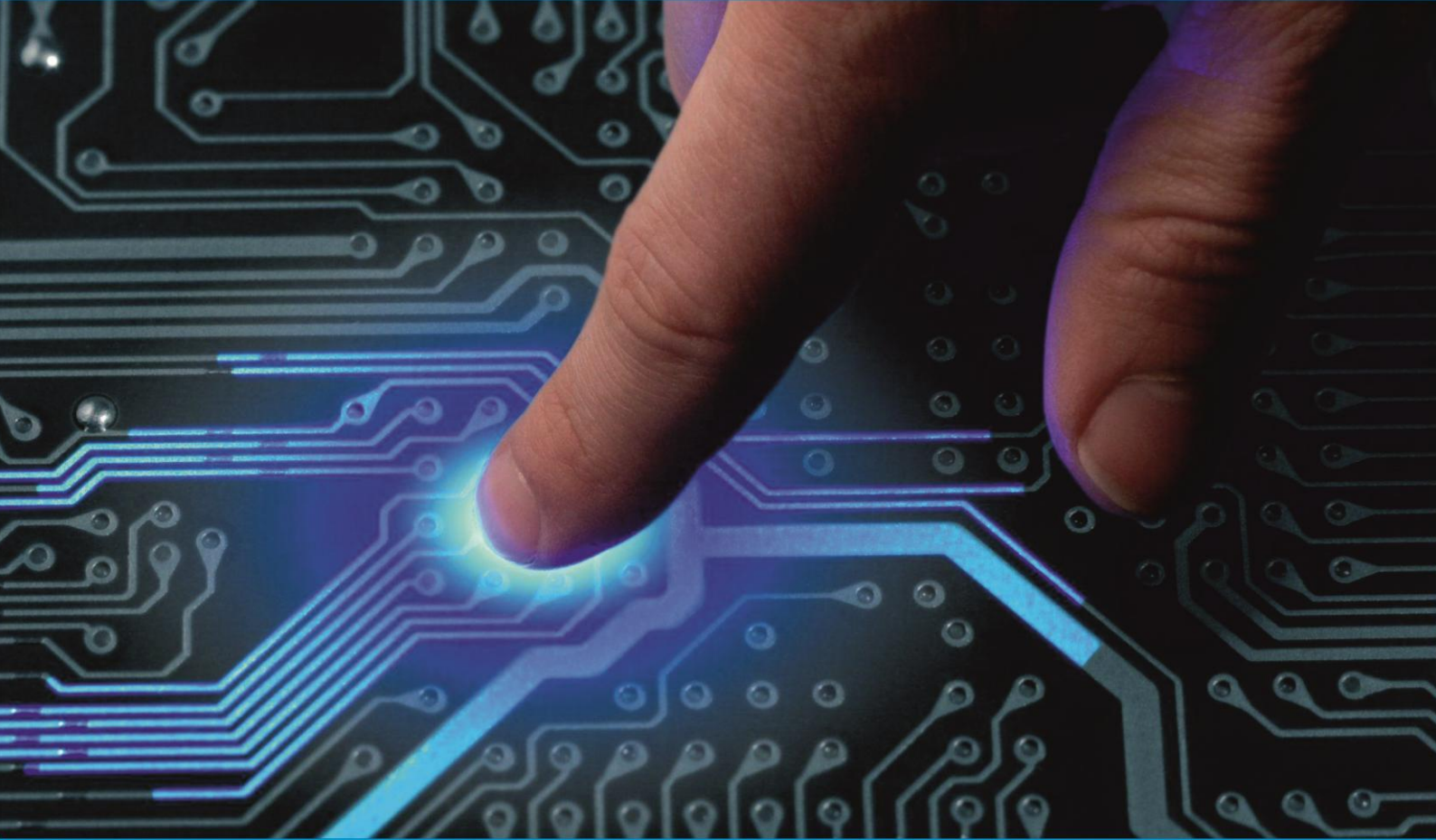




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# Easy Guitar: Implementation of Music Store Application

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**ABSTRACT:** This app mainly focuses on finding the best guitar as well as other musical instruments' stores near a location or a city, an ease for all the music aspirants who are dedicated in learning the art of music, where the first step is definitely searching and choosing the best gear to begin with. This app will also help in knowing your true potential and the best price range for your learning. It will also contain a guide from where you can begin your search from, be it budget, locality, brand or even manufacturer.

