

## CONCEPTUAL ARCHITECTURE OF AN AUTOMATED SYSTEM FOR ASSESSING STUDENTS' ASSIGNMENTS

Stefani Paunova, Vladimir Valkanov, Angel Georgiev

**Abstract.** *Working in the field of education is invariably accompanied by homework, exams and their checks. Nowadays, we are benefited by numerous systems giving the ability to dynamically prepare check and homework assignments, assigning them to a group of people and providing the possibility of transmission and completion from different points of the world. One of these commonly used systems is Google Classroom. Among others of this kind, they allow the compilation of a grading scale and automatic checking of predefined answers. Their disadvantage is the lack of checking of assignments consisting of free text. With this paper, we propose a conceptual architectural solution to the posed problem. The idea of the application is to analyze free-response tasks and to evaluate them without the direct intervention of a human hand.*

**Key words:** Student assessments, automation, conceptual architectures, SQL, homework tasks.

Stefani Paunova<sup>1</sup>, Vladimir Valkanov<sup>2</sup>, Angel Georgiev<sup>3</sup>,  
<sup>1,2,3</sup> Paisii Hilendarski University of Plovdiv,  
Faculty of Mathematics and Informatics,  
236 Bulgaria Blvd., 4003 Plovdiv, Bulgaria  
Corresponding author: [angel.georgiev@uni-plovdiv.bg](mailto:angel.georgiev@uni-plovdiv.bg)