Software Design Document

Surveying Software

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Revisions

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1.0	Akshar S, Aakash V, Abhay N Joshi, Aaditya N	Initial Release	27-10-2023

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1. Introduction

1.1 Purpose

The Software Design Document describes the architecture and system design for Surveying Software, a survey creation and management software. Surveying Software is designed to help users create and manage their surveys. This document is intended for Project Managers, Software Engineers, and anyone else who will be involved in the implementation of the system.

1.2 Scope

This document describes the implementation details of the Surveying Software (SS). SS will consist of six major components: Survey Management, Database, Optimization, Survey, User, and Authentication. Each of the components will be explained in detail in this Software Design Document.

1.3 Definitions, Acronyms and Abbreviations

Acronym	Meaning
SS	Surveying Software
SDD	Software Design Document
OS	Operating System
API	Application Programming Interface

2. System Components

2.1 Decomposition Description

Top Down Details

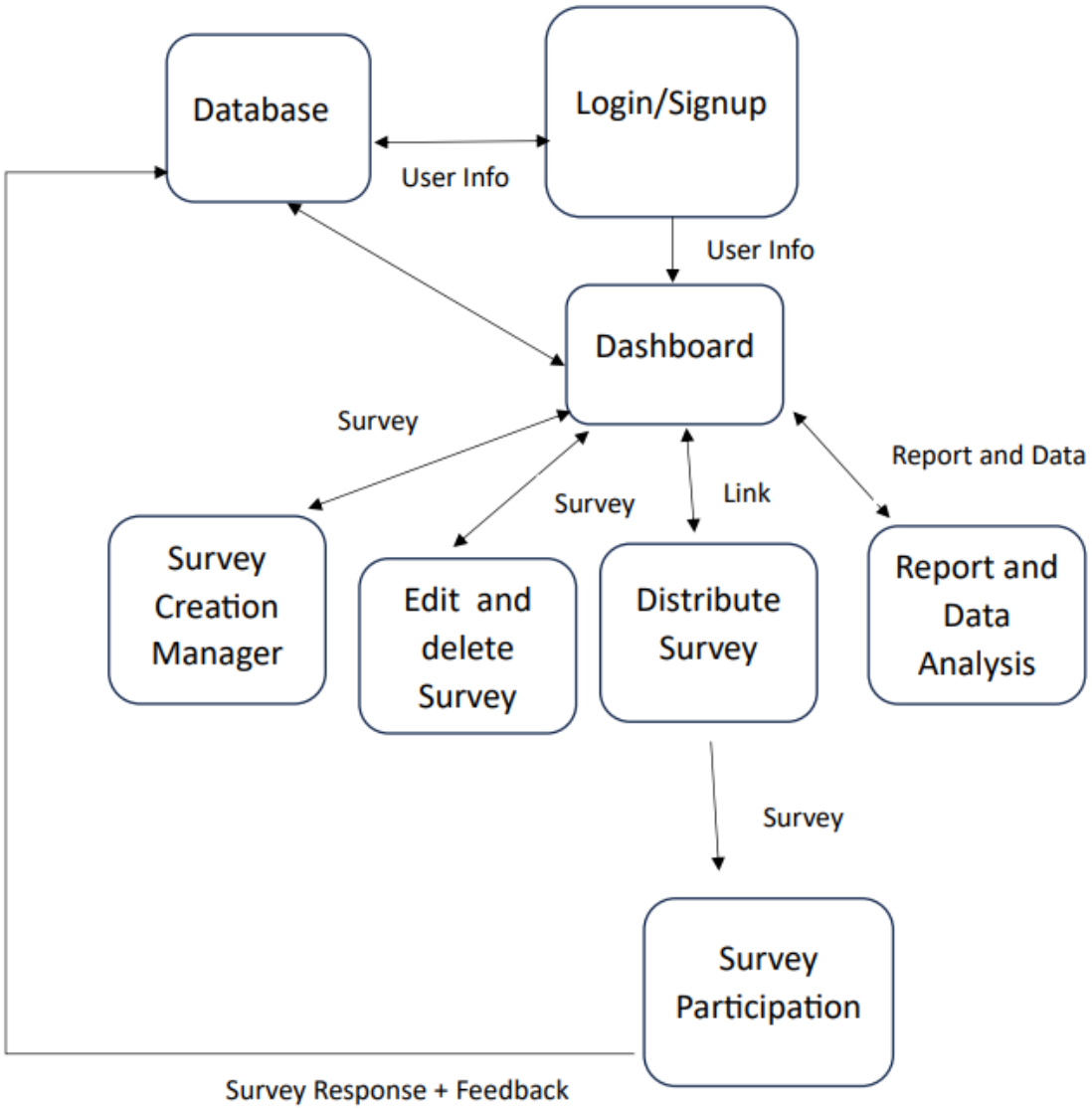

FIGURE 1

Figure 1 above shows a top down description of how the web application is expected to work and how components will interact with one another.

The dashboard is the main component. The survey creation manager and the edit and delete survey can create, edit and delete surveys from the database along with modifying the parameters for the survey and the contents within.

