<Project Name>

System Design

<Version>

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SYSTEM DESIGN DOCUMENT[1]

The System Design Document (SDD) is written after the initial system decomposition is done, and updated throughout the development. SDD describes the services provided by each subsystem. Although this section is usually empty or incomplete in the first versions of the SDD, this section serves as a reference for teams for the boundaries between their subsystems. The interface of each subsystem is derived from this section and detailed in the Object Design Document.

SDD is used to define interfaces between teams of developers and serve as a reference when architecture-level decisions need to be revisited. The audience for the SDD includes the project management, the system architects (i.e., the developers who participate in the system design), and the developers who design and implement each subsystem.

## Design Goals

**Security:** E-Lection should be secure, not allow can change votes or vote more than once and not allow except Admin access any data from E-Lection without shown by system. Since the system will work on web services, it must prevent all attacks from the outside and only authorized people must access the database. One person can open one account with system approval.

**Reliability**: Every user need to give strong information for approval to system. So that user must use the system in confidence. The system must keep information about candidate votes not who votes which candidate.

**Response Time**: Response time should be short because every user have different electronics equipment and for every user should be able to vote.

For interface designs we have to follow KISS principle. Every voter have different technological background so out interface need to be easy-to-learn and must be clear for every user. For voting task the voter will use confirm button and after submit button.

## Definitions, Acronyms, and Abbreviations

## Persistent Data Management

Describe 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 the description of the encapsulation of the database**.

## Access Control and Security

A secure access control mechanism that prevents using for improper use. The access control mechanism

Describe 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.

# Subsystem Services

Describe the **services provided by each subsystem**. Although this section is usually empty or incomplete in the first versions of the SDD, this section serves as a reference for teams for the boundaries between their subsystems. The interface of each subsystem is derived from this section and detailed in the Object Design Document.

# References

The following is an example of listing a book in this section. Check the text to see how it is cross referenced (The whole document is based on [1]).

1. Bruegge B. & Dutoit A.H.. (2010). *Object-Oriented Software Engineering Using UML, Patterns, and Java*, Prentice Hall, 3rd ed.