Software Requirements Specification

for

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1. Introduction

1.1 Purpose

The purpose of this document is to provide a detailed description of the requirements for the development of a web and Mobile application and that displays information on government health schemes. The web application will be built using React and will connect to a Firebase Realtime Database and Mobile App will be built using Flutter and Dart and It will also connect with a same Firebase Realtime Database as web Application. It will provide features such as user login, user registration, filtering of schemes by age, name and government, and a FAQ section. The purpose of this application is to make the information about the government health schemes more accessible to the public. This will help people to make informed decisions and choose the best health scheme that suits their needs.

1.2 Product Scope

The scope of this project is to develop a web and Mobile application that will display information about the various government health schemes in different states. The both application will allow users to search for health schemes based on their state and other criteria. The both application will also provide details about the eligibility criteria, benefits, and other relevant information about the schemes as well as include an FAQ system for queries.It is for the common users as well as advanced users aiding in their form filling.

1.3 Definitions. Acronyms, and Abbreviations

Web App refers to a website that a user can use.
React refers to a popular frontend library of Javascript.
Flutter refers to a frontend of mobile App for cross Platform.
Firebase refers to a server hosting and managing platform by Google.
Realtime Database refers to a Firebase database feature.

1.4 References

IEEE standard template for IEEE standard

1.5 Overview

This document is organized into Introduction, Overall Description, Specific Requirements System features and Other non functional Requirements. Each individual section is further subdivided into bullets describing their respective content.

2. Overall Description

2.1 Product Perspective

The web and Mobile Application is a standalone app and should be designed to be accessible to all users, regardless of their level of technical expertise or familiarity with government health schemes.
The app should also be designed to be scalable and flexible so that it can be easily updated as new health schemes are introduced or existing schemes are modified. It should be able to handle large amounts of data and provide users with real-time updates on the status of their applications. In addition, the app should be designed with security in mind, with appropriate measures in place to protect user data and prevent unauthorized access.

2.2 Product Functions

A government health scheme display web app and Mobile app should have several functions that make it easy for users to access information about various health schemes offered by the government. Some of these functions include:

1. Eligibility check: The app should allow users to check their eligibility for different health schemes based on their demographic, income, social details, etc.
2. Scheme discovery: The app should help users find relevant health schemes from hundreds of schemes available based on their eligibility.
3. Application guidance: The app should guide users on how to apply for different government health schemes.
4. Dedicated scheme page: The app should provide a dedicated scheme page with detailed knowledge, FAQs, and application process.
5. User-friendly interface: The app should be designed to be user-friendly and accessible to all users, regardless of their level of technical expertise or familiarity with government health schemes.
6. Scalability and flexibility: The app should be scalable and flexible so that it can be easily updated as new health schemes are introduced or existing schemes are modified.
7. Security: The app should be designed with security in mind, with appropriate measures in place to protect user data and prevent unauthorized access.

2.3 User Characteristics

User classes for a government health scheme display web and Mobile app can be divided into two categories:

1. Registered users: These are users who have created an account on the app and can access additional features such as personalized scheme recommendations, personalized filtering, etc
2. Unregistered users: These are users who have not created an account on the app and can only access basic features such as scheme discovery and eligibility check.
3. Administrators: Those who can edit schemes and add new entries to database along with answering queries

2.4 Constraints

This web app needs to work on all major web browsers on all major OS and should be responsive as well as fast and Mobile App needs to work on all cross platform like android, iOS and web. This web and Mobile app needs to be also easy to understand and secure.

2.5 Assumptions and Dependencies

One major dependency is the availability of data along with the govt websites and Mobile App that provide them. These need to be verified and up to date at all times, also we will be assuming those websites and Mobile App to display correct information regarding the schemes as verifying that is out of scope for this platform.

3. Specific Requirements

3.1 External Interface Requirements

1. User interface: The app should have an intuitive and user-friendly interface that allows users to easily navigate and access information.
2. Hardware interfaces: The app should be compatible with different hardware devices such as smartphones, tablets, and computers.
3. Data interfaces: The app should be able to access and retrieve data from backend database.
4. Security interfaces: The app should be designed with security in mind to protect sensitive data such as patient information.

3.2 Functional Requirements

1. User Registration: The application should allow users to register and create an account.
2. User Login: The application should allow registered users to log in and access the information.
3. Search: The application should provide a search option to allow users to search for schemes based on their state, eligibility criteria, benefits, etc.
4. Scheme Details: The application should display details about the health schemes, including eligibility criteria, benefits, and other relevant information.
5. Eligibility criteria: The app should provide information about eligibility criteria for different health schemes.
6. Application process: The app should provide information about the application process for different health schemes.
7. FAQ section: The app should provide a page to ask queries and view previously answered queries

3.3 Performance Requirements

The app should respond to the user without much delay while running on web and Mobile and fetching the data from the backend firebase server. It should also be able to post data as questions fast enough as well as so auth.

3.4 Logical Database Requirements

On a high level this app should use a get request for fetching data from firebase server as a json object about schemes with a specific schema to display as cards. It should use a post request for questions and a mixture of get and post requests for user authentication

3.5 Design Constraints

The app should be responsive across all screen sizes and support all the old and latest version of smart phone as well as be able to run on all major browsers

4. Other Nonfunctional Requirements

4.1 Performance Requirements

The app should respond to the user without much delay while running on web and Mobile and fetching the data from the backend firebase server. It should also be able to post data as questions fast enough as well as so auth.

4.2 Compatibility Requirements

The app should be compatible with all major browsers and OS and Smart Phones. It should also support all standard network protocols for opening and maintaining a safe and reliable connection to the database.

4.3 Security Requirements

The app should keep user or patient data private and only show a user recommendations based on their data.

4.4 Accessibility Requirements

The app should have a simple and intuitive UI with more focus on graphics and less of heavy technical terminology since it has to reach common masses