

An Analysis, Design and Development Of Words In Nihongo M-Learning

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Abstract

Nowadays, mobile learning can be considered as a well-established learning methodology that provides accessing learning content anytime and anywhere. It has been seen as one of the interactive learning platforms in line with the circulation of the technology in this century. This paper is to highlight a simple mobile app in learning Japanese language words called Words in Nihongo. With this application it is hoped that it can assist and give choices to the potential users who are interested in learning Japanese language. This application is developed using Adobe Animate which based on the ADDIE model.

Keywords: *m-learning, Japanese language, Nihongo, mobile learning, mobile app.*

1. Introduction

Employing the correct tools and equipment is highly beneficial in enhancing the enjoyment, motivation, and simplicity of the learning experience. The progress of information technology has broadened the opportunities for the development and application of IT-driven learning. According to Klimova and Poulouva (2016), currently, mobile learning which is also known as m-learning, may be viewed as an established form of learning that has been utilized for about 20 years which provides learning at anytime and anyplace.

M-learning emphasizes the capability to seamlessly transform traditional learning into the teaching and learning process, irrespective of the geographical context in which the learning takes place (Sharples et al., 2005). Mohd Razali et al. (2021) have said that m-learning has shown significant effects on student motivation, attitude transformation, and cognitive development in developed nations.

2. Mobile Learning

Mobile learning, also known as m-learning, refers to the use of mobile devices such as smartphones, tablets, or wearable technologies for educational purposes. It involves accessing learning materials, interacting with educational content, and participating in learning activities using mobile devices. M-learning enables learners to engage in educational experiences anytime and anywhere, offering flexibility and convenience. It can include various formats such as mobile app, mobile-optimized websites, multimedia content, and communication tools to facilitate learning on mobile devices.

The availability of wireless networks allows for m-learning through the use of computing and communication devices, such as smartphones, laptops, and PDAs (Mohammad & Amal, 2023). According to Mohd Razali et al. (2021), m-learning utilizes mobile technologies as a method for both teaching and learning. According to Aumhani et al. (2022), m-learning facilitates collaboration among educators, students, and teachers beyond the confines of traditional classrooms, including tutorial rooms, laboratories, and lecture theaters. By leveraging mobile computing and communication devices in the learning process, teachers and students gain increased flexibility and

encounter novel prospects for interaction. According to the definition provided by Mohamed Osman and Cronje (2010), mobile learning encompasses any form of learning that takes place in a learning environment as a result of the mobility of technology, learners, and the learning process itself. The statement from Nurul Ibtisam et al. (2020) suggests that mobile learning is most effective when both the technology being utilized and the individuals engaging with it are fully mobile during the learning process.

According to Ahmed and Parsons (2013), m-learning can be understood as the distribution of learning materials for remote access. Vavoula and Sharples (2002) argue that the term "learning" inherently implies the possibility of learning taking place at any time and in any location. Hence, the term "mobile learning" combines the notion of flexibility and mobility, enabling convenient learning regardless of limitations in terms of time, location, and distance, as noted by Taylor and Sharples (2006). This characteristic distinguishes mobile learning from the conventional use of textbooks.

According to Rashidah et al. (2017), the present generation demonstrates a keen interest in utilizing mobile technology for studying and supporting educational activities, which ultimately contributes to increased user engagement in the learning process.

3. Words in Nihongo App

Japanese, also known as Nihongo, is the primary language of the Japonic language family and is spoken by the Japanese people. With approximately 128 million speakers, it is predominantly used in Japan, where it serves as the national language, as well as among the Japanese diaspora across the globe.

Words in Nihongo is an Android mobile application designed to facilitate the learning of Japanese vocabulary. The app features a comprehensive collection of words in various categories, including days and months, foods, fruits, vegetables, drinks, animals, and exercises related to days and foods.

In addition to displaying the spelling of the words, the app also provides assistance in pronouncing the words accurately. This feature enables users to learn and practice the correct pronunciation of the Japanese words.

4. Application Analysis, Design and Development

The development of this mobile app will employ the ADDIE model, a widely-used instructional design framework. The ADDIE model serves as a guideline for instructional designers and training developers to create impactful learning experiences (DeBell, 2020).

During the analysis phase, various tasks will be carried out, including analyzing the problem at hand, determining the scope of the project, identifying objectives, defining the target users, and outlining the content that will be included in the application. Figure 1 shows the content of the app.

