

HeartAware Deliverable Checklist

November 19, 2014

Module	Commitment	Goal	Stretch Goal
Signal Processing	<ul style="list-style-type: none">- Sampled digital readings displayed on screen (no processing)	<ul style="list-style-type: none">- Smoothed digital readings calculated with local maxima detection implemented for peak detection (e.g. assume peaks occur at every sample that is a maximum over a window of n samples)	<ul style="list-style-type: none">- Smooth digital readings calculated with advanced processing implemented (e.g. local maxima calculation in addition to advanced filters to smooth signal)- Detects abnormalities in heart beat, sends to display for further analysis
Display	<ul style="list-style-type: none">- Display current status of FSM- Display oxygen saturation waveform	<ul style="list-style-type: none">- Display monochrome logo and icons- Display custom font- Render colorful interface	<ul style="list-style-type: none">- Longer term data view with averaged heart rates- Animated icons / waveform pre-fade
Audio	<ul style="list-style-type: none">- Outputs a sine wave tone briefly during heartbeat peak- Outputs a sine wave tone in error state	<ul style="list-style-type: none">- Outputs sampled sounds instead of sine wave tones- Outputs periodic heart rate audio announcer feature	<ul style="list-style-type: none">- Volume control with user buttons