

Universal Book Store

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Abstract -One of the important ways for e-commerce is using mobile devices because of time reduction and most of all its personalized aspect. The main objective of the project is to make available free PDF of books for engineering students that allows users to search a book online based on title, author and subject. Universal Book store is an application where the customer can download books through Smartphone. The user can login using his account details or new customers can set up an account very quickly. They should give the details of their name, contact number and address. The user can also give feedback to a book by giving ratings on a score of five. The Administrator will have additional functionalities when compared to the common user. He can add, delete and update the book details, book categories, member information. The Unique feature proposed by project are audio reading of books, inbuilt offline dictionary, Important note making

Index Terms-PDF, Offline features-Text to Speech, Dictionary, Lucene Algorithm, K-means.

I. INTRODUCTION

Universal Book store is an Android Application which will store all the books of engineering field. We have collecting the reference books of different branches and departments of engineering like

1. Computer Science
2. Information Technology
3. Electronics and Telecommunications
4. Civil Engineering
5. Mechanical Engineering

For example-Computer Engineering

In this branch there are no of subjects like Data structure, Data Mining, Operating System, Cloud computing etc. So in this case we are going to make available 10 no of reference books for each particular subject. So that it will allows users to search a book online based on title, author and subject.

The Unique feature proposed by project are Offline Audio reading of Book, Offline inbuilt Dictionary, Important Note Making. And also index pages will also be separately provided for the better understanding and fast searching. The Administrator will have additional functionalities when compared to the common user.

User: User gives input to the database like, sign up : It will provide security to the system. searching for the books: books will be search by giving the author name, book name. text to speech reading of books.

System: system will takes input and response to the clients. It will performs the operation like add, update, delete. The huge category of users are able to use the Application

II. MOTIVATION:

We thought of this project as it will create a user friendly environment for student basically for engineering student. Today's world is of the distribute architecture having many of things deployed over network for public purpose. Many of areas and sectors like Music, Sports, TV, Video channels having Unified architecture for ease of end user like Saavn, Gaana, Shazam, All Sports, Cricbuzz, Ten all, Star all, Youtube, are current fast growing trends in socialism.

