

High Performance Caching of Travel Inventory Data

Software Design Document

(Team Name)

Date: (mm/dd/yyyy)

Department:

Course:

Professor:

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1. INTRODUCTION

1.1 Purpose

Identify the purpose of this SDD and its intended audience. (e.g. “This software design document describes the architecture and system design of XX.”).

1.2 Scope

Provide a description and scope of the software and explain the goals, objectives and benefits of your project. This will provide the basis for the brief description of your product.

1.3 Overview

Provide an overview of this document and its organization.

1.4 Reference Material

This section is optional.

List any documents, if any, which were used as sources of information for the test plan.

1.5 Definitions and Acronyms

This section is optional.

Provide definitions of all terms, acronyms, and abbreviations that might exist to properly interpret the SDD. These definitions should be items used in the SDD that are most likely not known to the audience.

2. SYSTEM OVERVIEW

Give a general description of the functionality, context and design of your project. Provide any background information if necessary.

3. SYSTEM ARCHITECTURE

3.1 Architectural Design

Develop a high-level conceptual structure and explain the relationships between the components/subsystems to achieve the complete functionality/purpose of the system. This is a high level overview of how responsibilities of the system were partitioned and then assigned to subsystems. Identify each high level subsystem and the roles or responsibilities assigned to it. Describe how these subsystems collaborate with each other in order to achieve the desired functionality. Don't go into too much detail about the individual subsystems. The main purpose is to gain a general understanding of how and why the system was decomposed, and how the individual parts work together. Provide an innovative **diagram** showing the major component/ subsystems and data repositories and their interconnections. Describe the diagram.

3.2 Technical design

Provide a high-level view of technologies used and how they are technically designed.

3.3 Design Rationale

Discuss the rationale for selecting the architecture (and its underlying techniques or technologies) described in 3.1 and 3.2 including critical issues and trade/offs that were considered. You may discuss other architectures that were considered, provided that you explain why you didn't choose them.

4. DETAILED DESIGN

In this section, provide details (with respect to 3.1) at what each component does in a more systematic way. For instances, provide UML Class diagrams with all methods, attributes and relationships for all involving objects, if you are using OO approaches, provide a summary of algorithms in procedural description language (PDL) or pseudocode.

5. DATA (DATABASE) DESIGN

Explain how the information domain of your system is transformed into data structures. Describe how the major data or system entities are stored, processed and organized. List any databases or data storage items.

6. HUMAN INTERFACE DESIGN

6.1 UI design

6.2 UX design

7. REQUIREMENTS MATRIX

Provide a crossreference that traces components and data structures to the requirements in your SRS document.

Use a tabular format to show which system components satisfy each of the functional requirements from the SRS. Refer to the functional requirements by the numbers/codes that you gave them in the SRS.

8. APPENDICES

This section is optional.

Appendices may be included, either directly or by reference, to provide supporting details that could aid in the understanding of the Software Design Document.