

EKALAVYA

A App Report

submitted by

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1 INTRODUCTION

Ekalavya is a free source, online educational platform exclusively for the students of classes 6th to 10th in Andhra Pradesh State Board. It is provided with textbooks for all subjects including languages i.e. Telugu, Hindi, English and Maths, Science and social. It also has service of video lectures and Practice bits. Video lectures are collected for better understanding from reputed faculty. Practice bits are just like tests which helps students to start preparing for exams at free of cost. Ekalavya helps students to gain knowledge which enhances their learning skills.

App Link:

<https://play.google.com/store/apps/details?id=com.ekalavya.amdevelopers>

For the students of classes 6th to 10th SSC

2 SYSTEM ANALYSIS

2.1 OBJECTIVE

Secondary standard is an important foundational phase of every child's education where they learn basics and implement them in future. Our motto through "Ekalavya" is to give students of classes 6th to 10th clear understanding of what they learn through text books and video lectures and enhance their skills through practice bits.

2.2 SCOPE

Ekalavya is supported in android mobiles. Good internet connection is necessary in order to access this application.

2.3 PROPOSED SYSTEM

Ekalavya contains 3 main sections i.e. books, videos and practice. Each of the main sections have sub sections from grade 6th to 10th. By clicking on each grade, based on your medium (either telugu or english) you can access books, videos and practice bits respectively through your mobile application. Especially in the view of telugu medium students, we have provided medium option for all the 3 main sections (books, videos and practice). Practice bits gives you 2 options, languages (telugu, hindi and english) and other subjects (maths, physics, biology and social). For each subject, practice bits are provided chapter wise.

3 IMPLEMENTATION

3.1 OVERVIEW OF SOFTWARE USED

3.1.1 Android studio

Android Studio is the official Integrated Development Environment (IDE) for Android app development, based on IntelliJ IDEA. Android Studio offers even more features that enhance your productivity when building Android apps, such as:

- A flexible Gradle-based build system
- A fast and feature-rich emulator
- A unified environment where you can develop for all Android devices
- Apply Changes to push code and resource changes to your running app without restarting your app
- Code templates and GitHub integration to help you build common app features and import sample code
- Extensive testing tools and frameworks
- Lint tools to catch performance, usability, version compatibility, and other problems
- C++ and NDK support
- Built-in support for Google Cloud Platform, making it easy to integrate Google Cloud Messaging and App Engine

3.1.2 Firebase

The Firebase Realtime Database is a cloud-hosted database. Data is stored as JSON and synchronized in realtime to every connected client. When you build cross-platform apps with our iOS, Android, and JavaScript

