# *REAL TIME ANALYTICS*

# PRODUCT DESIGN SPECIFICATION

Version *1.0*

*23/12/2017*

# VERSION HISTORY

| Version | Implemented By | Revision Date | Approved By | Approval Date | Reason |
|---------|----------------|---------------|-------------|---------------|--------|
| 1.0 | *Pierre Saint-Sorny* | *7/23/2017* | Le père Noel | *12/23/2017* | Initial Design Definition draft |
| 1.1 | *Fabien Gadet* | *7/24/2017* | Pierre Saint-Sorny | *7/24/2017* | Alpha |
|  |  |  |  |  |  |

# TABLE OF CONTENTS

# 1  INTRODUCTION

## 1.1  PURPOSE OF THE PRODUCT DESIGN SPECIFICATION DOCUMENT

The Product Design Specification document documents and tracks the necessary information required to effectively define architecture and system design in order to give the development team guidance on architecture of the system to be developed. The Product Design Specification document is created during the Planning Phase of the project. Its intended audience is the project manager, project team, and development team. Some portions of this document such as the user interface (UI) may on occasion be shared with the client/user, and other stakeholder whose input/approval into the UI is needed.

# 2  GENERAL OVERVIEW AND DESIGN GUIDELINES/APPROACH

This section describes the principles and strategies to be used as guidelines when designing and implementing the system.
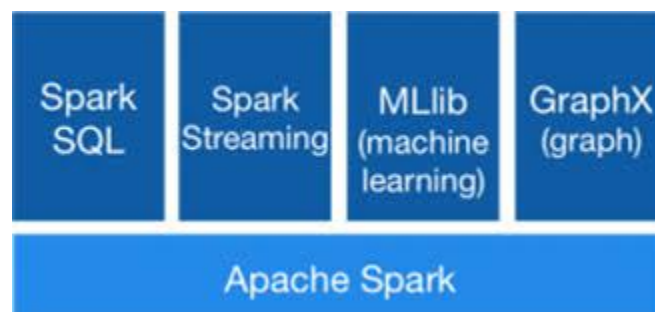
## 2.1  ASSUMPTIONS / CONSTRAINTS / STANDARDS

# 3  ARCHITECTURE DESIGN

This section outlines the system and hardware architecture design of the system that is being built.

- Back end interface
- Calculation platform
- Hearthbeat Data
- RDB: Patient info

## 3.1  LOGICAL VIEW



## 3.2  HARDWARE ARCHITECTURE

*Spark*

## 3.3  SOFTWARE ARCHITECTURE

*Heartbeat Algorithm*

## 3.4  SECURITY ARCHITECTURE

*Preventions of usability*

**3.5  COMMUNICATION ARCHITECTURE**

**3.6  PERFORMANCE**

*High performance and usable software*

# 4  SYSTEM DESIGN

## 4.1  USE-CASES

*Circle*

## 4.2  DATABASE DESIGN

*Spark / Hight performance thanks to map reduce application*

# 5  PRODUCT DESIGN SPECIFICATION APPROVAL

The undersigned acknowledge they have reviewed the REAL TIME ANALYTICS **Product Design Specification** document and agree with the approach it presents. Any changes to this Requirements Definition will be coordinated with and approved by the undersigned or their designated representatives.

| | | | |
|---|---|---|---|
| Signature: | Papa Noel | Date: | 25/12/2017 |
| Print Name: | De la part du | | |
| Title: | Le maître des lutins/Le roi du Pole nord | | |
| Role: | Prodigueur de bienfaisance | | |

| | | | |
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| Signature: | Pierre S | Date: | 25/12/2017 |
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| Title: | Developer | | |
| Role: | Project development | | |

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|---|---|---|---|
| Signature: | Gadet F | Date: | 25/12/2017 |
| Print Name: | Fg | | |
| Title: | Developer | | |
| Role: | Project development | | |

# Appendix A: References

The following table summarizes the documents referenced in this document.

| Document Name and Version | Description | Location |
|---|---|---|
| *1.0* | *Analyzing project* | *China* |

# Appendix B: Key Terms

The following table provides definitions for terms relevant to this document.

| Term | Definition |
|---|---|
| *HB Data* | *Heartbeat Data* |