The Use of Relational Data Model for Employee Evaluation:
The Case of a University in Poland*

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Abstract

The work presents a proposal to implement a database model, based on the relational data model used in PostgreSQL database management system (DBMS), designed to collect and process employee data in order to support the management of the employee evaluation process in higher education unit. The university employee evaluation system has not yet been included in IT resources, so proposed database as a module of existing databases or single web application that will support the employee evaluation process. Creating the model was performed in two stages. In the first stage, entity groups in the existing database regarding employee personal data were converted from Oracle DBMS schema to PostgreSQL DBMS schema, while in the second stage, the converted entities were modified and the schema was supplemented with two additional entity groups concerning evaluation activities and the employee discipline declaration. Created database can be used by the employee to monitor the achievements required in the university evaluation sheet, plan task time and generate an evaluation report as well as the superior to support decisions in staff management and planning activities for employees. The work also proposes the necessary organizational changes at the university that will allow the database to be kept consistent.

Keywords: PostgreSQL relational database, employee evaluation, university, open source software

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