

Lecture Notes in Networks and Systems 769

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Methodologies and Intelligent Systems for Technology Enhanced Learning, Workshops - 13th International Conference

 Springer

A Mobile App Game Based on the Development and Design of a Puzzle Created for Educational Learning

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Abstract. This paper presents a mobile app game designed for educational learning. The game is created by using contemporary software tools, featuring five different puzzle levels in which players have to solve jigsaw puzzles and eventually the player learns an interesting fact about the scene they arranged. The game aims to improve the young player's spatial imagination, problem-solving skills, memory, patience, concentration and motor skills. In this study the steps how to develop and implement the game are thoroughly explained. The article highlights the importance of the educational games and their potential to enhance learning outcomes in a fun and engaging way. The game's development process and design are discussed along with its potential to be utilized as an educational tool in various settings.

Keywords: Mobile App Development · Educational Learning · Unity Engine

1 Introduction

The game-based learning is nowadays widely used in schools and universities. It represents the learning through play and game elements. The traditional teaching is being replaced by some new process methods offered by game-based teaching training. Such methods are: digital and visual tools - mobiles applications, interactive whiteboards, tablets, virtual reality and modern information technologies for game learning [1–3]. A mobile app is a software application or computer program for mobile devices such as