Department of Computer Science University of Kaiserslautern

Master Thesis

Offline caching in web applications for AntidoteDB

Server Khalilov

University of Kaiserslautern Department of Computer Science Software Engineering

Leader: Prof. Dr. Arnd Poetzsch-Heffter

Supervisor: Dr. rer. nat. Annette Bieniusa



Zusammenfassung

Zusammenfassung auf deutsch

Abstract

Abstract in english

Ich versichere hiermit, dass ich die vorliegende M Thema "Offline caching in web applications for Anti- dig verfasst und keine anderen als die angegebenen habe.	idoteDB" selbststän- Hilfsmittel benutzt
Die Stellen, die anderen Werken dem Wortlaut oder nommen wurden, habe ich durch die Angabe der (macht.	
Kaiserslautern, den DD. April 2018	Server Khalilov

Contents

1	1.1 Motivation	1 1 1
2	Background 2.1 Related Work	3
3	Problem Analysis	5
4	Design4.1 Modern offline applications4.2 Service Workers4.3 IndexDB database	7 7 7
5	Architecture 5.1 General overview of the architecture	9 9
6	Implementation	11
7	Evaluation	13
8	Conclusion and Future Work 8.1 Summary	15 15 15
9	Appendix	17
Li	ist of Figures	19
Li	ist of Tables	21
Bi	ibliography	23

1 Introduction

In this chapter we are going to discuss the motivation, research questions and the scope of the following thesis.

1.1 Motivation

The motivation of this thesis is to explore the possibilities of implementing a web-client with a cache on a client-side.

1.2 Research questions

2 Background

2.1 Related Work

Maybe you can mention SwiftCloud here. https://github.com/SyncFree/SwiftCloud

3 Problem Analysis

Might be not needed

4 Design

Design or Approach

- 4.1 Modern offline applications
- 4.2 Service Workers
- 4.3 IndexDB database

5 Architecture

Architecture

- 5.1 General overview of the architecture
- 5.2 Communication protocol description

6 Implementation

Implementation

7 Evaluation

Evaluation

8 Conclusion and Future Work

Conclusion and Future Work

- 8.1 Summary
- 8.2 Future Work

List of Figures

List of Tables

Bibliography