Gamification-Based E-Learning Strategies for Computer Programming Education

Part of the Advances in Game-Based Learning Book Series

Ricardo Alexandre Peixoto de Queiros (Polytechnic Institute of Porto, Portugal) and Mário Teixeira Pinto (Polytechnic Institute of Porto, Portugal)

Description:

Computer technologies are forever evolving and it is vital that computer science educators find new methods of teaching programming in order to maintain the rapid changes occurring in the field. One of the ways to increase student engagement and retention is by integrating games into the curriculum.

Gamification-Based E-Learning Strategies for Computer Programming Education evaluates the different approaches and issues faced in integrating games into computer education settings. Features emergent trends on the application of gaming to pedagogical strategies and technological tactics, as well as new methodologies and approaches being utilized in computer programming courses.

Readers:

This book is an essential reference source for practitioners, researchers, computer science teachers, and students pursuing computer science.


Topics Covered:

- 3D Virtual Worlds
- E-Learning
- Educational Computer Games
- Game Design Principles
- Mini-Games
- Programming Language Training
- Remote Experimentation

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