TagItSmart!
Smart Tags driven service platform for enabling ecosystems of connected objects

Grant agreement 688061

IS-COSMEU-Tag

Deliverable ID:	**D 2.1**
Deliverable Title:	**System prototypes**
Revision #:	**1**
Dissemination Level:	**Public**

Start Date of the Project: 1 January 2016 Duration: 36 Months

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Introduction

This deliverable comes as a complementary documentation for the two android applications that are handed over to task 2.2 – Pilot Set-Up and Execution.

The first section, “Software modules”, gives an overview of the two applications, their functionalities and how they can be used by the respective end-users (i.e. professionals for the auditor app, consumers for the consumer app).

The second section, “Hardware devices”, describes the technical limitations due to the most advanced functionalities of the IS-COSMEU-Tag solution and the resulting list of android mobile devices that are enabled to run the two applications.

Section 1 - Software modules

The consumer and auditor mobile applications have the same code base for the shared functionalities (e.g. QRcode scanning and product information page) with customisation for the distinctive functionalities, respectively the authentication to the brand domain management solution for the auditor app and the augmented reality activities for the consumer app.

Both applications include the Java library written by Fincons to decrypt the product information stored in the blockchain and in the EVRYTHNG platform (ref. D1.2 – Pilot Reference Architecture).

The integration with the EVRYTHNG platform itself leverages on the REST APIs provided by EVRYTHNG. User credentials to authenticate the requests are stored in the applications and thus not available to the user.

In addition, the Consumer app includes the ARCore SDK to enable the augmented reality functionalities.

Section 2 - Hardware devices

When it comes to the definition of the Android devices compatible with the IS-COSMEU-Tag solution, three main factors have to be taken into account:

- Android 7.0.0 or newer (API level 24 and above);
- Camera used to read QRcode and enable the augmented reality experience;
- ARCore support.

An updated list of the ARCore enabled devices can be seen in the reference website[1].

By the time of the pilot preparation, the following devices supported the full set of functionalities of the IS-COSMEU-Tag apps:

Manufacturer	Model
Acer	Chromebook Tab 10
Asus	ROG Phone, Zenfone AR, Zenfone ARES
Google	Nexus 5X, Nexus 6P, Pixel, Pixel XL, Pixel 2, Pixel 2 XL, Pixel 3, Pixel 3 XL
HMD Global	Nokia 6 (2018), Nokia 6.1 Plus, Nokia 7 Plus, Nokia 7.1, Nokia 8, Nokia 8 Sirocco
Huawei	Honor 8X, Honor 10, Honor View 10 Lite, Mate 20 Lite, Mate 20, Mate 20 Pro, Mate 20 X, nova 3, nova 3i, P20, P20 Pro, Porsche Design Mate RS, Porsche Design Mate 20 RS, Y9 2019
LG	G6, G7 Fit, G7 One, G7 ThinQ, Q6, Q8, V30, V30+, V30+ JOJO, LG Signature Edition 2017, V35 ThinQ, LG Signature Edition 2018, V40
Motorola	Moto G5S Plus, Moto G6, Moto G6 Plus, Moto X4, Moto Z2 Force, Moto Z3, Moto Z3 Play
Oneplus	OnePlus 3T, OnePlus 5, OnePlus 5T
Samsung	Galaxy A3 (2017), Galaxy A5 (2017), Galaxy A6 (2018), Galaxy A7 (2017), Galaxy A8, Galaxy A8+ (2018), Galaxy J7 (2017), Galaxy J7 Pro, Galaxy Note8, Galaxy Note9, Galaxy S7, Galaxy S7 edge, Galaxy S8, Galaxy S8+, Galaxy S9, Galaxy S9+, Galaxy Tab S3, Galaxy Tab S4
Sony	Xperia XZ Premium, Xperia XZ1, Xperia XZ1 Compact, Xperia XZ2, Xperia XZ2 Compact, Xperia, XZ2 Premium, Xperia XZ3
Vivo	NEX A, NEX S, X23
Xiaomi	Mi 8, Mi 8 SE, Mi Mix 2S, Mi Mix 3, Pocophone F1

For the purpose of the development and pilot execution, a Samsung S8 device was chosen.

While the two former requirements are mandatory, the third is optional.
When using devices that do not support ARCore, the Consumer app provides just the auditing functionalities, while when used on more advanced devices, it provides the enhanced AR experience.

[1] Google ARCore official website - https://developers.google.com/ar/discover/supported-devices