Use Case 4).

Post-condition: The log session is deleted.

Main Success Scenario:

1. The user uses the arrow buttons to select the desired session by date.
2. The user presses the select button.
3. The user uses the arrow buttons to highlight the delete.
4. The user presses the select button.
5. The user is brought back to the Log/History menu.

Extensions:

1a. The session doesn’t exist. Then it was never originally saved, or it was already deleted.

**Use Case 6: Reset Device:**

Actors: User and Device.

Pre-condition: The device is turned on and the User is on the Main Menu.

Post-condition: The device has been reset and the User is back on the Main Menu.

Main Success Scenario:

1. The user uses the arrow buttons to highlight settings.
2. The user presses the select button.
3. The user highlights reset device using the arrow buttons.
4. The user presses the select button.
5. The user is asked if the want to reset the device.
6. The user uses the arrow buttons to highlight yes.
7. The user presses the select button.

Extensions:

6a. If the user doesn’t want to reset the device. The user uses the arrow buttons to highlight no. The user will then press the select button.

**The Function of the device:**

**Use Case 7: Battery Level:**

Actors: User and Device.

Pre-condition: The device is on.

Post-condition: The battery level has changed.

Main Success Scenario:

1. The user preforms a session (Use Case 1).
2. The battery percentage drops a percentage over a period during the session.
3. The user ends the session.
4. The device consumes les battery when not preforming a session.

Extensions:

1a. If the battery is already at or under five percent. The user is told that the battery is to low to start a session. The user is returned to the Main Menu.

2a. If the battery reaches five percent, the session will end without the user input.

**Use Case 8: Set Battery Level:**

Actors: User and Device.

Pre-condition: The device is turned off.

Post-condition: The device is turned on with the set battery Level.

Main Success Scenario:

1. The user entered a number into the battery input.
2. The user turns on the device.
3. The battery is set to the number that the user entered.

Extensions:

1a. The lowest percentage the device needs to turn on is five percent.

**Use Case 9: Connect the Sensor to the Device:**

Actors: User, Device, Sensor.

Pre-condition: The Sensor is not connected.

Post-condition: the Sensor is connected and can complete a session (Use Case 1).

Main Success Scenario:

1. The user click is on the Sensor check box to connect the Sensor.
2. The icon that states that the Sensor is connected appears on the screen.
3. The user can start (Use Case 1).

Extensions:

3a. If the Sensor is not connected the session won’t start.

3b. If the Sensor is disconnected during the session the session ends.