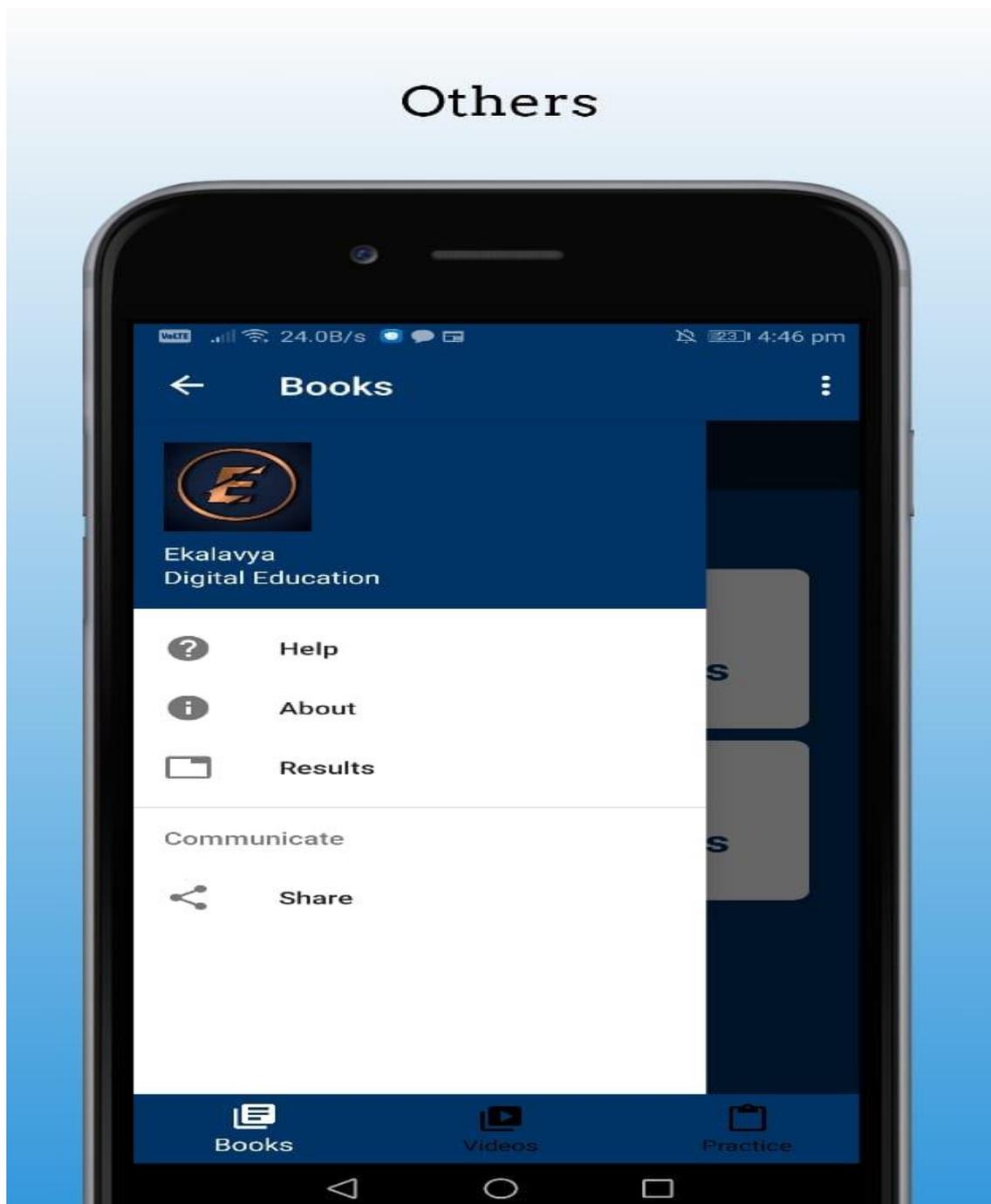
SDKs, all of your clients share one Real-time Database instance and automatically receive updates with the newest data.

Firebase provides a real-time database and back-end as a service. The service provides application developers an API that allows application data to be synchronized across clients and stored on Firebase's cloud. Firebase is a mobile platform that helps you quickly develop high-quality apps, grow your user base, and earn more money. Firebase is made up of complementary features that you can mix-and-match to fit your needs, with Google Analytics for Firebase at the core. You can explore and integrate Firebase services in your app directly from Android Studio using the Assistant window

