TRACEABILITY MATRIX

| ID | REQUIREMENT | REALTED USE CASE | FUFILLED BY |
|-----|---|------------------------|--|
| 1 | The Heartwave device displays a screen which contains the menu options and the display graph. It also has the following buttons: off/on, menu, back button to return to the user to the menu, four arrow buttons(up/down/left/right) and a selector in the center of the arrow buttons, hr contact (functions as start stop button in session mode), save button. | N/A | mainwindow, session, scores, loghistory, settings, testdata |
| 2 | When power button is pressed, the device is turned on and switches to the main menu page awaiting user interactivity. | Turn Device On | mainwindow session |
| 3 | When the power button is pressed while on, it is turned off and is no longer consuming battery power. | Turn Device Off | mainwindow, session |
| 4 | Under the 'create new session' option, when the hr contact button is pressed, the timer starts and the current coherence score, achievement score, and heart rate variability graph are displayed. | Start A Session | mainwindow, session, scores, settings, testdata |
| 5 | A coherence indicator is displayed on the session screen which uses LED light that changes colours when a new level is reached based on the selected challenge level. | N/A | mainwindow, session, scores, settings, testdata |
| 6 | The session is disrupted by pressing the hr contact button is pressed again while the session is active or the menu button. This ends the session. | End A Session | mainwindow, session |
| 7 | User can alter the challenge level by accessing it under the settings section. There are 4 challenge levels (beginner, intermediate, hard, advanced) that correlate to different coherence levels which can be adjusted for the user's desirability. | Change challenge level | mainwindow, session, settings |
| 8 | The user can alter the breath pace simulation by accessing it under the settings section. There options range from 1-30 and can be adjusted for the user's desirability. | Change breath pace | mainwindow, session, settings |
| 9 | The user can view and display previous session runs by accessing the log history of all sessions run. The user can see a list of all sessions and see a single summary of it and a possible delete option. | View Log History | mainwindow, session, scores, loghistory, settings, testdata |
| 10 | If the user wants to reset the device and clear all saved settings, the data can be reset and the Heartwave device is set back to factory settings. | Clear History | mainwindow, settings |
| 11. | A summary view of the session appears at the end of the session when the save button is pressed. This halts the process and creates a summarized page view of the session's acquired metric data values. This includes | Save a session | mainwindow, session, scores, loghistory, |

| | the % of time in coherence levels, average coherence, length of the session, challenge level, achievement | | settings, testdata |
|----|---|------------------|-----------------------|
| | score and the entire HRV graph. | | |
| 12 | Battery charge indicator that displays the power | Charging battery | mainwindow, |
| | percentage of the device's battery is displayed on the | | settings |
| | device's remote section. | | |