III. System Architecture:

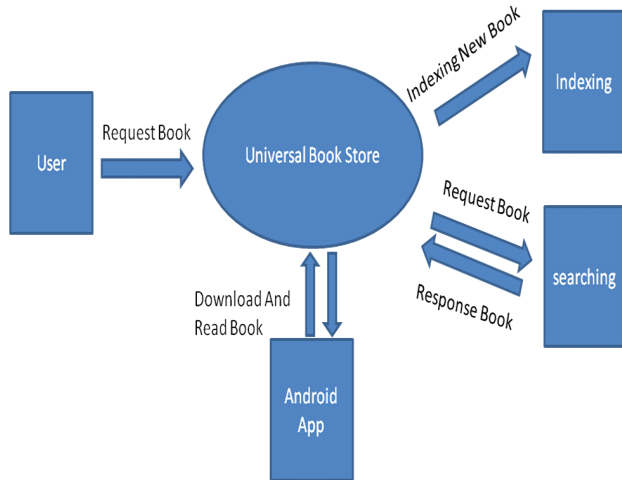
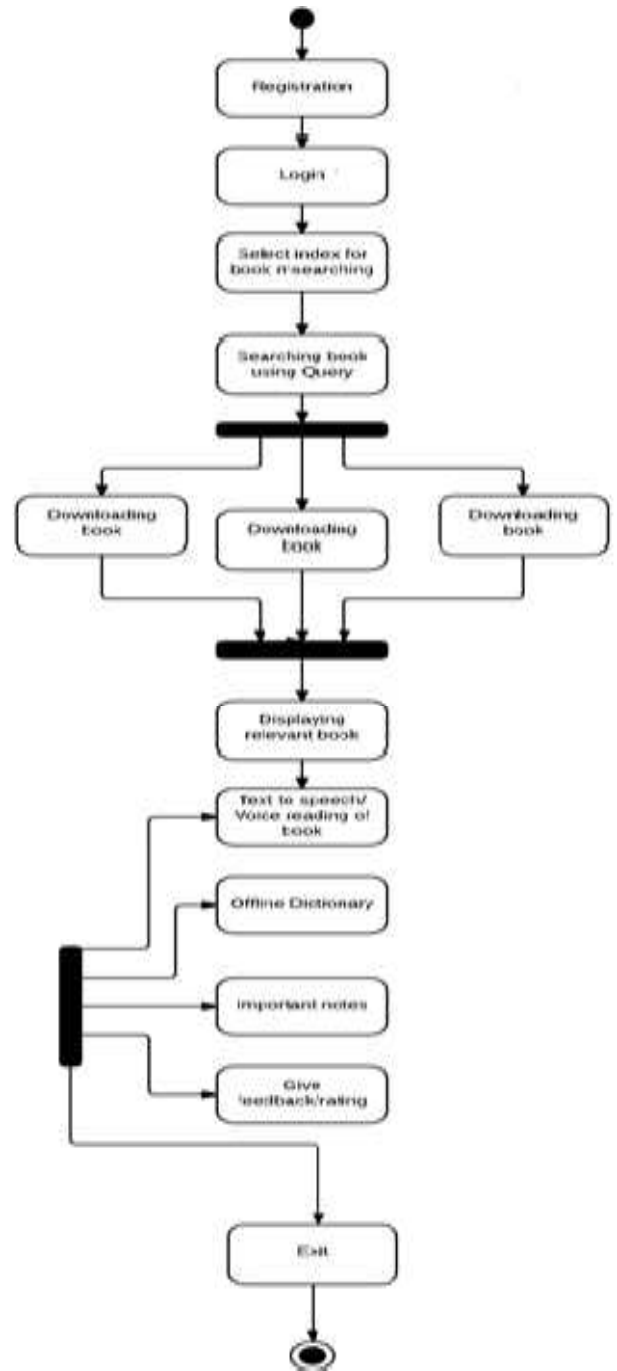
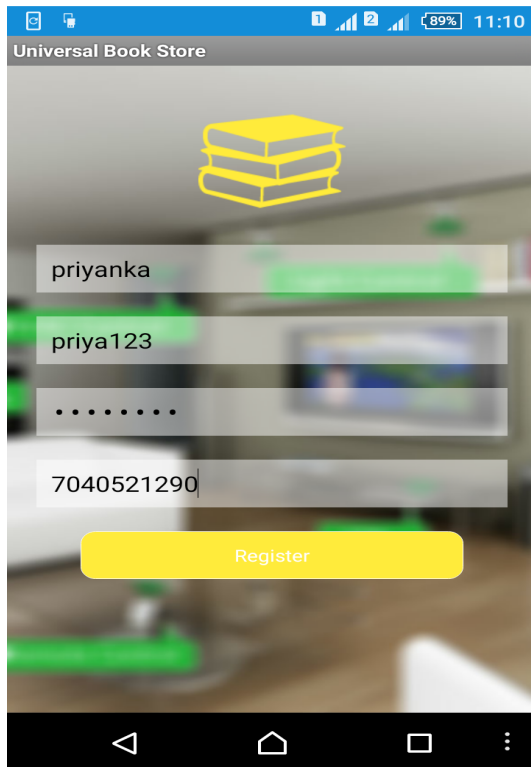


Fig 1. System Architecture

Project Flow:

