



POLITECNICO

MILANO 1863

Data4Help

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Contents

1	Introduction	2
1.1	Purpose and Scope	2
1.2	Definitions, Acronyms, Abbreviations	2
1.2.1	Definitions	2
1.2.2	Acronyms	2
1.2.3	Abbreviations	2
1.3	Reference Documents	2
1.4	Overview	2
2	Requirements Implemented	3
3	Design Choices	4
3.1	Database choices	4
3.2	Back-end choices	4
3.3	Front-end choices	4
3.3.1	iOS	4
3.3.2	Swift	4
3.3.3	External Frameworks	4
3.3.4	Apple Frameworks	4
4	Source Code Structure	5
4.1	Node project structure	5
4.2	Database description	5
4.3	XCode project structure	5
5	Testing	6
6	Efforts	7

1 Introduction

1.1 Purpose and Scope

1.2 Definitions, Acronyms, Abbreviations

1.2.1 Definitions

- Framework
- Library
- Packet Manager

1.2.2 Acronyms

DBMS	Data Base Management <i>System</i>
REST	REpresentational State Transfer
API	Application Programming Interface
OS	Operating <i>System</i>
UI	User Interface
HTTP	HyperText Transfer Protocol
URL	Uniform Resource Locator
JSON	JavaScript Object Notation

Table 1: Acronyms

1.2.3 Abbreviations

- **(Rn)**: n-th Requirement

1.3 Reference Documents

1.4 Overview

2 Requirements Implemented

2.1 User Authentication

2.2 User Management

2.3 Creation of Single Requests

2.4 Creation of Group Requests

2.5 Data Management

2.6 Health Status Monitoring

2.7 AutomatedSOS

2.8 Run Management

3 Design Choices

3.1 Database choices

3.2 Back-end choices

3.3 Front-end choices

3.3.1 iOS

- Operating system
- Documentation
- Interface peculiarity
- Device compatibility
- Frameworks
- Programming language and environment

3.3.2 Swift

- Simplicity
- Speed
- Built-in patterns

3.3.3 External Frameworks

- Alamofire
- SwiftyJSON
- Charts

3.3.4 Apple Frameworks

- Foundation
- Healthkit
- UIKit
- CoreData

4 Source Code Structure

4.1 Node project structure

4.2 Database description

4.3 XCode project structure

5 Testing

6 Efforts