Analyzing the Use of Augmented Reality and Image Recognition in Cultural Education: Use Case of Sintra Palace Treasure Hunt Application

Authors : Marek Maruszczak

Abstract : Gamified applications have been used successfully in education for years. The rapid development of technologies such as augmented reality and image recognition increases their availability and reduces their prices. Thus, there is an increasing possibility and need for a wide use of such applications in education. The main purpose of this article is to present the effects of work on a mobile application with augmented reality, the aim of which is to motivate tourists to pay more attention to the attractions and increase the likelihood of moving from one attraction to the next while visiting the Palácio Nacional de Sintra in Portugal. Work on the application was carried out together with the employees of Parques de Sintra from 2019 to 2021. Their effect was the preparation of a mobile application using augmented reality and image recognition. The application was tested on the palace premises by both Parques de Sintra employees and tourists visiting Palácio Nacional de Sintra. The collected conclusions allowed for the formulation of good practices and guidelines that can be used when designing gamified apps for the purpose of cultural education.