Gamification Using Stochastic Processes: Engage Children to Have Healthy Habits

Authors : Andre M. Carvalho, Pedro Sebastiao

Abstract : This article is based on a dissertation that intends to analyze and make a model, intelligently, algorithms based on stochastic processes of a gamification application applied to marketing. Gamification is used in our daily lives to engage us to perform certain actions in order to achieve goals and gain rewards. This strategy is an increasingly adopted way to encourage and retain customers through game elements. The application of gamification aims to encourage children between 6 and 10 years of age to have healthy habits and the purpose of serving as a model for use in marketing. This application was developed in unity; we implemented intelligent algorithms based on stochastic processes, web services to respond to all requests of the application, a back-office website to manage the application and the database. The behavioral analysis of the use of game elements and stochastic processes in children's motivation was done. The application of algorithms based on stochastic processes in-game elements is very important to promote cooperation and to ensure fair and friendly competition between users which consequently stimulates the user's interest and their involvement in the application and organization.
Keywords : engage, games, gamification, randomness, stochastic processes