HRV Project Rubric, Demo and Deliverable Check List

Do I have a Readme?

Tot: 100 marks (deliverable 75 marks and individual demo 25 marks)

A. Use case model (10 marks)

- 1- Quantity of use cases: did the provided use cases cover all the required features in the specification?
- 2- Quality of UC descriptions: Did you thoroughly describe each of the use cases
 - 2a) Did you follow the prescribed UC format? (actor, precondition, etc.)
 - 2b) Did you describe the UCs in an easy to understand and clear manner?
- 3. Use case diagram
 - 3a) Did you follow the UC diagram syntax?
 - 3b) Did you capture all the textual UCs in the diagram?

B. OO Design model (20 marks)

- 1. Demo: can you explain the design well or not?
 - 1a) Can you explain how the basic use case is realized by the design?
 - 1b) Can you explain the design and patterns, if any, used in it (including those from Qt)?
- 2. UML class diagrams.
- 3. UML sequence, and, optionally, state or activity diagrams.
- 4. Have you followed the syntax of the required diagrams?
- 5. Have you related the above diagrams to UCs?

C. Implementation (40 marks)

- 1. **Demo:** explain flow of control for the basic use (successful treatment) and exceptions (loss of connection during treatment and battery critically low)
- 2. **Demo:** explain design as it is realized in the implementation
 - 2a. If using observer from Qt how is it used?
 - 2b. Are you using any other patterns? (e.g. mediator, strategy, or any other ones)

- 3. Acceptable UI. It need not be the same as the one from the specification, "Figure 1: Example User Interface", but it should provide equivalent functionality.
 - 3a. Shows all the required buttons (power on/off, start/stop session, etc.)
 - 3b. UI shows battery level going down during treatment
 - 3c. UI displays the breath pacer
 - 3d. UI shows HR contact
- 4. History of sessions is implemented.

D. Tests and traceability matrix (30 marks)

- 1. Demo: what and how you've tested
- 2. Do you have a video that shows your tests?
- 3. Do you have a traceability matrix that relates use cases to tests, design and implementation.