

BUSINESS KNOWLEDGE REPOSITORIES FOR DECISION MAKING

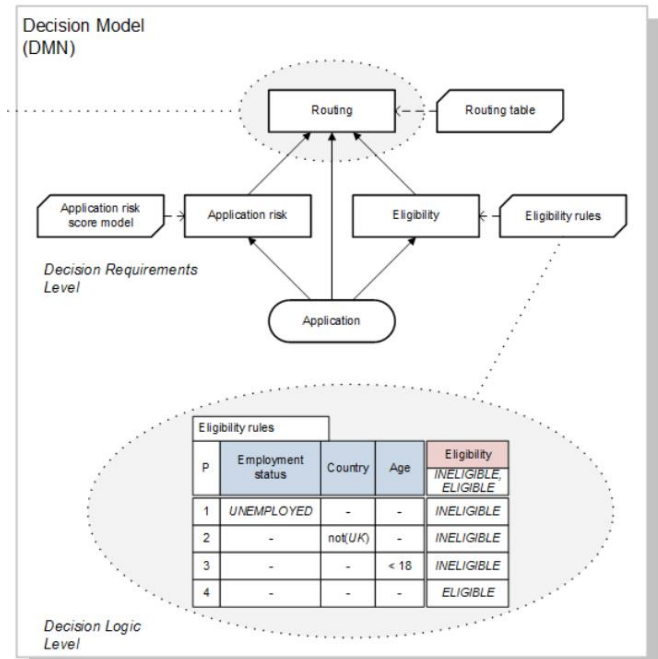
RESEARCH GROUP „DATABASE AND INFORMATION SYSTEMS“

Goal

The Object Management Group (OMG) maintains the “Decision Model and Notation” (DMN) specification for decision modeling [1]. An example for a DMN diagram is depicted on the right: A decision (such as “Eligibility”) is determined by applying business knowledge (such as “Eligibility Rules”) on input data (such as “Application”). The output of a decision may be used as input for another decision (cf. “Routing”).

Within this master thesis, a system should be developed that

1. allows administrators to share reusable business knowledge in a repository and
2. helps end users to select business knowledge that fits their decision and available input data (cf. figure below).



[1]: <https://www.omg.org/spec/DMN/>

Tasks

- Extension of DMN to allow annotation of (domain-specific) information such as decision objective or input/output data types
- Design and prototypical implementation of matching algorithm

Recommended Background

- Advanced Software Engineering
- (Graph) Databases
- BPMN
- Decision Support