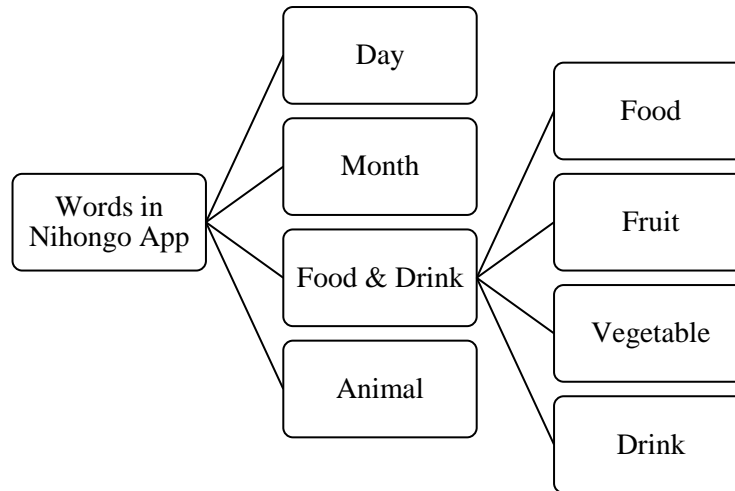


Figure 1: The content of the app

During the design phase, the task of sketching and designing storyboard will be carried out. Storyboards are frequently created in detail, and the look and feel, visual design, user interface, and content are all considered during design phase. Figure 2 shows the process of sketching and creating storyboard.



Figure 2: The process of sketching and creating storyboard

In development phase, the actual development of the app that has been design during previous phase will take place. The development of the app utilizes software tools such as Adobe Animate, Adobe Photoshop, and Adobe Illustrator. These applications play a crucial role in creating and designing various elements of the app, including animations, and graphics. Figure 3 shows the process of developing the app.

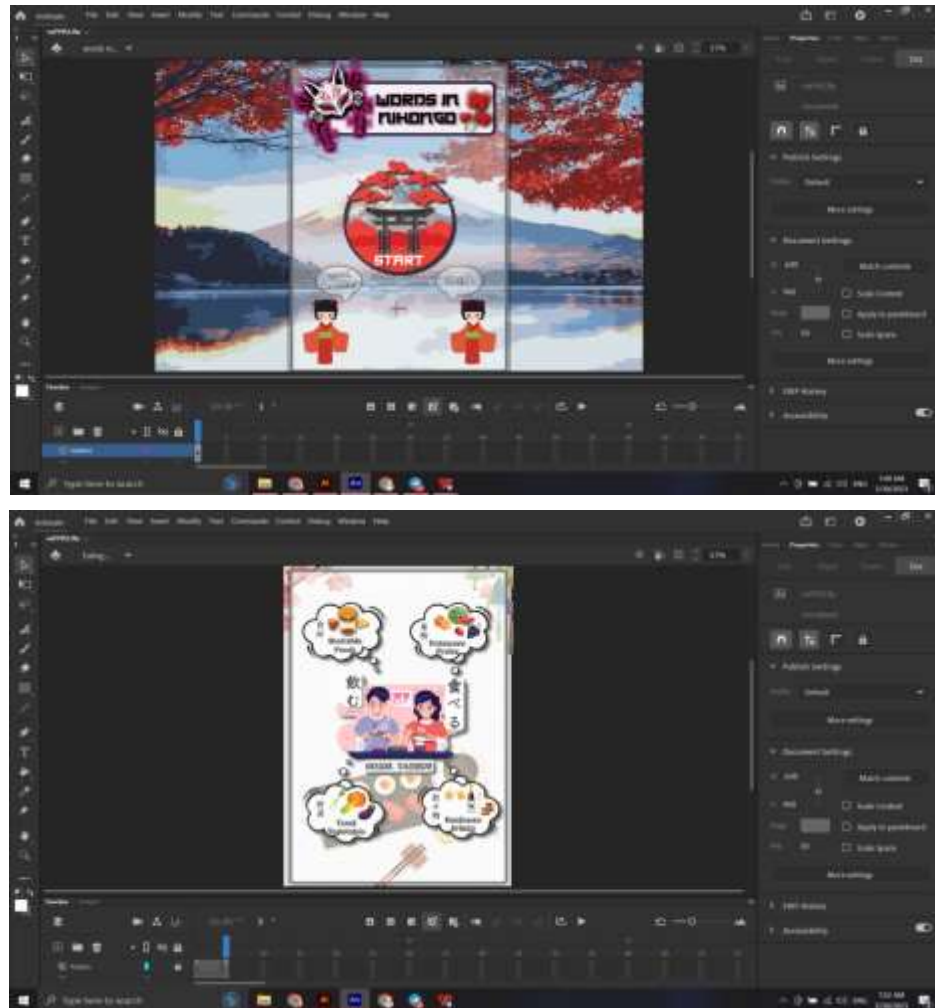


Figure 3: The process of developing the app

Once finished, the next process is to publish the app. The publishing process involves the steps necessary to generate the .apk file, which serves as the installer for the application. Once the .apk file is released, it can be installed on the target device. Figure 4 shows the process of publishing the app.

