Scaffolding Creativity: Framework, toolchain, and case studies on how to create Virtual Exhibitions

Agenda

Multiplier Event I

Limassol (Cyprus)

2022 / 11 / 10

1.   Agenda 10th November 2022

Multiplier Event I
14:00/14:30   **CREAMS Overview**
14:30/15:00   **Requirements Verification and Conceptual Design of the Framework for Virtual Exhibitions (IO1)**
15:00/15:30   **Towards an Artist-Centered Content Management System for the Creation of Virtual Reality Exhibitions(IO2)**
15:30/16:00   **Coffee Break**
16:00/16:30   **Investigating the opinions of Extended Reality Art Exhibitions creators and visitors (IO3)**
16:30/17:00   **Course and Training Material Development on Virtual Exhibitions (IO4)**
17:00/17:30   **Webinars as a tool for teaching the CREAMs platform for VR/AR student art exhibitions (IO5)**
17:30/18:00   **Readiness Metrics and User Acceptability Criteria**
18:00/18:30   **Bringing the Art in your Yard: Development of an Outdoor Art-Exhibiting Mobile Augmented Reality Application.**
18:30/19:30   **Hands-on Interaction Experience of CREAMS platform**

1. **CREAMS Overview:**

   Author: Dimitrios Koukopoulos

   Abstract:

We will provide an overview of the main objectives and the first results of an EU-funded research project, namely CREAMS that aims to design, develop and evaluate a framework and open-source tools based on virtual, augmented, and mixed reality for the creation of virtual exhibitions for art students. The virtual exhibitions will exploit the potential of digital technology to provide rich, multilayered, multimodal content such as digital narratives, that will contextualize the artworks, offer additional material, and engage audiences in more meaningful ways. We will present the current progress of CREAMS project, along with a planning for future steps.

2. **Requirements Verification and Conceptual Design of the Framework for Virtual Exhibitions:**

   Author: Stella Sylaiou

   Abstract:

This presentation summarizes and reports the activities and outcomes of Intellectual Output (IO) 1: Requirements Verification and Conceptual Design of the Framework for Virtual Exhibitions of the CREAMS project. The requirements are related to the design and development of tools and methods for scaffolding virtual exhibitions of art students, that have been derived from the literature. Subsequently, these requirements will drive the specifications of the CREAM framework. The main objectives are the following: • Verify and validate results from the literature through real-world case studies with key stakeholders at different European HEIs. • Define quantitative and qualitative metrics for user acceptability. • Set the specifications of the CREAMS Platform framework. • Design the conceptual and methodological framework of the CREAMS Platform.

3. **Towards an Artist-Centered Content Management System for the Creation of Virtual Reality Exhibitions**

   Author: Michail-Panagiotis Bofos

   Abstract:

In this talk, we will present ongoing activities and results related to the design and development of an open-source artist-centered content management system, which aims to support art students and instructors of Higher Education Institutions to manage digitized artworks, create virtual exhibitions, and eventually enable visitors to interact with the students' artworks through a Web-based Virtual Reality 360-degree view. The technology is implemented as part of the research project CREAMS ("Scaffolding Creativity of Arts Students: Framework, Toolchain, and Educational Material on how to Create their Own Virtual Exhibitions"), which aims to educate and create awareness of various stakeholders in the Higher Education domain with regards to scaffolding creativity of arts students and deploying a robust and innovative framework and open-source tools for virtual exhibition creation.

