



# PowerPoint Utilization to Make Android-Based Boomwhackers Learning App

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**Abstract.** This article describes how Microsoft PowerPoint can be used to create the Boomwhackers learning app. The rapid development of technology today certainly makes learning media must be able to follow these developments. One of the media that can be utilized is PowerPoint. The method that is used in this article is the research and development method. This article aims to provide a new innovation in learning Boomwhackers in the form of an android-based application. Microsoft PowerPoint that is integrated with iSpring can be used to create Android-based Boomwhackers learning applications. This is due to the features that are contained in Microsoft PowerPoint support the creation of Android-based Boomwhackers learning applications. The resulting learning media is well integrated through audio-visual displays which make the learning process more interesting.

**Keywords:** Microsoft PowerPoint · Application · Boomwhackers Learning · Android

## 1 Introduction

The technology that is currently developing has a major impact on human life in various fields. One field that is also affected by current technological developments is education. In the field of education, the implementation of learning in the current teaching and learning process cannot be denied by the involvement of technology. With the development of technology, many things can be done, one of which is using technology in the manufacture of learning media [1].

Learning media is an inherent or inseparable part of the learning process [2]. Learning media with various forms of display that are properly designed can provide additional value in the process of teaching and learning activities. The learning media created must contribute to improving the grade and quality of learning. There are applications that can be used in creating learning media, one of which is *Microsoft PowerPoint*. *Microsoft PowerPoint* as an assistant in teaching because *Microsoft PowerPoint* is easy to modify according to the material being taught [3]. As in learning the art of music with the material “*Mengenal Musik Barat*” lecture methods and presentations assisted by PowerPoint shows and videos from YouTube can be presented in one unit [4].

*PowerPoint application* is a tool that can be manipulated to design a learning application that is quite attractive. By grafting the iSpring tools into PowerPoint and supported by software with the label “Website 2 APK Builder Pro”, then the process of making android applications does not need to design a coding that is quite difficult for beginners [5].

This article describes how to use Microsoft PowerPoint to design an Android-based Boomwhackers learning application. Boomwhackers merupakan seperangkat tabung plastik berwarna yang mengeluarkan nada saat dipukul [6]. The writing this article aims to provide a new innovation in learning Boomwhackers in the form of an android-based application. The application was designed using Microsoft PowerPoint with the aid of iSpring tools, then converted into “.apk” using “Website 2 APK Builder Pro”.

## 2 Methodology

This research was conducted by using the Research and Development methods. This method is a research method that is employed in order to produce a product and the of the product’s effectiveness will be tested later [7]. This research includes five stages, namely: (1) analysis; (2) product design; (3) product development; (4) implementation; (5) evaluation. This research is to design an Android-based Boomwhackers learning application by using *Microsoft PowerPoint*.

In the process of developing the product, there were five stages that were employed by researcher. The first stage was the preliminary stage where the procedure on how to make android-based application through *Microsoft PowerPoint* was learnt by researcher. The second stage was the specification of the concept and design that would be applied. The data collection to make Boomwhackers learning was done by the researcher at the third stage. The fourth stage that was done was designing the application with *Microsoft PowerPoint*. The final stage was the *Microsoft PowerPoint* being converted to “.apk”. However, if it is adjusted to the researcher’s goal of designing learning media, then the media development stage does not reach the testing and distribution stage because this research only intends to design an Android-based Boomwhackers application using Microsoft PowerPoint so that the learning process becomes more interesting.

## 3 Discussion

### 3.1 Microsoft PowerPoint

*Microsoft PowerPoint* is an application that is used to create presentation materials [8]. This application is designed to display multimedia in an attractive and the convenience in using it. Microsoft PowerPoint has ready-to-use features to enhance the appearance of a presentation, such as backgrounds, slide layouts, text effects, animations, and audio and video that can be inserted [1].

### 3.2 Utilizing Microsoft PowerPoint to Create Learning Applications for Boomwhackers

The Microsoft PowerPoint features that were used in making the Boomwhackers learning application were:

- The animation feature, which served to create the animated effects on objects such as pictures or writing on a slide. Also, audio could be inserted during the animation. This feature made the slides even more interesting to look at and seemed more alive.
- The hyperlink feature served to provide convenience in connecting different slides or connecting different slides quickly without searching for them manually. This feature is very significant if it is used to create android-based applications.
- The shapes and images features had various shapes such as line, arrow, box, circle, and 3Ds. This feature was used to create the application design that would be used.
- The video feature served to insert videos into PowerPoint.

The following are the steps that were conducted to create a Boomwhackers learning application by using *Microsoft PowerPoint*:

**The Making of Flowchart and Storyboard.** Making a flowchart served to describe the direction of application flow and explain each step of creating media in the form of a chart. Storyboards were created when the developer already knew the flowchart of the application to be developed and had imagined what would be included in the application, starting from the layout of the material, images, logos, and others. The materials that were collected were the material scripts, learning videos, and graphic materials (Fig. 1).

**Designing PowerPoint.** Before being made into an application that runs on Android, the page was first designed and created in *Microsoft PowerPoint*.

