

MIDDLE EAST TECHNICAL UNIVERSITY

DEPARTMENT OF COMPUTER ENGINEERING

PROPOSAL REPORT

TEAM NAME : MOCKWARE

TEAM MEMBERS : ERKAN AKYOL

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PROJECT TITLE :

Domain Specific Kit Implementation for Business Rules Management

Motivation and Purpose:

Computerization is such a rising value of the present day that every business sector must keep up with this phenomenon to be stable and up to date. IT sector provides convenience for utilization of information and leads innovation through software and hardware developments such as ERPs, SAPs, embedded systems like factory controller, ABS in automobiles, PDAs etc. for all business sectors. Everything made to facilitate business life and so human life by providing specific equipments.

Two of the most important issues in both business management and IT sector is Business Process Management and Business Rule Management. BPM is need to be a solution to produce and service in a possible most efficient and effective way according to client needs and wants. The activities that construct BPM are design, modeling, execution, monitoring and optimization. On the other hand Business Rule Management is designed to automate complex decisions rather than manage processes.

Project Description and Approach:

In our project we are going to design and implement a new Domain Specific Kit for Business Rule Management. The kit contains Domain Specific Language, Domain Specific Engine and Domain Specific Toolset. DSLs are not unfamiliar to us we can see variety samples of it that we use in our everyday life like HTML, XML, SQL etc. As a DSL for BRM example there is RuleML. RuleML is more likely to be usually used for research purposes. To execute our DSL we are going to need DSE which recognize specific queries. We finally design and implement a DST which is going to be interactive utility and authoring tool, to create and package content deliverable to end user.

Although as a group we have not decided the environment, design features and methods yet we have raw ideas and abstract. Our first goal is that our project will be able to manage various platforms and different protocols for the sake of heterogeneity. In other words although we will be inspired by existing languages like RuleML we want our project to be an innovation or at least a different, more useful DSK for BRM. As a design goal flexibility and integrity are other vital features for us such that configurations can be adapted by user and recognition of different types and formats will be enabled. By user interface we aim that usage of the kit will be eased for users by guidelines, hints and graphical tools.

At the end of the term, we would like to have our new domain specific kit within language, engine and toolset created to provide requirements for certain business rules. Furthermore, by accomplishing our project, we expect to have a broad vision about Business Rules Management and Domain Specific Kits.