*<Remark: when the <(medical device) software name> is not yet defined, it is allowed to use the project name instead. For the final version of the document the (medical device) software name must be used.>*

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# Approval

*<*

*Before submitting a document for approval make sure all changes are accepted/rejected and all comments are deleted.*

*This document shall be approved by E signature according local document management system or by signing the table below.*

*In case of E-signature state:*

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| Name Reviewer(s): | Role Reviewer(s): | Review date: | Signature: |
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# Revision History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Date | Author | Description of Change | Reason for Change |
| 0.1 | 2016-06-16 | Gupta, Ayush | Initial version | Initial version |
| 0.2 | 2016-09-14 | Thirumalesha D K | Updated for PI 16.4 | Initial version |
| 0.3 | 2016-12-01 | Bopanna CJ | Updated for PI 16.5 | New features |

# Open Issues and/or Actions

The following open issues are identified:

|  |  |  |
| --- | --- | --- |
| **Open Issue ID** | **Description** | **Due** |
| <Issue-n> |  |  |

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# Introduction

## Purpose

This Software Requirements Specification (SwRS) describes the software system requirements, the functional behavior of the application and its software items / units as well as nonfunctional requirements, design constraints, and other factors necessary for design and development.

## Scope

The document describes requirement for Mobile Application Framework and Base Application (built on App Framework). The document does not contain requirements for Common Components which are integrated in Mobile App Framework.

## References

|  |  |  |
| --- | --- | --- |
| **Reference ID** | **Document ID** | **Document Title** |
|  |  | Common Components Roadmap |
|  |  | App Framework Architecture Document |
|  |  |  |

## Definitions & Abbreviations

List of specific definitions and abbreviations used in this document:

| Term | Description |
| --- | --- |
| ARCHITECTURE | IEC 62304, 3.3: organizational structure of a SYSTEM or component. |
| SOFTWARE ITEM | IEC 62304, 3.25: any identifiable part of a computer program. |
| SOFTWARE SYSTEM | IEC 62304, 3.27: integrated collection of SOFTWARE ITEMS organized to accomplish a specific function or set of functions |
| SOFTWARE UNIT | EC 62304, 3.28: SOFTWARE ITEM that is not sub-divided into other items. |
| SOUP | IEC 62304, 3.29: Software of Unknown Provenance.  SOFTWARE ITEM that is already developed and generally available and that has not been developed for the purpose of being incorporated into the MEDICAL DEVICE (also known as “off-the-shelf software”) or software previously developed for which adequate records of the development PROCESSES are not available. |
| SYSTEM | IEC 62304, 3.30: integrated composite of one or more of the PROCESSES, hardware, software, facilities, and people, that provides a capability to satisfy a stated need or objective |
| CoCo | Common Components developed by CDP. |
| App Fwk | Mobile App Framework |
| App Infra | Mobile App Infrastructure Library |

# Product Overview

## Purpose and Intended Use

Base app is intended to be an application which will integrate all Common Components and provide basic navigation models that can be used for new mobile application development.

## System Description

Base app is a Framework to integrate all Common Components and be able to quickly build a platform.

Base app has following Common Components integrated.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component Name** | **Developed by** | **Integrate in App Framework as** | **Integrated in Product Increments #** | **Remarks/ Notes** |
| User Registration | CDP – Philips | Library | PI 16.5 |  |
| Mobile App Infra Library | CDP – Philips | Library | PI 16.5 |  |
| Philips UI Kit | CDP – Philips | Library | PI 16.5 |  |
| Consumer Care/ Digital Care | CDP – Philips | Library | PI 16.5 |  |
| Product Registration | CDP – Philips | Library | PI 16.5 |  |
| In App Purchase | CDP - Philips | Library | PI 16.5 |  |
| ShineLib | CDP – Philips | Library | PI 16.5 |  |
| DICOMM | CDP – Philips | Library | PI 16.5 |  |
| Data Sync | CDP – Philips | Library | PI 16.5 |  |

App Framework’s Base App also has following screens/UI

|  |  |  |
| --- | --- | --- |
| **Screen Name** |  |  |
| Splash Screen |  |  |
| Introduction Screens |  |  |
| Home |  |  |
| Settings |  |  |
| Help |  |  |
| Data Sync |  |  |
| Philips Shop |  |  |

# Context Analysis

Android

iOS

BlueLib

DICom +ICPClient

User Reg

Prod

Reg

Mobile App Infrastructure Library

InApp

Purchase

Mobile UI Toolkit

Consumer

Care

ApopFWK

Data Sync

# Software Requirements

**EPIC** – App Framework: App Framework is a framework to integrate all Common Components so that it is easy to build applications. App Framework also contains basics UI – screens, common ux flows and will be DLS compliant which will act as starting point to build any mobile application.

**Feature** – Base App

1. Base App contain UI Screens – Splash, Introduction, Home, Settings and Help.
2. Base App will have pre-build navigation (this is default navigation and shall be customizable)
   1. Splash >> Introduction >> User Registration >> Home
   2. Home >> Settings and vice a versa.
   3. Home >> Help and vice a versa.

**Feature** – Unified Configuration

1. Unified Configuration in App Framework will allow easy library management when the developers want to include or exclude Common Components.
2. Developers will be able to create or modify their specific UI flows using easy configurations.

## Functionality and Capability Requirements

App Framework is a framework and provides many features. The requirements for the various features are described in the following sections.

### App Framework

AF-1: The App Framework shall provide a Framework which comply with Architecture Guildelines to develop mobile applications at Philips.

AF-2: The App Framework shall have Common Components – App Infra, UI Kit, In-App Purchase, User Registration, Product Registration, Consumer Care and Connectivity components pre integrated in it.

AF-3: The App Framework shall provide Unified Configurations to pick and choose desired components when building an application.

AF-4: The App Framework shall at least have a TICS label ‘B’ or better.

AF-5: The App Framework shall have a unit test case coverage of above 50%.

AF-6: The App Framework shall be available for iOS App development and Android App development.

#### Base App

AF-BA-1: The Base App shall be built using App Framework.

AF-BA-2: The Base App shall have 5 screens – Splash, Welcome, Home, Help and Support, and Settings.

AF-BA-3: The Base App shall have UX flow between Splash, Welcome, Home, Help and Support, Settings, User Registration and Consumer Care.

AF-BA-4: The Base App shall be built for Phones and Tablets.

AF-BA-5: The Base App shall support Landscape and Portrait orientation for Phones and Tablets.

AF-BA-6: The Base App shall be built for iOS and Android mobile OS.

#### Base App – Splash Screen

AF-BA-7: The Base App shall contain Splash Screen.

AF-BA-8: The Splash can be customized to change the logo, background images and text.

AF-BA-9: The Splash screen should not be displayed for more than 1 sec.

AF-BA-10: The Splash screen shall be available for Phone and Tablets and should support both Landscape and Portrait Orientations.

AF-BA-11: The Service locale match feature shall provide an API to start the negotiation with a cloud service in the background. A callback is provided to signal completion of the negotiation.

#### Base App – Welcome screens

AF-BA-12: There shall be 3 Welcome screen in Base App by default.

AF-BA-13: Developers can add more screens to Welcome screens.

AF-BA-14: Developers can remove screens from Welcome screens.

AF-BA-15: The content on Welcome screens– images, text, background images etc. are customizable and proposition should be able to change it per their needs.

AF-BA-16: User should be able to Skip welcome screens.

AF-BA-17: User should be able to mark Done to Welcome screens.

AF-BA-18: User should be able to move back and forth between screens for Welcome screen.

AF-BA-19: Once user chooses to move away from Welcome screen either by Skip or by Done, user shall be asked to Register with Philips to move forward in the application.

#### Base App – Home Screen

AF-BA-20: The Base App Home screen should be loaded after Welcome screen once user has registered as valid user.

AF-BA-21: The Base App Home screen can be customized to add content, images, text based on the need of the consumer of Base App.

