<com< th=""><th>pany</th><th>Name&gt;</th></com<>	pany	Name>
---	------	-------

**≺**Company Name>

# Calin-Lucian Pirosca Supplementary Specification

**Version 1.0** 

Child Health Tracking	Version: 1.0
Supplementary Specification	Date: 14/MAR/19
Project_SupplementarySpecification.docs	

# **Revision History**

Date	Version	Description	Author
20/MAR/19	1.0	Initial Requirements Statement	Calin – Lucian Pirosca

Child Health Tracking	Version: 1.0
Supplementary Specification	Date: 14/MAR/19
Project_SupplementarySpecification.docs	

## **Table of Contents**

1.	Intro	duction	4
2.	Non-	-functional Requirements	4
	2.1	Availability	4
	2.2	Performance	4
	2.3	Security	4
	2.4	Testability	4
	2.5	Usability	5
3.	Desig	gn Constraints	5

Child Health Tracking	Version: 1.0	
Supplementary Specification	Date: 14/MAR/19	
Project Supplementary Specification.docs		

### **Supplementary Specification**

#### 1. Introduction

The Supplementary Specification captures the system requirements that are not readily captured in the use cases of the use-case model. Such requirements include:

- Legal and regulatory requirements, including application standards.
- Quality attributes of the system to be built, including usability, reliability, performance, and supportability requirements.
- Other requirements such as operating systems and environments, compatibility requirements, and design constraints.

### 2. Non-functional Requirements

#### 2.1 Availability

The systemis not expected to be used in urgent scenarios so we can afford a SLA <sup>1</sup> of 99.5%. This translates into a yearly downtime of roughly 1 day and 19 hours, or a monthly downtime of 3 hours and 39 minutes. This time can be used to perform software updates, data compression and garbage collection.

#### 2.2 Performance

Performance is not a key factor for our system. For this reason we can allow a response time of up to 30 seconds for request submissions in the worst case scenario. The average response time, depending on the load of the system, should be 1 second.

#### 2.3 Security

The system will be secured using https encrypted connections. Also we will demand user authentication and will not keep passwords in plain text. Other user data might be encrypted in case of a leak the children's data is protected as well as their parents.

#### 2.4 Testability

The business logic of the application must be tested independently from the user interface. We will employ V-Model testing as illustrated in Figure 1 V-Model Testing. We aim to have over 90% test coverage, through unit and integration tests. With respect to manual testing, the systemwill log all information that is not displayed in the user interface, so that the system is fully observable and testable.

SLA = Service Level Agreement = Availability

Child Health Tracking	Version: 1.0
Supplementary Specification	Date: 14/MAR/19
Project Supplementary Specification.docs	

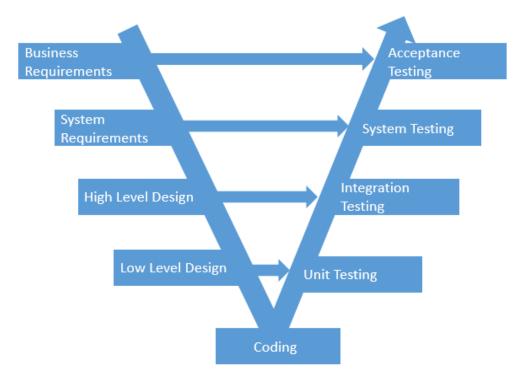


Figure 1 V-Model Testing

#### 2.5 Usability

The user should be able to reach any desired goal in under 10 mouse clicks.

### 3. Design Constraints

The systemis constrained to use JavaScript as implementation language. The software development process will be the Rational Unified Process (RUP), tailored to fit the team and the project. The conceptual architecture of the systemwill be a client server as illustrated in Figure 2 Conceptual Architecture. Any development tools can be used to develop the application. In terms of libraries we will use: Node.js for server, Angular/React/Vue.js for client, Sequelize and PostgreSQL.

Child Health Tracking	Version: 1.0
Supplementary Specification	Date: 14/MAR/19
Project SupplementarySpecification docs	

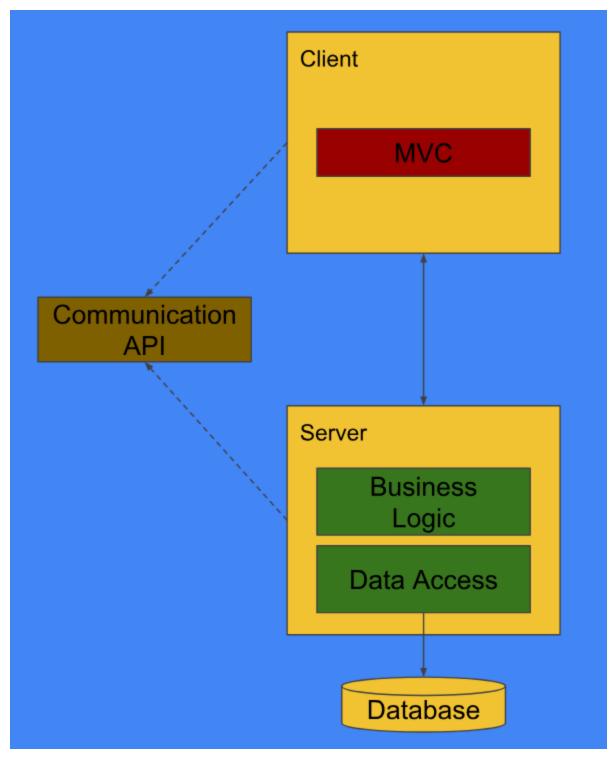


Figure 2: Conceptual Architecture