TOWARDS A SOFTWARE TOOL DEVELOPMENT FOR QUALITY ASSESSMENT OF BUSINESS PROCESS MODELS

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Designing comprehensible and customizable business process models that can be used to assess and enhance illustrated business processes is necessary since business process modeling is regarded as the cornerstone of the business process management methodology adapted by most organizations. Business process models can be used to comprehend, document, analyze, and possibly improve the business processes they describe [1].

Therefore, it is crucial to guarantee the high quality of the business process models that are designed. This means the special software tool for quality analysis of business process models should be designed and developed.

Hence, the general process within the framework of the user's engagement with the future software tool is shown in the activity diagram (Fig. 1) created using the Unified Modeling Language (UML).

Users should be able to visit the login page to access the application or use the sign-up page (Fig. 1) to create an account before accessing the software's features, according to this activity diagram.

Using the analysis form, users may then upload the business process models they want to analyze. Users should be able to adjust settings to specify how the calculated business process modeling metrics will be interpreted toward the thresholds and error probability values before obtaining the report (i.e. probabilities of detecting errors in business process models). Also, the settings form and analysis form can both be opened simultaneously (e.g. the settings form can be opened as the modal window). Users

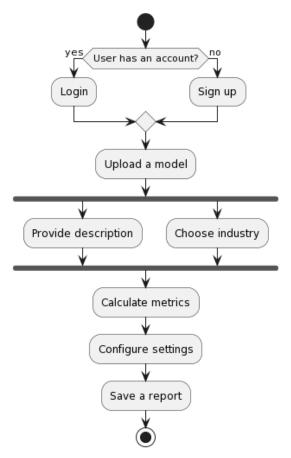


Fig. 1. – The UML activity diagram

may finally save the created reports with their chosen recommendations.

As a result, the suggested software tool may aid in assessing the likelihood of errors in business process models as well as enhancing their quality.

References:

1. Kopp A., Orlovskyi D. A Method for Business Process Model Analysis and Improvement. *CEUR Workshop Proceedings (CEUR-WS.org)*. 2019. Vol. 2403. P. 1–10.