AF-BA-22: Home screen shall contain Hamburger menu.

AF-BA-23: Home screen can be customized per proposition’s need.

AF-BA-24: User should be able to navigate away from Home screen using menu options under Hamburger Menu.

#### Base App – Help and Support screen

AF-BA-25: The Help and Support screen should provide options for user to contact Philips via email.

AF-BA-26: The Help and Support screen should provide options to users to connect with Philips on various social media platform.

AF-BA-27: The Help and Support screen should provide phone numbers to call Philips customer care.

AF-BA-28: The Help and Support screen should provide ability to Register Philips products.

AF-BA-29: The Help and Support screen should provide ability to find Philips location near the user.

#### Base App – Settings screen

AF-BA-30: The Setting screen should provide ability to the user to login if the user is not logged in.

AF-BA-31: The Setting screen should provide ability to the user to log out if the user is already logged in.

AF-BA-32: The Setting screen should provide ability to the user to view and change App level settings.

AF-BA-33: The App level settings will be configured and managed by the propositions.

AF-BA-34: The Setting screen should provide ability to the user to change the notification settings.

AF-BA-35 The notification settings can be managed by user only when the user is logged in.

AF-BA-36: The Setting screen should provide ability to the user to view Order History of the items purchased from Philips with the user account.

AF-BA-37: The order history can only be shown to logged in user.

#### Unified Configuration

AF-UF-1: App Framework should provide mechanism to manage library dependencies of integrated components.

AF-UF-2: App Framework should provide all the configurations files for the components at one location.

AF-UF-3: App Framework should allow configuration of UI components.

AF-UF-4: App Framework should allow the configuration for different UI Flows

#### Base APP Flow Manager

AF-BA-38: Flow manager enables consumers of BASE APP/ REFERENCE APP to be able to define the Navigational UI flow by choosing the appropriate configurations.

For example, each proposition may want to define a user flow based on the design prescribed by the business i.e. it could be hamburger menu for proposition A and Tabbed for proposition B.

#### Base APP – Common Components Integration

AF-BA-39: Base APP now supports retailer purchase flow as part of the IN-APP purchase flow

AF-BA-40: Base APP now supports create, update, delete actions for moments. It also manages syncing of these moments across the devices and PHILIPS IT backend for a user account. This feature is part of the Data Services Module.

AF-BA-41 BASE APP has integrated connectivity components DICOMM and BLUELIB

### Consumer Preferences

Not Applicable

## Software System Inputs and Outputs

Refer to App Framework Architecture Document.

## Interfaces

Refer to App Framework Architecture Document.

## Software-driven Alarms, Warnings, and Operator Messages

Not Applicable.

## Security and Privacy Requirements

The Base App shall pass the internal Product Security and Risk assessment from Security assessment team

## Usability Engineering Requirements

Not Applicable

## Data Definition and/or Database Requirements

Not Applicable

## Installation and Acceptance Requirements

Not Applicable

## Methods of Operation

Not Applicable

## Maintainability and Upgradeability

Mobile App Framework will be upgraded with new features in span for 10-12 weeks. Any application using Mobile App Framework should be able to include the upgraded version without significant effort.

## User Documentation

Not Applicable

## User Maintenance Requirements

Not applicable.

## Regulatory Requirements

See [STANDARDS], where the applicable standards are referenced.

## SOUP

*<Clause 5.3.3:*

*If a SOFTWARE ITEM is identified as SOUP, the MANUFACTURER shall specify functional and performance requirements for the SOUP item that are necessary for its intended use.**[Class B, C]>*

## Risk Control Measures

Not Applicable

# Update system requirements

Not Applicable

# Traceability Matrix

The next table shows the mapping of each requirement from [SysRS]/[SysArch] to the software requirement(s) identified in this [SwRS] that result(s) from it.

Table 1 Requirements traceability cross reference to [SysRS] and/or [SysArch]

|  |  |
| --- | --- |
| **System Requirement** | **Software requirement(s)** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

1. Appendix <Title>

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