Data Analytics

**(Project Title)**

Software Design Document

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**1. INTRODUCTION**

**1.1 Purpose**

This design document describes the architecture and system design of XX. …. XX purpose is to allow for realtime search through the large amounts of data gathered by the MedVoice app, and display it in a readable manner for business purproses.

**1.2 Scope**

To easily display log data, which can be difficult to decipher due to a lack of standardization between databases (SQL, NoSQL, ElasticSearch, mongo DB, etc.) and make it easy to understand for business/analytic purposes. The software will take in mock user data (such as name, address, health rating, IP, alignment), store them in a generalized format and allow that data to be queried.

**1.3 Overview**

This document will contain the purpose, scope, system overview, system architecture, data design, component design of this project.

**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 design document that are most likely not known to the audience.

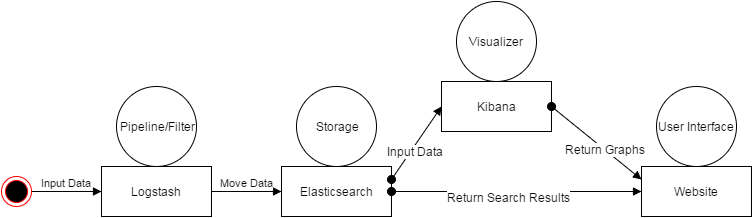
**2. SYSTEM OVERVIEW**

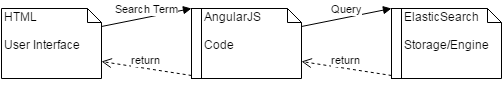
Give a general description of the functionality, context and design of your project. Provide any background information if necessary.

**3. SYSTEM ARCHITECTURE**

**3.1 Architectural Design**

Develop a modular program structure and explain the relationships between the modules to achieve the complete functionality 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 a diagram showing the major subsystems and data repositories and their interconnections. Describe the diagram if required.





**3.2 Decomposition Description**

Provide a decomposition of the subsystems in the architectural design. Supplement with text as needed.

**3.3 Design Rationale**

Discuss the rationales for selecting the architecture described in 3.1 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. DATA DESIGN**

**4.1 Data Description**

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.

**4.2 Data Dictionary**

Alphabetically list the system entities or major data along with their types and descriptions.

**5. COMPONENT DESIGN**

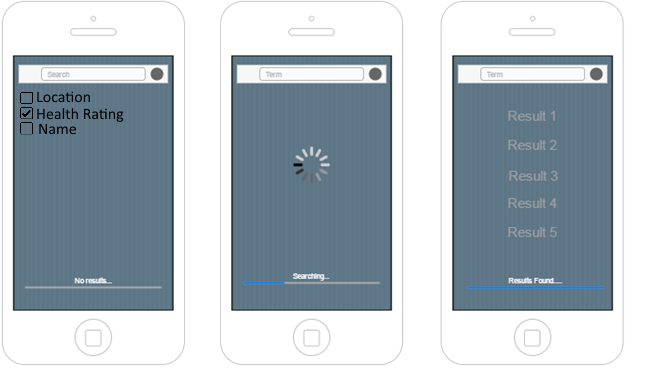
In this section, we take a closer look at what each component does in a more systematic way.

**6. HUMAN INTERFACE DESIGN**

**6.1 Overview of User Interface**

Describe the functionality of the system from the user’s perspective. Explain how the user will be able to use your system to complete all the expected features and the feedback information that will be displayed for the user.

**6.2 Screen Images**



**6.3 Screen Objects and Actions**

Screen has three objects, a textbox, a series of checkboxes and a search button. The user will input a term to search, check boxes to limit where the app should look for the term, and search button to initiate the search.

**7. REQUIREMENTS MATRIX**

Provide a cross reference that traces components and data structures to the requirements in your requirements document.

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

**8. APPENDICES**

*This section is optional.*