

Implementation Paper of Design and Development of a System Based Application for Reading and Learning Ayurveda Sutras

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ABSTRACT:

The main aim of this application is to provide the user with better understanding and learning the ayurvedic shloka. Because most of the ayurvedic shloka are based on sanskrit. It is difficult for everyone to learn and understand the same. So, with this application user can learn the shloka and its pronunciation. The basic idea of this mobile application is to provide the user with audio of the shloka and the context of that particular shloka.

KEY WORDS: Ayurveda shloka, mobile application, pronunciation.

Date of Submission: 07-06-2022

Date of acceptance: 22-06-2022

I. INTRODUCTION:

Sanskrit (5000 years old) is the oldest language in the world. The meaning of the ayurvedic concepts is deeply rooted in the language. Ayurveda lives within the language of gods. It is nearly impossible to learn ayurveda without the usage of sanskrit, once we understand the root words we can decipher and recognize many terms with more visibility. The one with more basic knowledge of sanskrit will face difficulty in understanding the language.

Sanskrit literature mainly comprises contents which are composed in the primitive ancient India known as vedic sanskrit. Vedic sanskrit is the language of the liturgical works of the vedic religion. There are four vedas which are solely comprised in sanskrit. These vedas are not only used in rituals but also have more scientific values in the field of medicine. The language of ayurveda is sanskrit. This is from the prominent Charak Samhita. "Ayur" means an ancient system of life and "Veda" means knowledge. Ayurveda basically analyses life and all its layers.

Charak Samhita is ayurveda's exposition. It is the most referenced data by students, scholars, physicians, researchers and teachers in the field of ayurveda and in medical field. Charak Samhita is the only data which is available worldwide on restorative science. It mainly focuses on the development of health and prevention of diseases. Charak Samhita is thought to have arising in the first century C.E. Charaka dwelled into all the areas of medicine including logic and philosophy.

Our project mainly comprises of a shlokas that has been implemented in the form of mobile application which can be used by teachers, students etc. this helps the user with better understanding of shlokas. Audiobook has proven successful in its own unique way but not widely in use. An Audiobook is a voice over of the particular data read out aloud. There are many applications which are developed from the idea of audiobook. Even though Sanskrit is the oldest language in the world, it is strenuous to understand. The words and sentences contain unique meanings. The grammar in the sanskrit is boundless, it is nearly impossible to simply learn sanskrit.

The distinctiveness of our application is the voice over of the shloka in sanskrit described with the denotation of the same. The basic idea of this project is to collect the audio context of the shloka and the description below which enables the user to listen the audio and the description at the same pace. This helps user to listen and view the shloka with that particular description. This application helps the user to understand, study the shloka and rewind it as many times.

OBJECTIVE OF THE PROJECT:

1. To develop an application to read and learn Ayurveda shloka
2. To collect the required data (Ayurveda shloka, meaning of the sutras, sandhi).

3. To collect audio of the Ayurveda shloka.
4. Sync the Ayurveda shloka with the audio.

IMPLEMENTATION:

OUR proposed system is implemented using the following software techniques..

1. FLUTTER
2. FIRE BASE
3. FIRE STORE
4. ANDROID STUDIO

Our application ,user interface is crafted beautifully using google sportable UI tool kit flutter. it is an open source framework by google for developing mobile applications. flutter code compiles ARM OR intel machine code as well as javascript for fast performance on any device. it is powered by dart , a language optimized for fast apps on any platform.

Firebase is a google-backed application development software that enables the developer to develop IOS , android web apps. Firebase provides tools for tracking analytics , reporting and fixing app crashes ,creating , marketing and product experiments. firebase offerd an number of services analytics,authentication,cloud messaging, real time database, crash litics, performance and test lab. This has been of great benefit in developing our application.

Cloud firestore is an no sql document database that lets you easily store , sync, and query data for our mobile and web apps at global scale. We can automatically synchronis our app data between devices.this helps to build collabortive experiences and real time apps.users can make changes at there data any time, even when it is offline. Offline mode is available on ios ,android and web.

In our application we have used firestore to store the lyrics and audio of the shloka.

Android studio is a unified environment where you can build , develop applications for various mobile applications.in our application we have used android studio for running the code which is written in dart programming language.

II. METHODOLOGY:

Audiobooks: Audiobook has proven successful in its own unique way but not widely in use. An Audiobook is a voice over of the particular data read out aloud. There are many applications which are developed from the idea of audiobook. Even though Sanskrit is the oldest language in the world, it is strenuous to understand. The words and sentences contain unique meanings. The grammar in the sanskrit is boundless, it is nearly impossible to simply learn sanskrit.

Music player: music player lets you manage and play your digital music in variety if ways. There are various music player applications that are available in the market.

Our application is based on the ideology of both audiobook and music player. Which helps users to learn ayurvedic shlokas.

It is designed in such a way that users can conviniantly learn Sanskrit shlokas independently. It is a self learning application.

In our application. We used trained dataset i.e shloka , which is saved in lrc format and stored in cloud based firestore. Which contains the lyrics and audio of the shloka.

Our user interface is designed in such a manner that it has a login screen which includes user credentials such a user phone number, which follows by generating an automatic otp for the same. This leads us to the official home screen of the application.

Home screen includes the following fields :- latest shlokas , popular shlokas and the amazing facts and general information about the application.

Users can select shlokas of there choice in order to learn .

Another unique feature is our application is that the user can rewind or forward the shloka by 10 seconds . this helps the user to listen to the shloka as many times as required. It also helps in better understanding of the ayurvedic shlokas.

As seen in music players . this applications also contains a button to start and pause the shlokas , as many times as they could.

The user can also logout from there credentials as they wish.

III. CONCLUSION:

It's a real time application. Our applications mainly focuses on users who finds difficulty in learning ayurvedic shlokas. this application aims the same. It benefits lot of users in ayurvedic field.

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