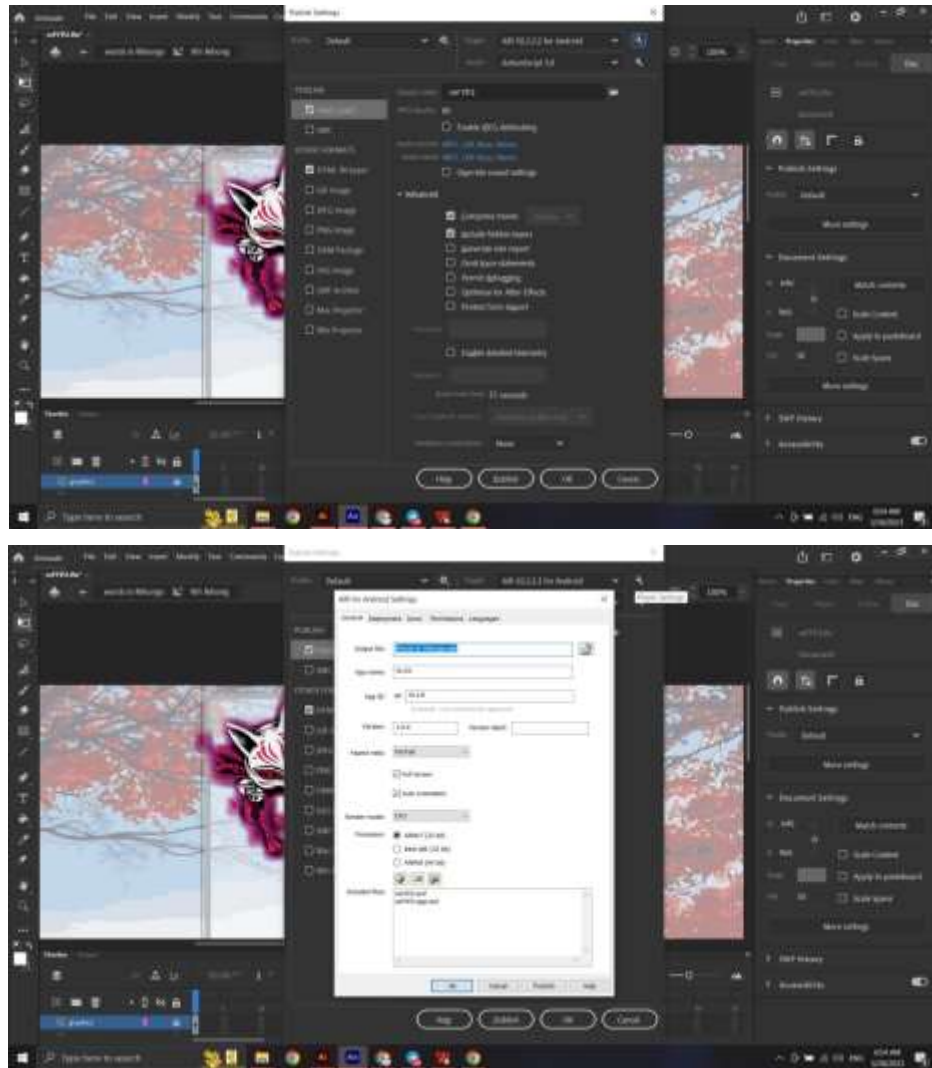


Figure 4: The process of publishing the app

Words in Nihongo offers learners a flexible, interactive, and personalized learning experience, significantly enhancing the convenience and enjoyment of Japanese language learning.

This app has an impact on the learning of the Japanese language in several aspects. Firstly, it enhances accessibility by allowing learners to access language learning materials anytime and anywhere through mobile devices. Secondly, the interactive learning features engage learners actively, promoting better retention and understanding of the language. Thirdly, the inclusion of multimedia content enriches the learning experience with audio and visual elements, facilitating pronunciation and comprehension skills. Additionally, the app's portability and convenience make it easy for learners to carry their language learning resources with them on their mobile devices, enabling seamless learning on the go.

Overall, Words in Nihongo has revolutionized Japanese language learning by providing learners with a user-friendly and feature-rich platform that maximizes accessibility, interactivity, multimedia content, and convenience.

5. Conclusion

Mobile learning has brought about a fresh outlook on the utilization of modern educational technology, offering new possibilities for enhancing the learning experience.

The incorporation of mobile app, such as Words in Nihongo, into the process of learning the Japanese language has proven to be highly effective. These simple mobile app has the potential to significantly enhance users' interest in learning a foreign language, making the process faster, easier, and more engaging.

As part of future research endeavors, the team members have outlined plans to conduct surveys focusing on the user interface and user experience of the Words in Nihongo mobile app. This research aims to gather valuable feedback from users, which can be used to further enhance and improve the app's features and functionalities in the future.

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