3.1.3 AdMob

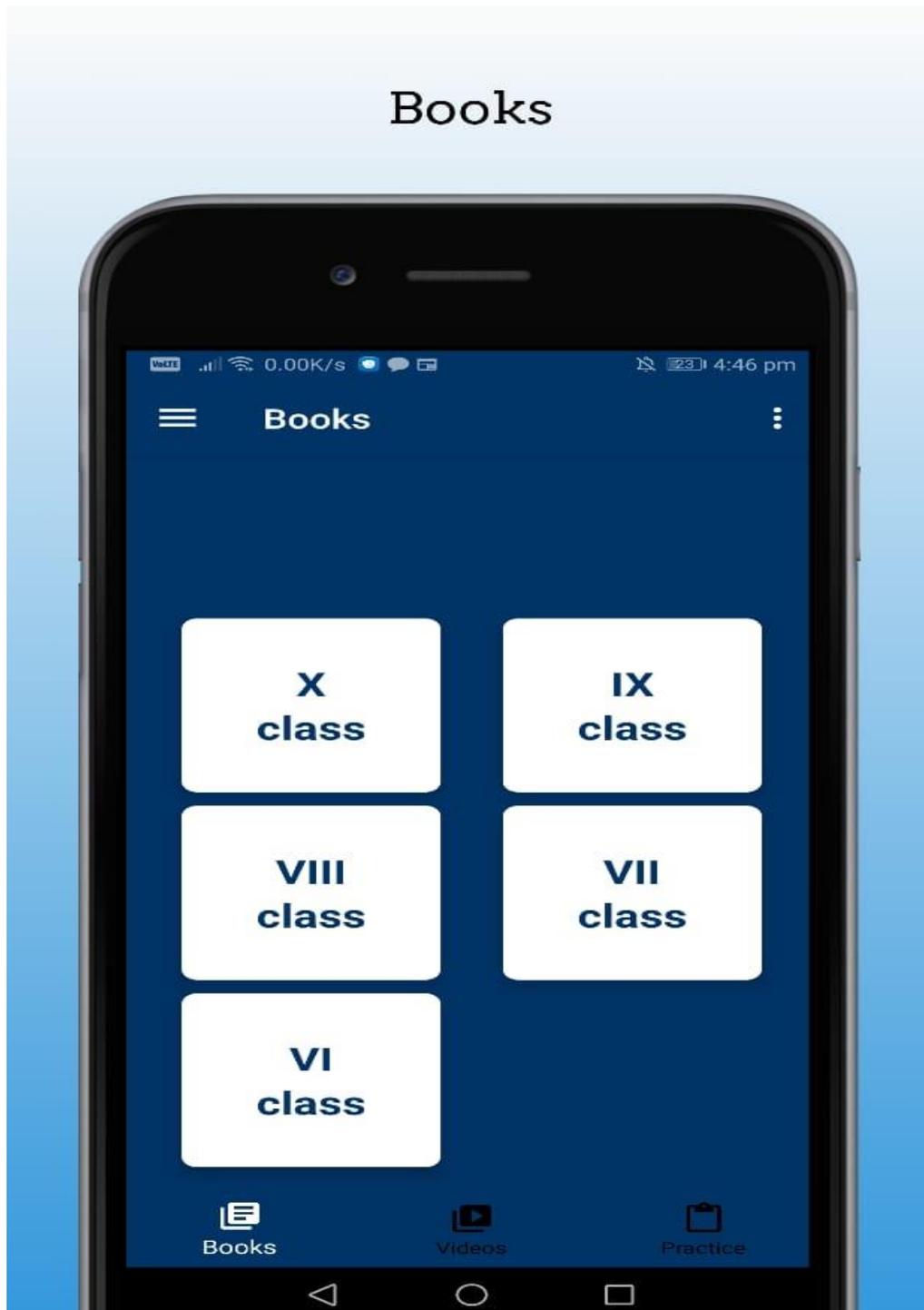
AdMob is Google's advertising platform for promoting and monetizing mobile applications. Your AdMob account connects with your AdWords account to distribute your ads for your Android, iOS, or gaming applications. By connecting AdMob to AdWords, you can create mobile app install campaigns. These campaigns are specific to getting more people to download your app. You can also segment your audiences to gain perspective on how people use your application.

