● Use Case 1 (UC1): [Turn Oasis Pro On]

●.1 Description

The user wants to use the Oasis Pro and thus must turn the Oasis Pro on.

●.2 Trigger

User purchases the Oasis Pro in order to improve their quality of life and increase relaxation.

●.3 Primary Actor

The Primary Actor is the user of the device.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

The user must have purchased the Oasis Pro and currently have it in their possession.

●.6 Main Success Scenario

1. The user presses the Power On button.
2. The Oasis Pro turns on.

●.7 Extensions

1.a: The Oasis Pro is unable to turn on.

- 1a1: In the event that the Oasis Pro is unable to turn on even after pressing the Power On button, then the user must replace the battery. If it still does not turn on, then the user must contact customer service as the device might be defective.

●.8 Post Conditions

●.8.1 Success End Condition

The user is able to turn the Oasis Pro on and navigate its various buttons and menus.

●.8.2 Failure End Condition

The user is unable to turn the Oasis Pro on.

● Use Case 2 (UC2): [Turn Oasis Pro Off]

●.1 Description

The user wants to stop using the Oasis Pro and thus must turn the Oasis Pro off.

●.2 Trigger

User has finished or has stopped using the Oasis Pro.

●.3 Primary Actor

The Primary Actor is the user of the device.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

The user must have purchased the Oasis Pro and currently have it in their possession.

The user must have pressed the power button two times. First click is to turn on the device, second click is to enable session and duration.

●.6 Main Success Scenario

1. The user presses the Power button a third time.
2. The Oasis Pro turns off.

●.7 Extensions

1.a: The Oasis Pro is unable to turn off.

- ● 1a1: In the event that the Oasis Pro is unable to turn off even after pressing the Power Off button, then the user must contact customer service in order to further troubleshoot potential issues with the device.

●.8 Post Conditions

●.8.1 Success End Condition

The user is able to turn the Oasis Pro off and it is not consuming the battery.

●.8.2 Failure End Condition

The user is unable to turn the Oasis Pro off and it is still consuming the battery.

● Use Case 3 (UC3): [Ending a Session]

●.1 Description

The user wants to end a session.

●.2 Trigger

User of the Oasis Pro would like to end a session early.

●.3 Primary Actor

The Primary Actor is the user of the device.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

The user must have purchased the Oasis Pro and currently have it in their possession.

A duration and Session Group must have been selected.

The user must have previously placed the device electrodes on the skin in order for the session to have run in the first place.

●.6 Main Success Scenario

1. Once the sessions ends, the device will activate Soft Off, a gradual reduction of the CES stimulus
2. The graph will scroll from 8 to 1 to confirm that Soft Off is in progress.
3. Soft Off simulates a gradual reduction of the CES stimulus.
4. After Soft Off the unit will power off.

●.7 Extensions

1.a: The user presses and releases the power button during a session (before it ends).
        1a1: The device will activate Soft Off, a gradual reduction of the CES stimulus.
        1a2: The graph will scroll from 8 to 1 to confirm that Soft Off is in progress.
        1a3: Soft Off simulates a gradual reduction of the CES stimulus.
        1a4: After Soft Off the unit will power off.

2. b: Graph is not scrolling from 8 to 1.

- 2b1: In the event that the graph is not scrolling from 8 to 1, then the user must contact customer service in order to further troubleshoot potential issues with the device.

●.8 Post Conditions

●.8.1 Success End Condition

The graph scrolls from 8 to 1 and enters into Soft Off mode which eventually turns the device off, only when the session ends and also if the user presses the power button during a session.

●.8.2 Failure End Condition

The graph cannot scroll from 8 to 1 and cannot enter into Soft Off mode, when the session ends and also if the user presses the power button during a session.

● Use Case 4 (UC4): [Show Battery Level]

●.1 Description

The battery level of the Oasis Pro is displayed on the graph.

●.2 Trigger

User of the Oasis Pro turns on the Oasis Pro.

●.3 Primary Actor

The Primary Actor is the user of the device.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

The Oasis Pro must have a working battery.

●.6 Main Success Scenario

1. The user presses the power button to turn on the device.
2. The device displays the battery level on the graph for 3 seconds when the device is first turned on.
3. The battery is monitored and displayed periodically while the session is running.

●.7 Extensions

2.a: The graph displays 2 bars and blinks, when the battery level is getting low.

- 2a1: It is recommended that the battery be replaced before running a session if this warning is displayed.

2.b: The graph displays 1 bar and blinks, when the battery level is critically low.

- 2b1: It is recommended that the battery be replaced immediately if this warning is displayed when the unit is turned on.

- 2b2: In the event that this warning occurs during a session, the session will end early, and the battery indicator will continue blinking for a short period of time.

- 2b3: The battery must be replaced before the unit can be used again.

●.8 Post Conditions

●.8.1 Success End Condition

The battery level is displayed on the graph when the user presses the power button and is displayed periodically while the session is running.

