An IT-based Learning Approach about Finite State Machines Using the Example of Stock Trading - The Stock Trading Game FSTG

This paper presents an IT-based learning approach to both theory and application of Finite State Machines (FSM). We determined the most important learning objectives about FSMs, described them according to the taxonomy of Bloom and Krathwohl, and implemented them as a serious game called 'Finite State Trading Game' (FSTG). Our approach was verified based on a lesson that was conducted at the Technical University of Munich with upper vocational school students. The results indicate a major improvement in the students' knowledge about FSMs. Thus, the FSTG approach proves to be a suitable supplement or even a substitution for teaching the topic of FSM in traditional classroom settings.

Stichworte: IT-based learning · serious games · Finite State Machine · stock trading · Bloom’s taxonomy for learning objectives

Intellectual Contribution:
Kongress- / Buchtitel:  
19th International Conference on Interactive Collaborative Learning (ICL2016)

Kongress / Zusatzinformationen:  
Belfast, UK

Jahr:  
2016

Monat:  
Sep

Key publication:  
Nein

Peer reviewed:  
Ja

International:  
Ja

Book review:  
Nein

commissioned:  
not commissioned

Interdisziplinarität:  
Nein

Leitbild:  
;

Ethics & Sustainability:  
Nein

Occurences:  
· Hochschulbibliographie > 2016 > Fakultäten > Informatik > Informatik 17 - Lehrstuhl für Wirtschaftsinformatik (Prof. Krcmar)
· Einrichtungen > Fakultäten > Fakultät für Informatik > Lehrstühle der Informatik > Informatik 17 - Lehrstuhl für Wirtschaftsinformatik (Prof. Krcmar) > Konferenzbeiträge

entries: