

UC-01 Basic Use Case	
Description	Abstract use case involves a user utilizing the HeartWave device to see their coherence levels through real-time biofeedback
Actors	User, HeartWave device
Pre-condition	The HeartWave device is turned off and properly functioning. The user has the device in their possession and is ready to begin coherence
Post-condition	The user can view their coherence levels on the summary screen, and the device records the coherence data for later analysis.
Main sequence	<ol style="list-style-type: none"> 1. The user turns on the HeartWave device 2. The user puts on the heart rate monitor with the HeartWave device 3. The user starts a new session 4. The HeartWave device measures the user's coherence levels in real-time using the heart rate monitor and displays the HRV graph on the device's display 5. The HeartWave device displays the coherence levels, length of session, and achievement on the device's display 6. Once the user is done with their session, press the 'OK' button to exit 7. The HeartWave device records the coherence data for later analysis and review
Extensions	<p>3a. If the battery runs out, go to UC-05</p> <p>3b. If HR contact is lost, go to UC-04</p> <p>3c. At any step, if the user presses the power button, the session stops without saving session</p> <p>3d. If before 5 seconds the user decides to stop the session, the session will not be saved</p> <p>6a. Users can also press the back button to exit and save their session</p> <p>6b. Users can also press the menu button to exit and save their session</p>

UC-02 Adjusting Challenge Level Use Case	
Description	This use case describes the scenario where a user wants to change the challenge level of the HeartWave device. The user interacts with the device's interface to select a new challenge level.
Actors	User, HeartWave device
Pre-condition	The HeartWave device is turned on and properly functioning. The user has the device in their possession and is ready to begin coherence
Post-condition	The user can view their coherence levels on the HeartWave device display

	based on the new coherence threshold, and the device records the coherence data for later analysis.
Main sequence	<ol style="list-style-type: none"> 1. The user goes to the settings tab 2. The user selects the “Level” option 3. The HeartWave device displays the available challenge levels (1-4) 4. The user selects a challenge level 5. The HeartWave device informs the user that the challenge level has been changed 6. The HeartWave device updates the thresholds for the levels of Coherence that determine if the user is in low, medium, or high Coherence
Extensions	<ol style="list-style-type: none"> 1a. At any step, if the user presses the power button, the device turns off 4a. User can choose to press the back button to not select any level and remain with the currently selected level (default “Beginner”) 4b. User can choose to press the menu button to not select any level and remain with the currently selected level (default “Beginner”)

UC-03 Adjusting Breath Pacer Use Case	
Description	This use case describes the scenario where a user wants to customize the breath pacer settings on the HeartWave device. The user interacts with the device’s interface to select new breath pacer settings.
Actors	User, HeartWave device
Pre-condition	The HeartWave device is turned on and properly functioning. The user has the device in their possession and is ready to begin coherence
Post-condition	The user can view their coherence levels on the HeartWave device display, with the new breath pacer settings applied, and the device records the coherence data for later analysis.
Main sequence	<ol style="list-style-type: none"> 1. The user goes to the settings tab 2. The user selects the “Breath Pacer” option 3. The HeartWave device displays a screen with the possible selections for the length of a breath cycle 4. The user changes the duration of each breath cycle 5. The HeartWave device informs the user the new duration has been set 6. The HeartWave device updates the breath pacer settings to reflect the user’s selection 7. The user goes back to the main screen and selects a new session 8. The breath pacer will reflect the new change
Extensions	<ol style="list-style-type: none"> 1a. At any step, if the user presses the power button, the device turns off 4a. User can choose to press the back button to not select any level and

	remain with the currently selected length (default 10 sec) 4b. User can choose to press the menu button to not select any level and remain with the currently selected length (default 10 sec)
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UC-04 Lose HR Contact Use Case	
Description	This use case describes the scenario where contact with the user's heart rate is lost in the middle of a session
Actors	User, HeartWave device
Pre-condition	The HeartWave device is turned on and properly functioning. The user has the device in their possession and is ready to begin coherence
Post-condition	The device will not record information from the session. The device will redirect the user to the menu screen
Main sequence	<ol style="list-style-type: none"> 1. The user puts on the heart rate monitor with the HeartWave device 2. The user starts a new session 3. When the heart rate contact is disconnected, the device will go back to the menu screen 4. The device informs the user that the HR contact has been lost

UC-05 No Battery Use Case	
Description	This use case describes the scenario where the user is in the middle of a session when the device runs out of battery
Actors	User, HeartWave device
Pre-condition	The HeartWave device is turned on and properly functioning. The user has the device in their possession and is ready to begin coherence
Post-condition	The device will not record information from the session. The device will not turn on unless the user charges the battery
Main sequence	<ol style="list-style-type: none"> 1. The user starts session 2. The battery of the device reaches 0% 3. The device powers off with a black screen

UC-06 Reset Device Use Case	
Description	This use case describes the scenario where the user resets the device, wiping all data

Actors	User, HeartWave device
Pre-condition	The HeartWave device is turned on and properly functioning. The user has the device in their possession and is ready to begin coherence
Post-condition	The user will be redirected to the menu screen, and the database will have no sessions
Main sequence	<ol style="list-style-type: none"> 1. The user selects the “Reset” option from menu 2. The user confirms the reset 3. The device wipes all sessions in the database
Extensions	2a. User can choose to press the back button to not reset the device 2b. User can choose to press the menu button to not reset the device

UC-07 Delete Session Use Case	
Description	This use case describes the scenario where the user wishes to delete a specific session
Actors	User, HeartWave device
Pre-condition	The HeartWave device is turned on and properly functioning. The user has the device in their possession and is ready to begin coherence
Post-condition	The user will be redirected to the history screen, and the database will remove the selected session
Main sequence	<ol style="list-style-type: none"> 1. The user selects the “History” option from menu 2. The user selects the delete option 3. The device will display a list of past sessions 4. The user selects session 5. The user confirms the deletion by pressing the “OK” button
Extensions	2a. If the device has no previous sessions, the user will be unable to navigate into the delete screen 5a. User can choose to press the back button to not delete session 5b. User can choose to press the menu button to not delete session

UC-08 View Session Use Case	
Description	This use case describes the scenario where the user wishes to view a specific session
Actors	User, HeartWave device
Pre-condition	The HeartWave device is turned on and properly functioning. The user has

	the device in their possession and is ready to begin coherence
Post-condition	The user will be directed to that session's summary screen, and the user will be able to view the summary screen
Main sequence	<ol style="list-style-type: none"> 1. The user selects the "History" option from menu 2. The user selects view option 3. The device will display a list of past sessions 4. The user selects session 5. The user confirms the selection by pressing the "OK" button 6. The user will be directed to that session's summary screen
Extensions	<p>2a. If the device has no previous sessions, the user will be unable to navigate into view screen</p> <p>6a. Users can use the left and right arrow buttons to look between values and the HRV graph</p>