Colour and Travel: Design of an Innovative Infrastructure for Travel Applications with Entertaining and Playful Features

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Abstract: This paper presents the research project 'Colour & Travel', which is co-funded by the European Union and national resources through the Operational Programme "Competitiveness, Entrepreneurship and Innovation" 2014-2020, under the Single RTDI State Aid Action "RESEARCH - CREATE - INNOVATE". The research project proposes the design of an innovative, playful framework for exploring a variety of travel destinations and creating personalised travel narratives, aiming to entertain, educate, and promote culture and tourism. Gamification of the cultural and touristic environment can enhance its experiential, multi-sensory aspects and broaden the perception of the traveler. The latter's involvement in creating and shaping his personal travel narrations and the possibility of sharing it with others can offer him an alternative, more binding way of getting acquainted with a place. In particular, the paper presents the design of an infrastructure: (a) for the development of interactive travel guides for mobile devices, where sites with specific points of interest will be recommended, with which the user can interact in playful ways and then create his personal travel narratives, (b) for the development of innovative games within virtual reality environment, where the interaction will be offered while the user is moving within the virtual environment; and (c) for an online application where the content will be offered through the browser and the modern 3D imaging technologies (WebGL). The technological products that will be developed within the proposed project can strengthen important sectors of economic and social life, such as trade, tourism, exploitation and promotion of the cultural environment, creative industries, etc. The final applications delivered at the end of the project will quarantee an improved level of service for visitors and will be a useful tool for content creators with increased adaptability, expansibility, and applicability in many regions of Greece and abroad. This paper aims to present the research project by referencing the state of the art and the methodological scheme, ending with a brief reflection on the expected outcome in terms of results.

Keywords: gamification, culture, tourism, AR, VR, applications

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