This app will also have a guitar tuner that will be based on mainly two types of guitar, a standard tuning guitar with the strings E A D G B E and a Bass Guitar with its standard tuning B E A D G or E A D G. A custom tuning option will also be added soon, but as of now only the standard tunings will be available. A tuner for Ukulele enthusiasts will also be in consideration.

**KEYWORD:** Location, Guitar, Location, Android

## I. INTRODUCTION

Easy Guitar mainly focuses on guiding the best music shop nearby or in the particular city for buying the best quality guitar with some really amazing benefits that can help newcomers in the music line decide the best gear for themselves even in the learning stage. They'll also be benefitted by getting some deals on their purchase, for example a warranty/guarantee on the products they purchase from the store guided by the app.

A built-in tuner will also be available as a part of this application. The accuracy of the tuner will be the utmost point of the application. It surely wouldn't be disappointing.

## II. LITERATURE SURVEY

1. A simple application cannot replace a music teacher, but the goal is to become as close as possible, and therefore, interactivity is a must. It is very important to have it integrated into music projects because the users can receive feedback which they can use in order to improve. An interesting way to bring interactivity into music projects is to implement a method of note recognition. Thus, the device which runs the app has the capacity to listen and process the sound produced by the user's instrument. Electrical devices are very important instruments used in learning processes. Music is a difficult and wide domain that requires a lot of time and devotion. This is why the advantages of electrical devices are very important, since they bring extra convenience, time, and diversity of learning resources.

2. Guitar, an epitome of the expression "a work of adoration" has gotten perhaps the most mainstream instruments these days. The most wizardry thing is guitar can mimic pretty much every other instrument, inconceivably adaptable! It's chordal like a piano, can play however much notes as you need, however not as unequivocally along these lines, with a couple of harmonies, a little practice and a nice voice, you can play and sing and have a fun time with others. A lot of tuning applications are rushing to the Android applications market, making it truly helpful for individuals to tune their guitars at whatever point and any place simply utilize their telephones. This task is to plan an Android application for new guitar students to learn essential guitar harmonies without any problem. The application would distinguish the

sound made by the client when client pick the particular harmony continuously and advise them if their fingers press the correct fret of the string by changing the fret speck's tone and showing some content on the screen.

3. Hobbies playing musical instruments is one hobby that teaches patience and perseverance [1-5]. One of them is a musical guitar instrument. With the many variations of the chord in playing the guitar, to be proficient or just to sing harmonious melodies while being clear needs perseverance and patience. In this study propose an embedded system and a smartphone application that allow guitar students to practice guitar, without music sheet, by lightening LEDs on the corresponding positions at the guitar fretboard. This research has succeeded in achieving the goal of making a basic guitar chord educational game so that it can use to facilitate the learning process for individuals who are currently or will be learning guitar. This application equipped with additional facilities, namely the try-it feature in the bonus round. This feature will stimulate users to directly practice the results of learning basic guitar chords into a song that has provided by the chords that have taught before.

4. We dive into guitar industry and find a tuning device that can be elaborate more as an option for customer to choose from. Besides from manual tuning that need a great amount of skills, there are manual tuning using pitch pickup device that are clipped at the head of the guitar picking up the frequency and convert it to Notes such a E,A,D,B,G,E in order. The analysis of data collected is collected by testing the duration and accuracy of the tuning with our project itself. We use it to prove that this project is reliable and one of incentive that our generation can use to benefit. This analysis study was conducted for our semester five in electrical engineering study in polytechnic we use it for better understanding of the guitar tuner itself.

5. The electric guitar is certainly not an advanced instrument. It can, in any case, be depicted as a multi-segment framework that incorporates both the guitar, the related impact pedals, and the speaker as a component of a bigger instrument. Through responding to the examination questions, the second point of the investigation—planning and building up a model tablet application that could handle Aalberg Audio's guitar impacts—was additionally met, with one exemption: the model couldn't handle the real impact pedals, just programming mimicking those impacts. This was because of execution issues on Aalberg Audio's end.

