



## Ukelele for Dummies Tutorial Application

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**Abstract** – Tutorial is a method of transferring knowledge and may be used as a part of a learning process. More interactive and specific than a book or a lecture, a tutorial seeks to teach by example and supply the information to complete a certain task. It is a way to educate, indoctrinate or to instruct a lesson to someone particularly on academic way by teaching someone how to do something by explaining each stage of a process. In lieu with it, the proponents developed a mobile application specifically for Android phones called “The Ukelele for Dummies Tutorial Application” which is intended people who are willing to learn how to play Ukelele. It was designed to conjoining all information about ukelele in terms of its parts, a little of bit on its history, and the fundamentals on how to play this stringed instrument that includes basic finger positioning, and the basic chord patterns on playing some notes with the ukelele.

**Keywords** – Tutorial, Ukelele, Mobile Application, Android Application

### INTRODUCTION

Ukulele is an instrument that has 4 strings and belongs to the guitar family instruments and shares many similarities with standard guitars, including its basic shape and construction. Its simplicity and compactness make it easy to pick up and learn, even by beginners. The ukulele originated in the 19th century as a Hawaiian adaptation of the Portuguese machete, a small guitar-like instrument, which was introduced to Hawaii by Portuguese immigrants, many from Madeira and the Azores. It gained great popularity elsewhere in the United States during the early 20th century and from there spread internationally. The tone and volume of the instrument vary with size and construction. Ukuleles commonly come in four sizes: soprano, concert, tenor, and baritone (Tranquada, Jim, King, John, 2012).

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The convergence of data or information and communication technology in a singular intelligence mobile device has the advantage of global and abundant ease of access to information, collaboration and communications at your fingertips. With the exponential rate at which these mobile devices are advising and becoming more sophisticated, the on-going development of mobile device enterprise application platforms and telecom improvements, the easier it is becoming to access and manipulate information (Cahanap, et.al., 2015).

In lieu with this, the proponents developed a mobile application intended for the Android platform named “The Ukelele for Dummies Tutorial Application”. It is a user – friendly mobile application the focuses on imparting knowledge about the basics of the Ukelele in terms of its history, but more importantly, on how to actually play this stringed instrument, from the proper finger positioning, to the basic chord patterns, as well as the basics in plucking and strumming the strings of the Ukelele.

This particular application is intended to be an “electronic pocket reference” for those who wanted to learn on how to play the Ukelele.

### OBJECTIVES OF THE STUDY

The aim of the study is develop a mobile application intended for Android devices that teaches the user about the basics on how play the Ukelele. Specifically, this study sought to what are the features included in this mobile application.

### METHODOLOGY

In this study, the developers adapted the Rapid Application Development (RAD) approach as its main Software Development Methodology. RAD is a linear sequential software development process model that emphasized on extremely short development cycle using a component based construction approach. If the requirements are well understood and defined, and the project scope is constraint, the RAD process enables a development team to create a fully functional application with in very short time period. The developers used RAD because it is the appropriate method to use, it is easy to understand and it does not consume a lot of time. Figure 1 shows the phases of RAD that were implemented in the development of the aforementioned prototype.

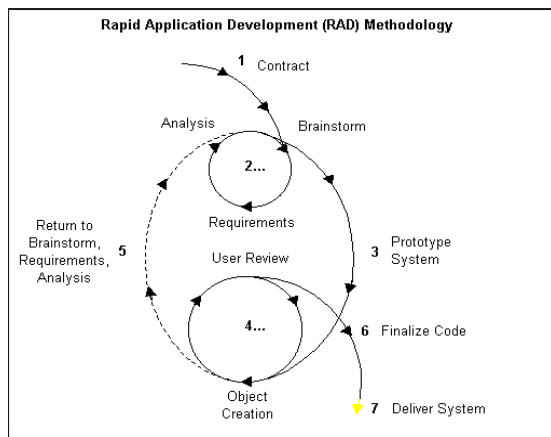


Fig. 1. The Rapid Application Development Methodology Model

### RESULTS AND DISCUSSION

The proponents developed the said application using Cordova, a mobile framework that is intended to create responsive mobile applications. Features of mobile application tutorial includes video clippings made by the proponents themselves to show the correct way on how to do the basic plucking, strumming, and even

tuning the Ukelele to achieve its playable tune. Figure 2 shows the proper finger positioning of a specific chord in the Ukelele as a part of its feature.

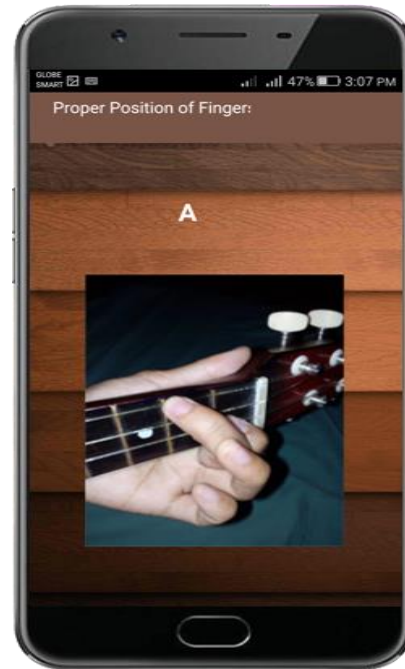


Fig. 2. A screenshot of the actual mobile application that shows the proper finger positioning of the “A” chord in the Ukelele.

In addition, a simulator of the basic chord patterns in the Ukelele were included along with its tune wherein the user allows to listen what will be the specific tune of a specific chord in the Ukelele as shown in Figure 3.



Fig. 3. Screenshot of the chord simulator



### **CONCLUSION AND RECOMMENDATION**

The researchers were able to develop this application by the use of the Cordova. The application was developed following the phases of the Rapid Application Development (RAD) approach.

The said application included features such as video clipping on how the properly strum, pluck, and even tune the Ukelele. Furthermore, pictures of the proper finger positioning of the different chords of the Ukelele were included as well as the chord simulator for the users to have an idea what a specific chord in the Ukelele sounds like.

One of the recommendation for this mobile application includes a tabulator simulation for those Ukelele users that would like to learn how tabulations in Ukelele works. This can be included as an advanced feature of the mobile application in the future.

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