●.8.2 Failure End Condition

The battery level is not displayed on the graph when the user presses the power button and does not show up even while the session is running.

● Use Case 5 (UC5): [User Selects a Session]

●.1 Description

The user wants to select a session group (Theta, Alpha, SMR, Beta).

●.2 Trigger

User of the Oasis Pro turns on the Oasis Pro.

●.3 Primary Actor

The Primary Actor is the user of the device.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

The Oasis Pro must be turned on and have sufficient battery power.

The user must have chosen a user in the user dropdown.

The user must have selected connect in the apply to skin dropdown.

●.6 Main Success Scenario

1. User places the device on the ear. Include Activate Electrodes use case.

2. The user clicks the left or right duration arrow buttons to switch between durations.
3. The lit duration icon changes.
4. The user clicks the left or right session arrow buttons to highlight a session number.
5. The frequency and mode icons associated with the session light up to indicate what frequency range and CES pulse type is used.
6. The user presses the select button to start the highlighted session.
7. The session number flashes, and the session begins after a five second delay.

●.7 Extensions

4a: If no sessions are available in a group, no numbers will be lit.

●.8 Post Conditions

●.8.1 Success End Condition

The user is able to start a session. The user is able to switch between durations by using the left and right duration arrow button and highlight a session number by pressing the left and right session arrow buttons and use the select button to start the highlighted session.

●.8.2 Failure End Condition

The user is unable to start a session.

● Use Case 6 (UC6): [Starting a Connection Test]

●.1 Description

The Oasis Pro starts a connection test after the start of each session.

●.2 Trigger

The user starts a session.

●.3 Primary Actor

The Primary Actor is the user of the device.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

The Oasis Pro must be turned on and have sufficient battery power.

The user must have selected and started a session in the Oasis Pro.

●.6 Main Success Scenario

1. The Oasis Pro enters a test mode. User places the device on the ear. Include Activate Electrodes use case.
2. The Oasis Pro enters a test mode.
3. The CES Mode light (⎍) blinks.
4. The graph displays the status of the connection.
5. The Oasis Pro will run with either an Okay or Excellent connection.
6. Once the connection has been confirmed, the display goes blank or displays a Soft On animation.
7. The intensity may be adjusted as soon as the connection test ends.

●.7 Extensions

4.a: The connection displayed is Okay.

- 4a1: In the wet/dry dropdown select **wet** in order to get an excellent connection.

- 4a2: The intensity may have to be turned up higher before it can be felt or may not be felt at all.

4.b: The Ear clips are disconnected.

- 4b1: The Oasis Pro will pause the session and wait for the ear clips to be Reconnected.

- 4b2: No connection (7 and 8 blinking) will display for a couple of seconds, then the graph may scroll up and down indicating that the unit is returning the voltage to a safe testing level which may take 20 seconds.

- 4b3: In the apply to skin dropdown select **connect** in order to get a connection.

4.c: The graph is animating 1 to 8 and back to 1.

- 4c1: Wait while the Oasis Pro resets to a safe connection test level, which may take up to 20 seconds.

●.8   Post Conditions

●.8.1   Success End Condition

The Oasis Pro enters a test mode. The graph then displays the status of the connection. The display then goes blank or displays a Soft On animation.

●.8.2   Failure End Condition

The Oasis Pro does not enter a test mode. The graph does not display the status of the connection.

● Use Case 7 (UC7): [Adjusting Intensity]

●.1   Description

The User would like to increase the intensity of the stimulus.

●.2   Trigger

The user starts a session; however the intensity of the stimulus is too high or too low.

●.3   Primary Actor

The Primary Actor is the user of the device.

●.4   Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5   Preconditions

The user must have selected and started a session in the Oasis Pro.

The connection test must end for the intensity to be adjusted.

●.6   Main Success Scenario

1. The user presses the INT ▲ button to increase the intensity of the stimulus.
2. The user presses the INT ▼ button to decrease the intensity of the stimulus.
3. When adjusting the intensity, the topmost lit number will blink.

●.7   Post Conditions

●.7.1   Success End Condition

The user is able to increase or decrease the intensity of the stimulus by pressing either the INT ▲ or INT ▼ button.

●.7.2   Failure End Condition

The user is unable to increase or decrease the intensity.

● Use Case 8 (UC8): [Replacing Battery]

●.1 Description

The User would like to replace the battery of the Oasis Pro with a new battery.

●.2 Trigger

The current battery level of the Oasis Pro has been depleted; thus it needs a new battery since the Oasis Pro cannot be charged.

●.3 Primary Actor

The Primary Actor is the user of the device.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

The user must have depleted the battery power of the Oasis Pro.

●.6 Main Success Scenario

1. User presses the "New Battery" button; the battery level changes to full charge.

●.7 Post Conditions

●.7.1 Success End Condition

The user is able to replace the battery by pressing the "New Battery" button.

●.7.2 Failure End Condition

The user is unable to replace the battery.

