System Design Document (SDD)

Project:

Purpose of the document

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About the System Design Document

VERSION CONTROL

Version No.	Name(Title)	Author	Date	Authorization
2.0	SDD Report		January 20, 2019	
2.1	SDD Final		January 20, 2019	

Document Properties

Item	Details
Document Title	
Author	
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1. Introduction

< Here comes the background of the project and some introductory notes>

1.1 Purpose of the System

1.2 Design goals

1.3 Definitions, acronyms, and abbreviations

1.4 References

<provides references to other documents and traceability information (e.g., related requirements analysis document, references to existing systems, constraints impacting the software architecture).>

1.5 Overview

< If there is a legacy system or if there is no automated system, explain it here. What makes the new proposed system is better than the existing similar systems. >

2. Current software architecture

1.4.1 Overview

<describes the architecture of the system being replaced. If there is no previous system, this section can be replaced by a survey of current architectures for similar systems.>

3. Proposed software architecture

1.4.2 Overview

<presents a bird's eye view of the software architecture and briefly describes the assignment of functionality to each subsystem>

1.4.3 Subsystem decomposition

<describes the decomposition into subsystems and the responsibilities of each. This is the main product of system design.>

1.4.4 Hardware/software mapping

<describes how subsystems are assigned to hardware and off-the-shelf components. It also lists the issues introduced by multiple nodes and software reuse.>

1.4.5 Persistent data management

<describes the persistent data stored by the system and the data management infrastructure required for it. This section typically includes the description of data schemes, the selection of a database, and issus such as object -relational mapping (if it applies).>

1.4.6 Access control and security

<describes the user model of the system in terms of an access matrix. This section also describes security issues, such as the selection of an authentication mechanism, the use of encryption, and the management of keys.>

1.4.7 Global software control

<describes how the global software control is implemented. In particular, this section should describe how requests are initiated and how subsystems synchronize. This section should list and address synchronization and concurrency issues.>

1.4.8 Boundary conditions

<describes the start-up, shutdown, and error behavior of the system. If new use cases are discovered for system administration, these should be included in the requirements analysis document, not in this section>

4. Subsystem services

<describes the services provided by each subsystem in terms of operations including the APIs>