Serums

Project no. 826278

SERUMS

Research & Innovation Action (RIA)
SECURING MEDICAL DATA IN SMART PATIENT-CENTRIC HEALTHCARE SYSTEMS

Initial Project Website/Presentation
D8.2

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Responsible institution: University of St Andrews
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Version 1.0

Project co-funded by the European Commission within the Horizon 2020 Programme		
Dissemination Level		
PU	Public	√
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Change Log

Rev.	Date	Who	Site	What
1	28/03/19	Vladimir Janjic	USTAN	Original Version

Executive Summary

This deliverable describes the **Serums** project website, that is publicly accessible at `serums-smartpatient.eu`. The website is used for project dissemination, planning of meetings, publishing of project reports (deliverables), publications, talks, posters, etc.

Contents

Chapter 1

Introduction

The key objectives of WP8 are to:

- disseminate research results to the scientific community;

- ensure awareness of the results in the user community;

- raise general public awareness of the **Serums** project, including an Open Science model;

- define individual exploitation plans; and,

- manage existing and new intellectual property.

As such, this deliverable describes the **Serums** website, which aims to address the key objectives for dissemination, awareness, and exploitation of the project results. We introduce the design of the website in terms of its structure and hosting. In the deliverables that will describe the dissemination of the project results (D8.4, D8.5 and D8.8), we will also report on the statistics of the traffic to the website, including the number of unique visitors, their georgraphical distribution etc.

Chapter 2

The Serums Website

2.1 Website Hosting

The website is hosted by Weebly and can be accessed at
http://serums-smartpatient.eu/
Similarly, the following URL will also link:
http://serums-smartpatient.com/
All project participants who are active in maintaining the website have been granted
access to this server. Vladimir Janjic and Christopher Brown from the University
of St Andrews are the lead website maintainers. The website is implemented using
a combination of static HTML and CSS. There is no dynamic content creation.
The content of the website is updated manually by the maintainers. This permits to
increase security (by avoiding logins on the website itself) and also to simplify the
website implementation. Maintainance is performed by logging into the Weebly
service and performing changes to the website pages files. Furthermore, external
users cannot obtain membership to documents that are not public. Only documents
that are publicly available are published to the website.

2.2 Website Structure

The website is designed to have a classic and simple layout. Figure 2.1 illus-
trates the main page of the website. The layout is such that the navigation is dis-
played across the top of the page. Underneath the navigation, there is a large
logo clearly displaying the project name. Underneath the logo, is the main con-
tent panel. Currently, the main control conect panel contains just the information
that is relevant to the current page, but we will also add the columns to the left,
displaying a twitter feed with real time updates live from the project's Twitter ac-
count (@serums_h2020, shown on Figure 2.2) and to the right, displaying the
news items. Each page of the website follows this structure, with the centre panel
changing appropriately depending on the theme of the page being displayed.

Securing Medical Data in Smart Patient-Centric Healthcare Systems

WELCOME TO THE SERUMS PROJECT

The Serums Project is an EU Horizon 2020 research project which deals with security and privacy of future-generation healthcare systems, putting patients at the centre of future

Figure 2.1: The main project webpage.

2.2.1 About

The About section lists the project's aims and objectives as outlined in the project proposal. Figure 2.3 shows an illustration of this page as it is on the website. The Partners subpage of this page lists the institutions and companies involved in the project, as shown in 2.4.

2.2.2 Publications

Figure 2.5 shows details of the project's publications. These include conference, journal and workshop publications by the project participants; also technical reports and project posters. The details of each publication includes the authors of the publication, the venue, year and month, publisher, title and a short abstract. If the publication is published in an open access venue, a link to the PDF will also be provided. Currently, this list is maintained manually, with participants emailing the website maintainer with details of their publications to be uploaded to the wesbite. Project participants are reminded once a month to send relevant and up to date details.

2.2.3 Deliverables

Figure 2.6 illustrates the webpage for the project deliverables. Here *public* deliverables for the project are available for download, including a description and title of the deliverable and which work-package it belongs to. If any deliverable contains commercial sensitive information, provided by an industrial partner, for example,

Figure 2.2: The **Serums** Twitter.

a cut-down version of the deliverable can be available for download instead. The deliverables are grouped by the workpackage to which they refer.

2.2.4   News and Events

Up to date relevant news and events are displayed on this page. Here, current news items relating to the project's dissemination activities are diplayed, with their date. All relevant news items are passed to the website maintainer. In addition to this dedicated page, news items will also be displayed on each page of the website, on the far right column of the main content panel. Events that are organised by the project, including project workshops, meetings, conferences and other events are displayed on the events page. These are organised and maintained by the project participants and give a chance for the public to attend the non-private project events.

Figure 2.3: Webpage showing the **Serums** aims and objectives.

Figure 2.4: Webpage showing the **Serums** consortium.

M. Belk, C. Fidas, A. Pitsillides, **FlexPass: Symbiosis of Seamless User Authentication Schemes in IoT**. To appear in ACM SIGCHI Human Factors in Computing Systems (CHI EA 2019), ACM Press.

Abstract: This paper presents a new user authentication paradigm which is based on a flexible user authentication method, namely FlexPass. FlexPass relies on a single, user-selected secret that can be reflected in both textual and graphical authentication secrets. Such an approach facilitates adaptability in nowadays ubiquitous user interaction contexts within the Internet of Things (IoT), in which end-users authenticate multiple times per day through a variety of interaction device types. We present an initial evaluation of the new authentication method based on an in-lab experiment with 32 participants. Analysis of results reveal that the FlexPass paradigm is memorable and that users like the adaptable perspective of the new approach. Findings are expected to scaffold the design of more user-centric knowledge-based authentication mechanisms within nowadays ubiquitous computation realms.

C. Hadjidemetriou, M. Belk, C. Fidas, A. Pitsillides, **Picture Passwords in Mixed Reality: Implementation and Evaluation.** To appear in ACM SIGCHI Human Factors in Computing Systems (CHI EA 2019), ACM Press.

Abstract: We present HoloPass, a mixed reality application for the HoloLens wearable device, which allows users to perform user authentication tasks through gesture-based interaction. In particular, this paper reports the implementation of picture passwords for mixed reality environments, and highlights the development procedure, lessons learned from common design and development issues, and how they were addressed. It further reports a between-subjects study (N=30) which compared usability, security, and likeability aspects of picture passwords in mixed reality vs. traditional desktop contexts aiming to investigate and reason on the viability of picture passwords as an alternative user authentication approach for mixed reality. This work can be of value for enhancing and driving future implementations of picture passwords in mixed reality since initial results are promising towards following such a research line.

Figure 2.5: Webpage showing the **Serums** publications.

DELIVERABLES

Our project deliverables are divided up by project workpackage. Please click the links below to see the deliverables for each workpackage. Alternatively, choose the drop down menu for each workpackage from 'Deliverables' above.
We aim to publish our deliverables as soon as they are available. If you have any questions about any of the deliverables, please contact us.

WP2: SMART PATIENT RECORD CONSTRUCTION

WP4: SECURITY AND PRIVACY-PRESERVING DATA COMMUNICATION

WP6: INTEGRATION AND TESTING

WP3: PRIVACY-PRESERVING DISTRIBUTED DATA ANALYTICS

WP5: AUTHENTICATION AND TRUST

WP7:REQUIREMENTS, USE CASES AND EVALUATION

Figure 2.6: Webpage showing the **Serums** deliverables.