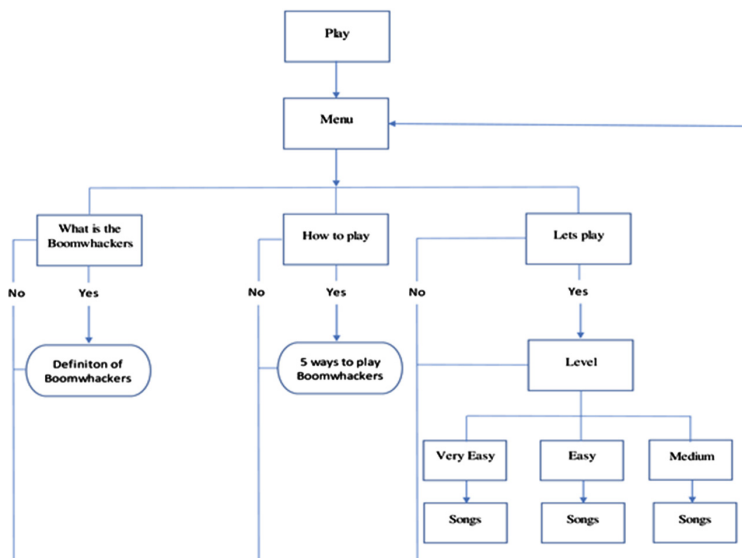


Fig. 1. Flowchart.

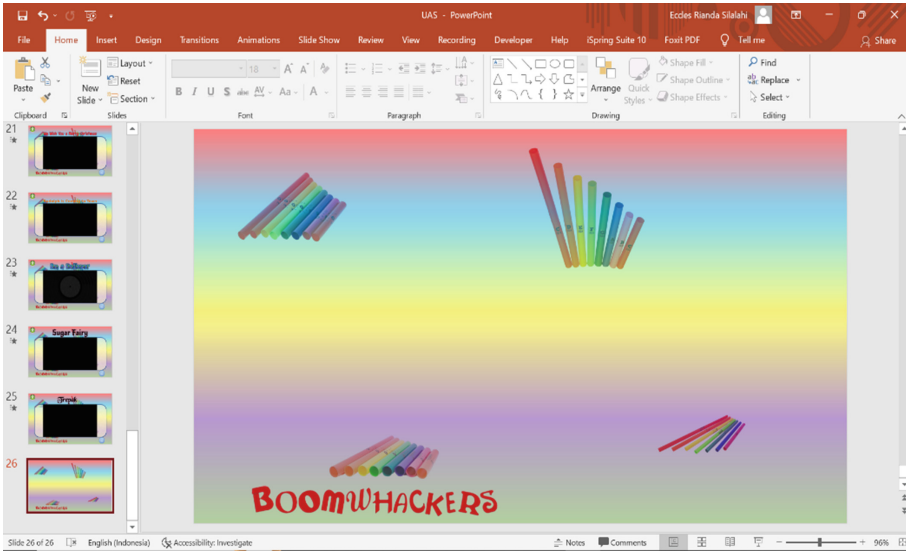


Fig. 2. Main layout.

Each slide used a layout that had been designed to make it look more attractive. Not only that picture could be inserted, *Microsoft PowerPoint* could also edit the pictures related to the contrast and color gradations. The main layout in the Boomwhackers learning application could be seen in Fig. 2.

There were also icons such as, home, next, previous on some slides. These images functioned as buttons for the usage on Android by providing a hyperlink feature which if the user pressed the image, it would be automatically redirected to a slide that had been prepared automatically.

**Converting PowerPoint to Flash Player File Format.** *iSpring* is a tool to convert presentation files into flash player files. *iSpring* itself could easily be integrated with *Microsoft PowerPoint* so that its use did not require complicated skills. As for the process of converting to the form of a flash player file, it can be seen in Fig. 3.

**Converting Flash Player Files to .apk Extension.** The important part in designing this application was the process of converting *PowerPoint* into a flash player file and then converting it again into an .apk extension so that it could be installed on Android (Fig. 4).

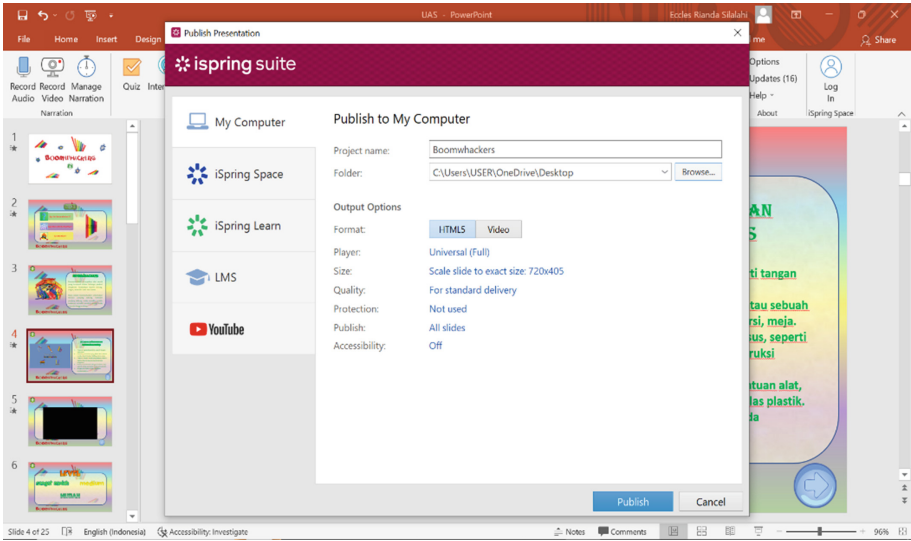


Fig. 3. Convert to file flash player.



Fig. 4. Conversion to .apk.

## 4 Conclusion

Based on the explanation and presentation above, it could be concluded that *Microsoft PowerPoint* which was integrated with *iSpring* could be used to create an android-based Boomwhackers learning application. This was due to the features that were contained in *Microsoft PowerPoint* supported the creation of Android-based Boomwhackers learning applications. The outcome of the learning media was well integrated through audio-visual displays that made the learning process became more interesting.

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