4 SCREENSHOTS



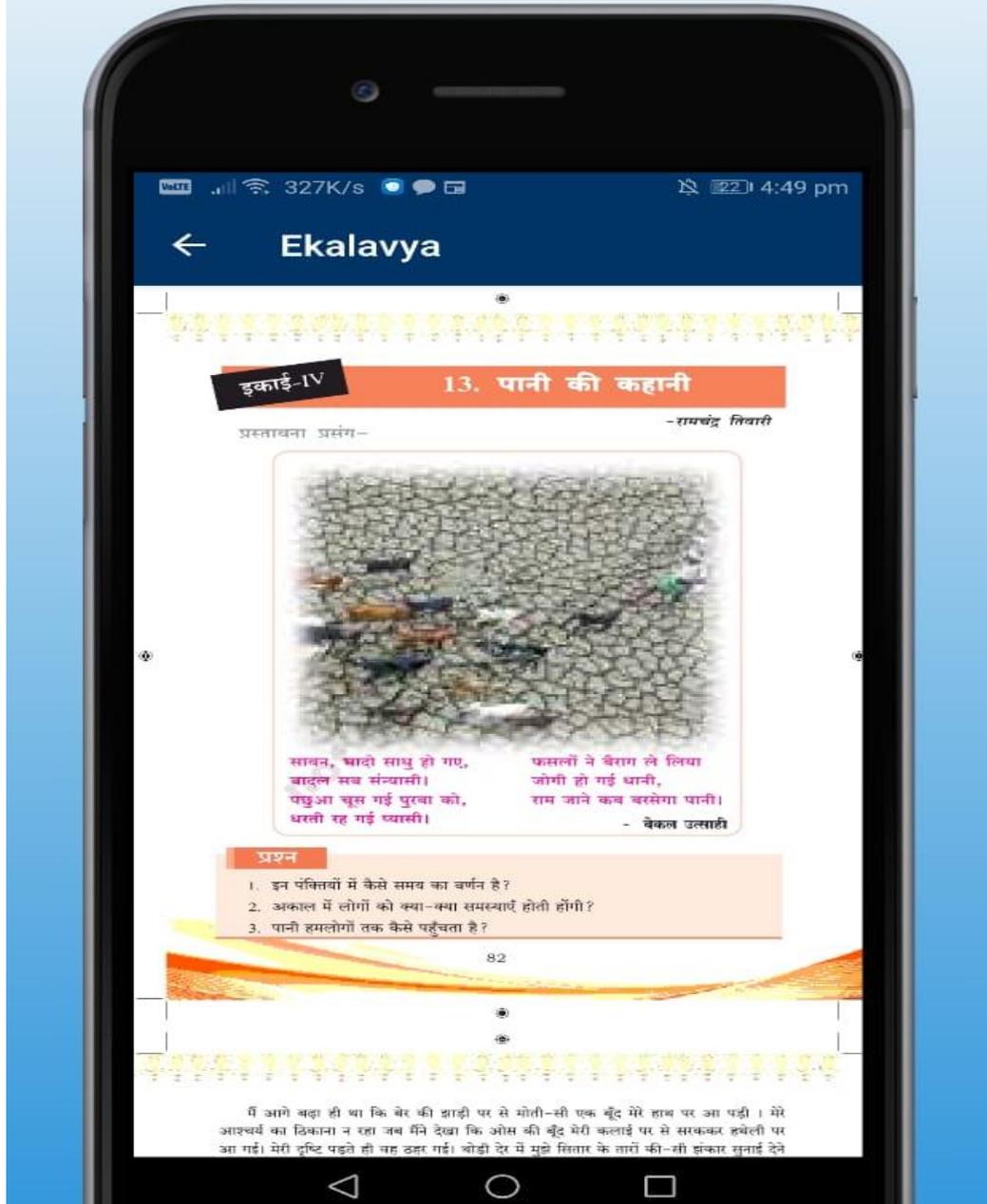
4.1 Details about Ekalavya