The login/signup is for signing up, logging in, logging out, and authenticating users. The survey participation will get user responses and feedback from the participants that are then saved in the database.

The report and data analysis will generate a report and fetch the data from the responses. The distribute survey function will generate a link to the survey that is to be shared with the participants.

2.2 Dependency Description

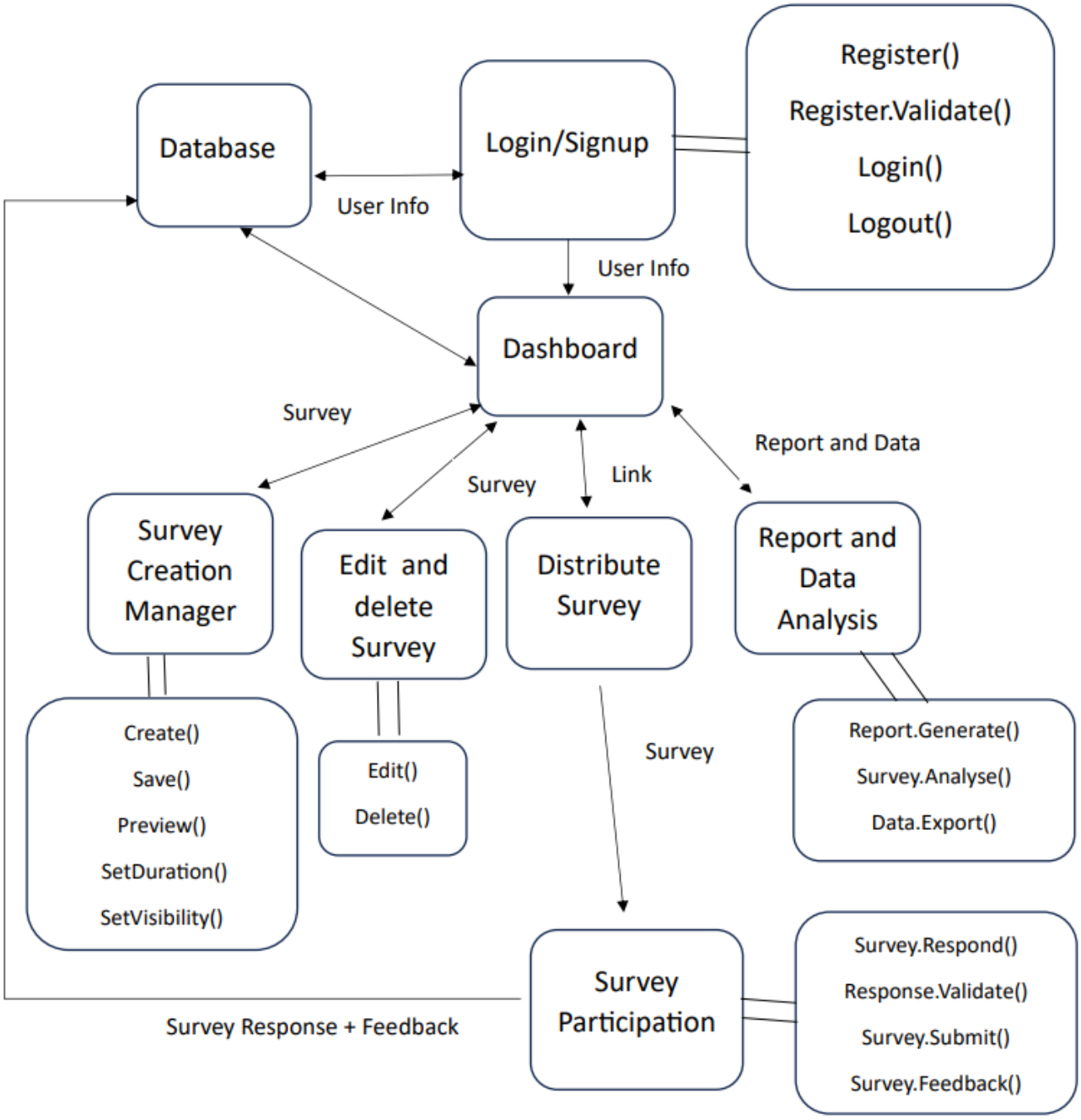

FIGURE 2

Figure 2 above represents the component diagram of the SS system and how each module is dependent on another for its functionality. Double lines are used to show functions that are attached to modules. Via the Login/Signup, the user is expected to enter their credentials that will authenticate the user and allow them access to the Dashboard.

After being authenticated, survey information will be retrieved from the database on request. The user needs authentication if he needs to manage the survey. The user can then create and edit surveys from the Survey Creation Manager and the Edit and delete survey. The user can generate a link to the survey to be shared to the participants using Distribute Survey.

If the user is a participant, they will not be prompted to authenticate since the surveys are to be taken anonymously. The participants can then take the survey following the link that the survey manager has sent them and submit their response along with any feedback which will then be stored within the database.

If the user wishes to analyze the data, the system can retrieve a report of the user data generated from the participants' responses along with tools to visualize and options to export.