Sleep Tight MCS-4833 Amy Janks

## **Software Requirements Specification**

## **Document**

Version: (1) Date: (01/19/2020)

Version: (2) Date: (02/09/2020)

## 3. The Overall System Requirements

- The product must start collect heart record and recording when the patient presses the black button. After the black button is pressed, the product must start collecting vitals and recordings of the patient.
- The product must stop collecting vitals and recordings when the black button is pressed.
- The product must have a start and stop button for collecting data.
- The product must include a finger heart rate senor and a microphone.
- The user must press the black button to stop recording data right when they wake up.
- The product must send data to doctor via email; if the email can't be sent, an alert must be displayed on the screen.
- The product must alert emergency responders when the patient's heart rate is below 50 bpm or higher than 100 bpm.
- The product must be enclosed in a container in case of a fall.
- The product must be place 1 foot away from the patient while they sleep.
- The product must be plugged in to an electrical outlet in the bedroom.
- The product should record any noise happening while the patient is sleeping.
- The product should send the recording gathered to the patient's doctor.
- The product should send the email through sSMTP.
- The product should be easy for a patient to set up in their house on their own.
- The product can display a message on the screen when the recording starts and stops.
- The product can display the heart rate on the screen.

## 4. Diagrams

