TOWARDS THE ALGORITHM FOR ACTIVITY LABELS QUALITY ASSESSMENT IN BUSINESS PROCESS MODELS

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This research addresses the relevant problem of business process model quality assessment in terms of activity labels understandability. The study aims to improve the understandability of business process models, as one of the main quality properties. The considered problem is relevant, since poorly designed business process models can be sources of errors when the corresponding workflows are analyzed or automated as parts of information systems. Business process models are used by various stakeholders in business and information technology domains. If they will not be understandable, this may negatively affect real processes, cause additional expenses to fix mistakes, or lead to even more serious consequences for critical domains [1]. Therefore, Fig. 1 demonstrates the proposed algorithm for activity labels quality assessment in business process models. It is based on part of speech (POS) checks for activity labels to assess their correspondence to the "verb-object" labeling rule [2].

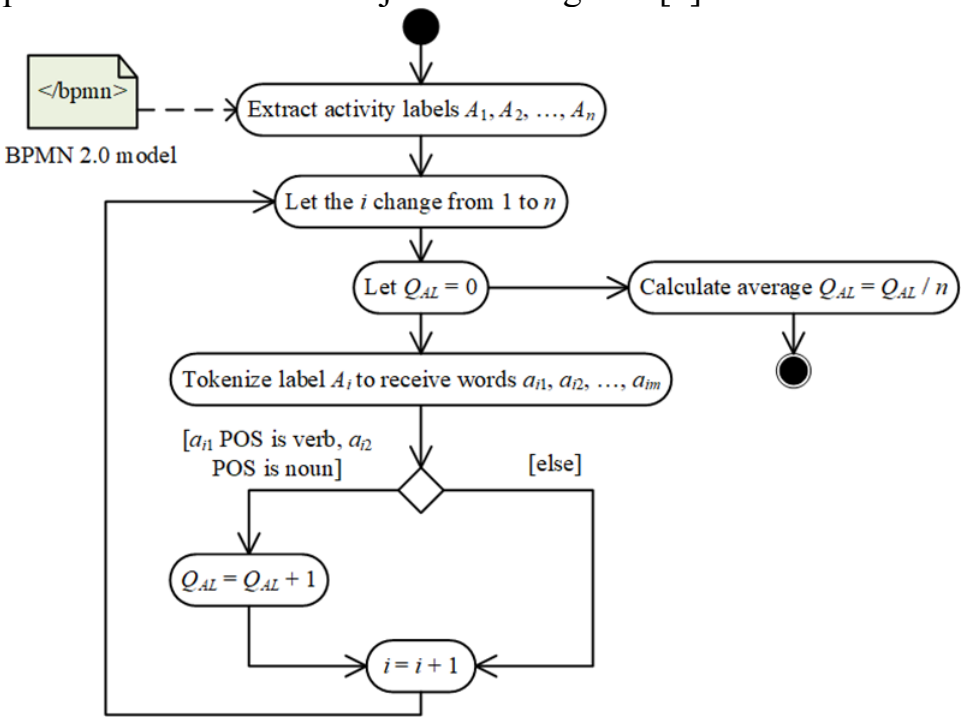

Figure 1 – The algorithm for activity labels quality assessment in business process models

In the future work, the software component will be developed to implement this algorithm (Fig. 1) and perform experiments with the real business process models.

References:

1. Shevelev V. D., Kopp, A. M. Algorithm for comprehensibility evaluation of business process models using natural language processing. *Automation of technological and business processes*, 2023. No. 15(4). P. 76-83.

2. Kopp A., Orlovskyi D., Orekhov S. Towards Understandability Evaluation of Business Process Models using Activity Textual Analysis. *MoMLeT & DS*, 2022. Vol. 3312. P. 200-211.