Books



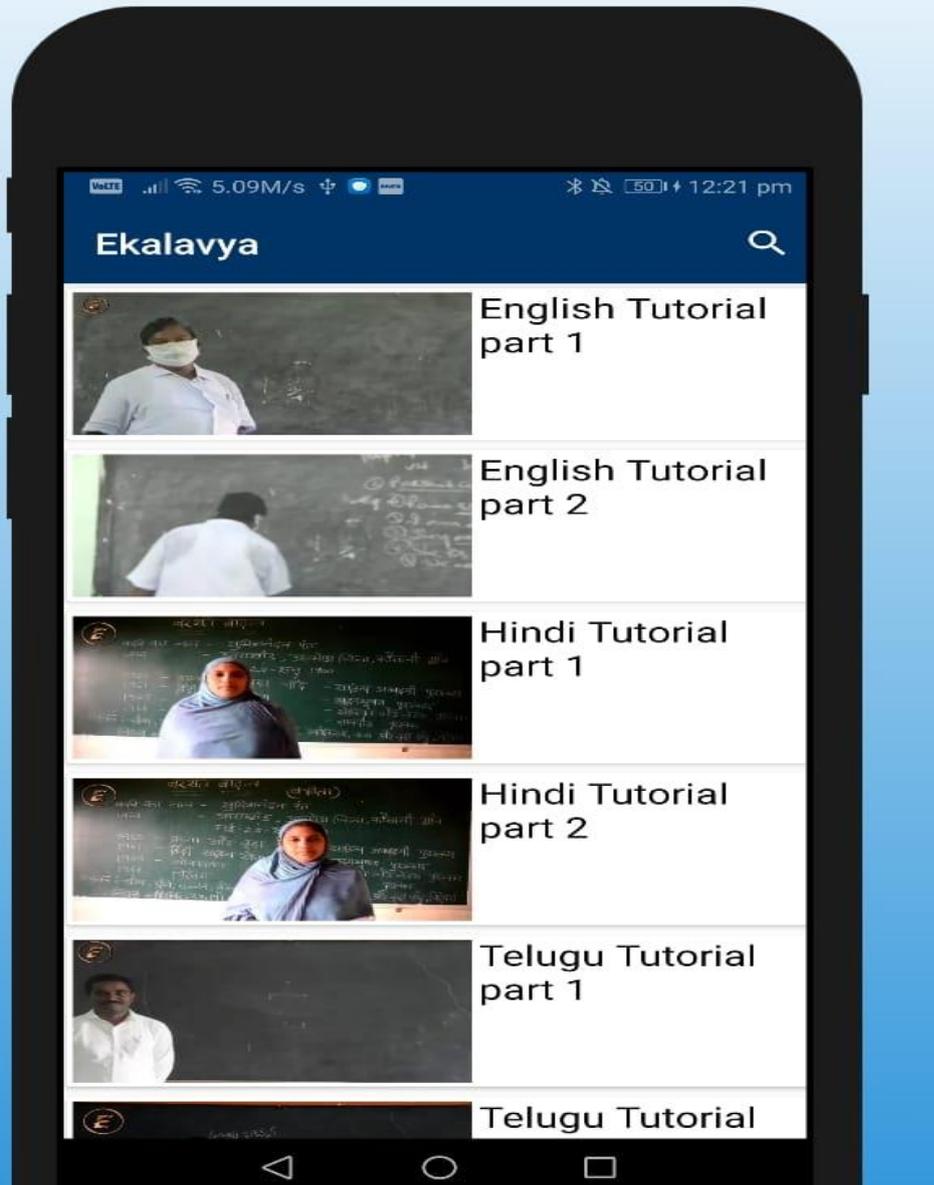
4.2 Accessing books for grades 6th to 10th