4. **'Investigating the opinions of Extended Reality Art Exhibitions creators and visitors'**

   Author: Panagiotis Dafiotis

   Abstract:

The presentation delineates early findings and issues about users' opinions on the applications and tools developed for Virtual and Mixed Reality art exhibitions by the CREAMS research project. The term 'users' covers three distinct categories, namely art school students who will create art exhibitions, visitors and art teacher (academic staff in art and design schools/colleges). As the full title of the CREAMS project suggests (Scaffolding Creativity of Arts Students: Framework, Toolchain, and Educational Material on how to Create their Own Virtual Exhibitions) the main goal of the entire project is to support art students in using Extended Reality technologies to present their work. This will enable them to explore and exploit the affordances, possibilities and dynamics that these new means offer, in order to create content-rich interactive experiences that will engage audiences both with the work and the contextual issues in which it is being created. Therefore, measuring user engagement, satisfaction and cognitive immersion in encounters with art, in XR environments poses challenges that require a special approach adapting to the specificity of art exhibition experiences. The research methods and early findings in relation to user needs and expectations, (e.g., from Focus Groups) will be presented along with methodological approaches and considerations on user evaluation studies regarding the ICT tools.

5. **Course and Training Material Development on Virtual Exhibitions:**

   Author: Koundouris Marios

   Abstract:

Project Results 4 (PR4) aims to design and develop multilingual course and training material that directly address How, When and Why art students or art professionals should engage in creating their own virtual exhibition. In addition, R4 targets in developing best practice guides that will outline pros and cons of using diverse eXtended Reality (XR) technologies for deploying a virtual exhibition. The developed material will freely available in four European Languages through the online knowledge repository which will be accessible though the project's web-site. Main Objectives is a) design and develop course material for theoretical manifestation and empirical knowledge related to XR technologies in art domain, b) design develop best practices and training material in the context of different scenarios, c) design develop guidelines and training material related to how to personalize narratives of virtual exhibitions in order to increase user experience of visitors.

6. **Webinars as a tool for teaching the CREAMs platform for VR/AR student art exhibitions.Author:** Rebeka Vital

   Abstract:

The rapid evolution of mobile smart devices and the development of inexpensive immersive devices (VR googles, google box etc) in the past two decades, have brought opportunities in the field of curating, storing, and viewing art. CREAMS is a European funded Erasmus Plus project that is developing a VR (Virtual Reality)/AR (Augmented Reality) platform for hosting art exhibitions within the educational process. The platform accommodates 3 types of users, namely lecturers, students, and visitors, and allows for VR/AR exhibitions of art within an academic environment. This presentation describes how webinars can be an ideal tool for training the users of this platform, on a pan-European level, and organize the training

material in a clear concentrated way. It will be presented what type of materials can be used in remote training and how all the digital material supplement each other in order to create an effective and comprehensive learning environment.

7. **Readiness Metrics and User Acceptability Criteriaexhibitions.**

Author: Martinus Suijkerbuijk

Abstract:

A Report-presentation which shows the pitfalls, possibilities and essentials of the development of a virtual exhibition and education platform. Can there be metrics for what we imagine? A rich, eclectic and agile virtual platform, where state-of-the-art tool chains and frameworks facilitate art students, teachers and audience in a collective undertaking in virtual exhibition production. Tools for digital exhibition making, operating in tandem with frameworks that enable social interaction, critical reflection and value assessment of (digital) art production. A platform, that disavows the simple supplanting of traditional physical exhibition spaces with a facsimile, but rather confronts the limitations of physical spaces, transforming the ubiquitous image-based digital exhibition format, inclusive of non-traditional art practices such as socially engaged practices, performance and net art — becoming a tool for learning through creation.

8. **Bringing the Art in your Yard: Development of an Outdoor Art-Exhibiting Mobile Augmented Reality Application.**

Author: Eleni Karachaliou

Abstract:

Mobile applications have emerged as one of the most compelling, ubiquitous, and accessible products and services of contemporary life. By integrating exhibitions and artworks from art students into an outdoor augmented reality mobile application, we aim to boost the creativity of art students and enhance the quality of life of its users by disrupting their gloomy day with an easily accessible and imaginative work of art in their mobile phone. In this talk we will present the ongoing activities and results of the application's development which are implemented as part of the research project CREAMS ("Scaffolding Creativity of Arts Students: Framework, Toolchain, and Educational Material on how to Create their Own Virtual Exhibitions"). CREAMS' purpose is to support the art students and boost their creativity by offering cutting edge technologies to present their work.