Process Discovery using Big Data stack - Implementing the Alpha Algorithm with Map-Reduce

Project Initiation

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1 Overview

2 Business Case

We develop a business case to disclose the potential of this project. The study is divided into three parts. First we explain one of the current algorithm in process mining. Furthermore we will define the scope of the project and point out the key benefits of our optimization.

2.1 Initial Situation

2.2 Scope

2.3 Key Benefits

3 Feasibility Study

3.1 Theoretical Point of View

3.2 Technical Point of View

3.3 Risks and Mitigations

Project Managment Risks

Technical Risks

4 Project Plan

5 Project Team

The project team consists of two persons. The following roles have been assigned to reflect individual strengths and competences:

Name	Role	Contact
Martin Hashem	Project Manager	martin.hashem@rwth-aachen.de
	Backend Architect	
Xiangan Chen	Quality Manager	xiangan.chen@rwth-aachen.de
	Frontend Architect	

In addition a team member is assigned to each milestone in the project, who is primarily responsible, that the requirements and goals of the milestone are met in time with sufficient quality. The responsibilities are stated in the following table:

Milestone	Chief Responsibility
Project initiation document	Xiangan Chen
Requirement analysis document	Xiangan Chen
Design and proof of concept	Martin Hashem
Sprint 1	Martin Hashem
Sprint 2	Xiangan Chen
Sprint 3	Martin Hashem
Assessment	Xiangan Chen
Final Documents	Martin Hashem

References

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[Bra91] Johannes Braams. Babel, a multilingual style-option system for use with latex's standard document styles. *TUGboat*, 12(2):291–301, June 1991.

[Cla91] Malcolm Clark. Post congress tristesse. In *TeX90 Conference Proceedings*, pages 84–89. TeX Users Group, March 1991.

[Her93] Maurice Herlihy. A methodology for implementing highly concurrent data objects. *ACM Trans. Program. Lang. Syst.*, 15(5):745–770, November 1993.