1. Activity Diagram:

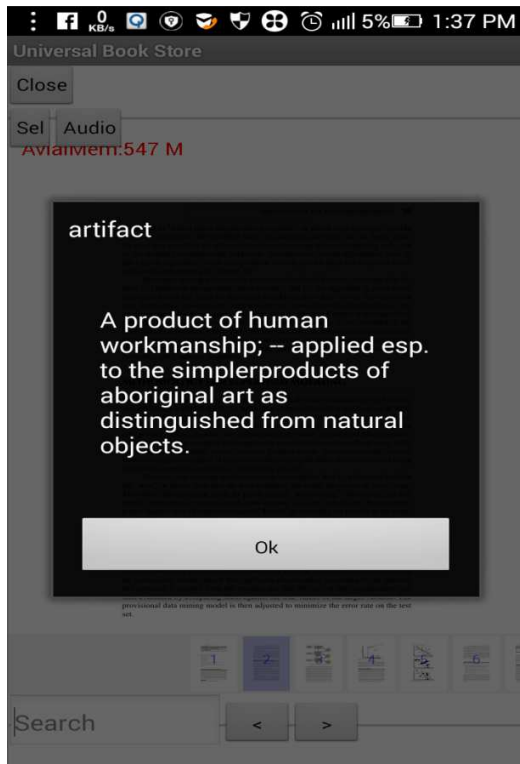




Screenshot: Gives meaning of words after longpress



Screenshot: Gives audio feature (Text to Speech)



IV. TECHNIQUES USED

Text-to-speech

Synthesis of speech is the transformation of the text to speech. This transformation is converting the text to the synthetic speech that is as close to real speech as possible in compliance with the pronunciation norms of special language. TTS is intended to read electronic texts in the form of a book, and also to vocalize texts with the use of speech synthesis. [1]

WEB-SERVICE Web service is a method of communication between two electronic devices over a network. It is a software function provided at a network address over the Web with the service. A Web service generally as, a software system designed to support interoperable machine-to-machine interaction over a network.

APACHE LUCENE

While suitable for any application that requires full text indexing and searching capability, Lucene has been widely recognized for its utility in the implementation of Internet search engines and local, single-site searching. At the core of Lucene's logical architecture is the idea of a document containing fields of text. This flexibility allows Lucene's API to be independent of the file format. Text from PDFs, HTML, Microsoft Word, Mind Maps, and OpenDocument documents, as well as many others (except images), can all be indexed as long as their textual information can be extracted.[5]

PHRASE QUERY

A Query that matches documents containing a particular sequence of terms. A Phrase Query is built by Query Parser for input like "new York". This query may be combined with other terms or queries with a Boolean Query.

TERM QUERY

A Query that matches documents containing a term. This may be combined with other terms with a Boolean Query. [2]

K-Means

Two very common task in data mining are classification and clustering.

Classification:

In classification we are given some training data where someone manually had classified each data in it to some category. Our aim is to do the classify the future data into categories as accurately as possible.

Clustering:

It is an unsupervised learning technique. The aim here is to group the data point into clusters such that similar items are lumped together in the same cluster. There are two types of clustering. One is called hierarchical clustering where you try to create a hierarchy of related objects or clusters. And the other major type of clustering is called iterative clustering.

Distance Major

for each stage of Lloyd's algorithm, for each of the k centers, we need to compute the centroid of the set of data points for which this center is closest. We then move this center to the computed centroid and proceed to the next stage.[4]

Steps:

- Randomly choose k item and make them as initial centroids.

- For each point, find the nearest centroid and assign the point to the cluster associated with the nearest centroid.
- Update the centroid of each cluster base on the item in that cluster. Typically the new centroid will be average of all points in the cluster.
- Repeat steps two and three, till no point switches clusters.

V. PROPOSED METHODOLOGY

In this paper we have studied different methodologies which can be useful to complete the given problem. Google Play Book is one of the dominating app in on Play store for reading and availability of books. Though sign up- sign-ins are cumbersome things for accessing the books on the store. Rather than reading no other feature is provided by Play Book. For overcoming these drawbacks we are proposing new technological solution. Universal Book Store is the new app providing multiple features rather than only book displaying like

- Text-to Speech voice reading of book.
- Live dictionary feature while ongoing book reading.
- Particular word searching while reading book.

VI. CONCLUSION

Universal Book Store presenting online offline features of play store. And thus making it easily accessible and flexible in every field.

VII. ACKNOWLEDGMENT

It gives us immense pleasure to present the preliminary paper on "Universal Book Store" We would like to take this opportunity to thank our internal guide Prof. V. S. Gaikwad for giving us all the help and guidance we needed. We are really grateful to them for their kind support. Their valuable suggestions were very helpful.

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