Textbook Viewer



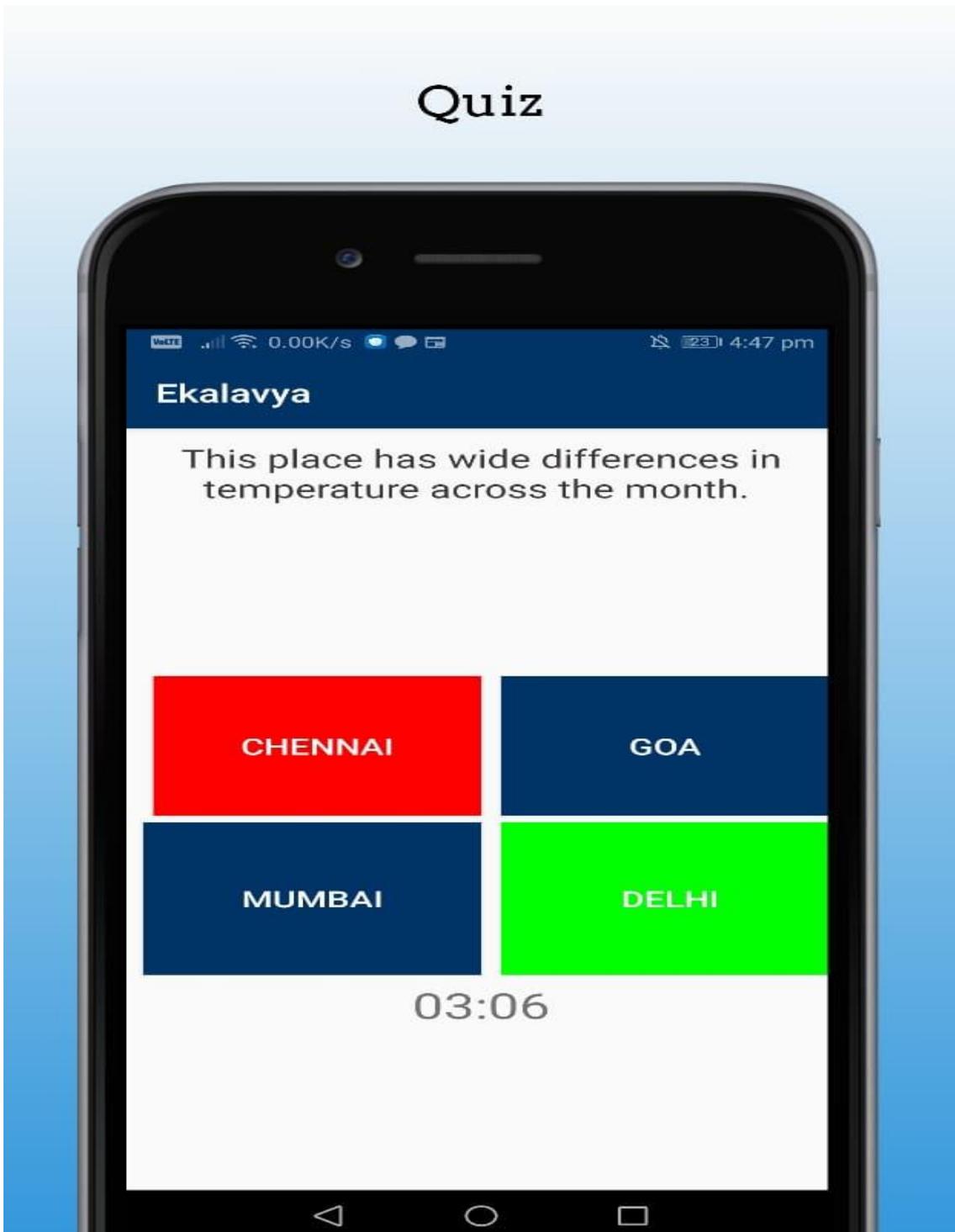
4.3 Accessing Textbooks

Video Classes



4.4 Accessing video lectures

Quiz



4.5 Accessing Practice bits

5 CONCLUSION AND FUTURE WORK

Ekalavya is reported to be performing well with positive reviews from the initial release. Few bugs have been reported. we have fixed them and we will be continuing this in future too. Fixing the bugs, updated version will be released in the plays store replacing the current version. Further in future, we are planning to extend the app for 1st to 10th class students.