6. The smartphone platform offers a unique test bed for music-based experiments; high quality graphics, sound and haptic capabilities are built into most modern examples. The Android interface encourages tapping and stroking and many instrument simulations have been developed that exploit these actions. The Guitar Simulator has a lot of potential as a haptic instrument. Although not formally evaluated yet, informal tests with several Android users showed that even the simple level of haptic interaction in the current iteration provides an enjoyable sensation, congruent with the visual and audio aspects. A possible venue for formal experimentation could be to assess the role of haptic feedback in enhancing realism and quality of the simulation.

7. Guitar has been one of the popular instruments over the last few years. Researchers have devoted their time in learning the science behind music theory. Many attempts have been made in the past to detect the pitch of the played note for different instruments. A guitar tuner was successfully design and tested using cepstral analysis and fuzzy controller on Arduino microcontroller. Although, pitch detection using cepstral analysis is more popular in speech processing domain, an attempt is made to extend algorithm for musical sound and promising results were found.

### III. PROPOSED METHODOLOGY

Concept of Android will be used. Android Studio will be the platform on which the application will be created using Java/Kotlin programming language. But as of now, Java will be used. Also, the app compatibility will range from the previous versions of Android as well, be it Android 5 (Lollipop), Android 6 (Marshmallow) or Android 7. It'll not be mainly focused on the previous versions because most of the devices run nearly Android 8 (Oreo) and above. In the Android Studio, concepts of Navigation Drawer, Grid View, Card View, Recycler View will also be used. Firebase will be used as a database for the application.

A sign-up page followed by a sign in page and then the home page will be observed in the Android application. User data will be stored from the sign-up page to the firebase real-time database. As soon as the user fills his/her credentials in the sign-up page, the user is redirected to the login page to sign up with his registered credentials. The sign-up page also has an option where an existing user can skip the sign-up page and directly jump to the sign in page where he can login with his credentials and jump to the home screen of the app. The home page of the app will consist of all the music stores with their information and contact info.

#### IV. OUTCOME

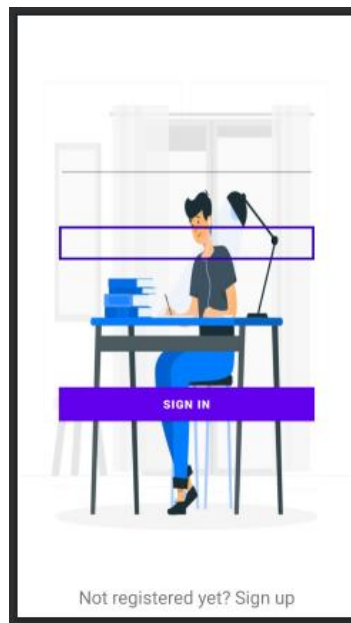


Fig.1 Login Page



Fig.2 Sign Up Page

## V. RESULT

The final result comes up with the ease and comfort of locating and contacting a nearby music store for literally any work related to music. Further contacts through music stores can also be beneficial for example a guitar tutor or a music teacher. This can completely eliminate any problems faced in searching for stores and local workmen.

## VI. CONCLUSION

Conclusion is basically helping out all the music enthusiasts to get a platform where they can come up and clear all their doubts regarding how to purchase a guitar, what to do and what not to do while buying a guitar and it's not just guitar, but other music instruments are included as well because a Music shop does have a variety of other music instruments depending on a particular genre. One place to know about and test your skills and if at all the guitar sounds off tune, no switching to a different app for a tuner, instead, there will be a tuner that could accurately tune the guitar and never let the user feel demotivated, bringing back on track and slowly rocking up with the pace.

In the near future, a database can be setup letting users create their profiles where they can completely trust the application as the data it'd be collecting will totally be encrypted. No social media logins or phone number logins but just letting them register with the user's choice of username and password and of course, linking of email to that account so that when a user forgets their password, they can easily recover it with the help of forgot password and a recovery password mail.

Also, alongside this, there can be a blog page as well where all recent information of the musicians around the world will be updated along with their activities, upcoming albums, newly released albums or singles will also be featured there, without paying a penny, everything completely free! A genre-based selection would also feature to make it easier to differentiate the respective musicians.

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