● Use Case 9 (UC9): [Activate Electrodes]

●.1 Description

The electrodes will be attached to the User's ears to create an electrical connection, and through the stimulus cable that will be plugged into the CES output jack of the Oasis Pro, a stimulus will be created.

●.2 Trigger

The user has started a session or has started test mode to test for an electrical connection.

●.3 Primary Actor

The Primary Actor is the Oasis Pro electrodes.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

A section or connection test has been started.

●.6 Main Success Scenario

1. User selects **connect** in the apply to skin dropdown.

2. Electrode senses the user's ears and begins to output an electrical current.
3. Electrode informs the Oasis Pro to display the status of the connection in the graph whenever a session is started.
4. Electrode informs the Oasis Pro to countdown the session duration once the connection test ends.

●.7 Extensions

4.a: The electrode is no longer placed on the ear, since the user has selected **disconnect** in the apply to skin dropdown.

- 4a1: Electrode ceases to output an electrical current to the Oasis Pro.

- 4a2: The time of therapy is paused by the Oasis Pro.

- 4a3: If the electrode senses skin once again, return to step 1. Otherwise, end use case

4.b: The electrode connection strength is good but not excellent.

- 4b1: Wet the earlobes with water to increase connection strength by selecting **wet** in the wet/dry dropdown.

●.7.1 Success End Condition

The electrode is able to sense the user's ears and begins to output an electrical current to the Oasis Pro.

The electrode is no longer able to sense the user's ears and does not output an electrical current to the Oasis Pro.

● Use Case 10 (UC10): [Record a Therapy]

●.1   Description

The User would like to record a therapy and add it to a treatment history.

●.2   Trigger

The user is in the process of selecting a session, but wants to record it so that they may replay it at a later date.

●.3   Primary Actor

The Primary Actor is the user of the device.

●.4   Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5   Preconditions

The user must have selected a user in the dropdown menu.

The user must have started a valid session and must have either a good or excellent connection.

●.6   Main Success Scenario

1. The user selects an identity from the dropdown menu which includes: User 1, User 2, User 3 and User 4.

2. The user will then select a session and duration and start the session. Include User Selects a Session use case.

3. When the session ends, the treatment record for that specific user will be automatically added as a new therapy history record to the database.

●.7   Post Conditions

●.7.1   Success End Condition

The user is able to save the therapy history record to the Oasis's pro database of treatment history.

●.7.2   Failure End Condition

The user is unable to save the therapy history record to the Oasis's pro database of treatment history.

● Use Case 11 (UC11): [View a saved Therapy]

●.1 Description

A User would like to view their treatment history.

●.2 Trigger

A user has recorded their treatment and would like to view it.

●.3 Primary Actor

The Primary Actor is the user of the device.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

The user must have selected a user in the dropdown menu.

The Oasis Pro must be turned on and the user must have recorded a therapy.

The user must be in the treatment history list box.

●.6 Main Success Scenario

1. The user refreshes the Treatment History List Box by pressing the Refresh Button.
2. The Oasis Pro will then display all currently saved therapies of that specific user.

●.7 Extensions

1.a: There are no therapies saved that are associated with that user.

- ● 1a1: Nothing is Displayed

●.8 Post Conditions

●.8.1 Success End Condition

The user is able to view all of their saved therapy on the Oasis Pro.

●.8.2 Failure End Condition

The user is unable to view all of their saved therapies on the Oasis Pro.

● Use Case 12 (UC12): [Replay a saved Therapy]

●.1 Description

A User would like to replay their saved therapy.

●.2 Trigger

A user has viewed their treatment record history and would like to replay it.

●.3 Primary Actor

The Primary Actor is the user of the device.

●.4 Stakeholders

Raven Microcurrent Biofeedback Inc. (RMB): A manufacturer of a variety of microcurrent biofeedback devices. Hired our team to build Oasis Pro which they intend to add to their product line. RMB intends to use this prototype to explore different capabilities before deciding on the design of the physical product.

Vojislav Radonjic: Responsible for assessing feasibility of implementations and authorization of changes to the Oasis Pro.

●.5 Preconditions

The user must have selected a user in the dropdown menu.

The Oasis Pro must be turned on and the user must have recorded a therapy.

The user must be in the treatment history list box.

●.6 Main Success Scenario

1. The user refreshes the Treatment History List Box by pressing the Refresh Button.
2. The user uses the up and down buttons in the Treatment History list box to highlight the appropriate therapy history record of that specific user.
3. Then the user will select a therapy history record using the select button.
4. Then the user will select the select button (checkmark) and then the session icon will be selected, duration will be selected and the intensity will be highlighted.
5. The timer duration of that session will start and the intensity will be enabled meaning that the user can change the last clicked intensity from their previous session.

●.7 Extensions

1.a: There are no therapies saved that are associated with that user.

- 1a1: Nothing is Displayed

●.8 Post Conditions

●.8.1 Success End Condition

The user is able to view all of their saved therapy on the Oasis Pro.

●.8.2 Failure End Condition

The user is unable to view all of their saved therapies on the Oasis Pro.