



Gamification Implementation in Health Service Website in 5.0 Society Era

**Ricky Muhammad Ramdhani^{1*}, Aditya Dwi Nurrahman²,
Prayogi Haris Affendi³, Leonardi Paris Hasugian⁴, Agis Abhi Rafdhi⁵**

^{1,2,3} Departemen Ilmu Komunikasi, Universitas Komputer Indonesia, Indonesia

^{4,5} Departemen Sistem Informasi, Universitas Komputer Indonesia, Indonesia

Email: *ricky.41818006@mahasiswa.unikom.ac.id

Abstract. The purpose of this research is to identify how to implement the gamification concept for health service in the 5.0 Society Era. This research is done in qualitative method with descriptive study approach. The results from this research are the increase in public awareness to maintaining their health with the application of gamification element on the health service website. Gamification in health service website interface means presenting game elements in user mechanisms to increase public participation in the needs of everyday health information. This research is to know how to implement the gamification concept in the public health service website in the 5.0 Society Era. The benefit of this research is to increase health public awareness from the gamification web interface and provide health information.

Keywords: Gamification, Health Service, Web-Based.

1. Introduction

Gamification is the use of game elements, implementing ranking, point, or prize in non-game environments [1]. In the implemented design called Serious Game design, this design was made for entertainment products with a focus on player gameplay. The difference with gamification is to improve hard-to-understand instruction into easier, with the game element [2]. The purpose of gamification is to increase the user's urge and motivation during web browsing activity [3]. Gamification development is not only for education. It can be implemented in business, government, and health services [3]. The basic concept of gamification through health services can be from public participation with a reward system for every health consultation. The relation between health services and demands from the community is formed through the gamification element to achieve community physical and social well-being goals [2,3]. The gamification concept can change public perception of health, from self-diagnosis to doctor consultation through health service website [4]. Gamification in the health web interface leads to 5.0 Society Character. The characteristics that can be seen are

the people interact with the use of technology for daily needs [5]. Gamification mechanism creates health service in 5.0 Society which is not limited to age, gender, and language [5].

2. Method

This research used the qualitative method. Every activity and motivation from the subject that oriented on how to create gamification become a health service activity. The Gamification technique that is suitable for the community is maintaining health. The review for gamification implementation is widely used to motivate people's health behavior [8] (see Figure 1).

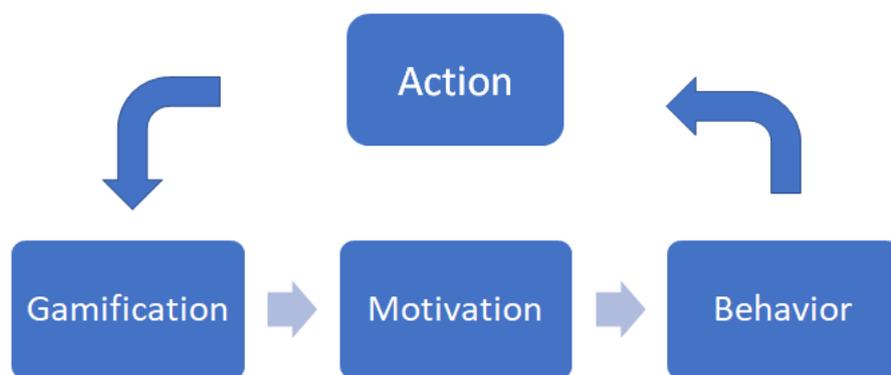


Figure 1. Process Flow for Person Gamification Motivation

The Gamification element can be determined with many processes, but the gamification implementation can be adjusted [9]. Correct visual implementation such as certain items. Such the person complete information display list like choosing a game character [9]. Explanation of each symbol and great offer can be obtained [6].

3. Results and Discussion

Motivating people to maintain health is very difficult until they experience health problems. The advanced technology with various innovation allows gadgets to provide many health services [7]. Gamification includes game motivation such as the game objective, game rule, progress achieved, and the other component like time duration and prize [10]. Many health service providers are available for various gadgets. As in result and discussion, the display of the interface only as a mechanism illustration for gamification implementation in health service.

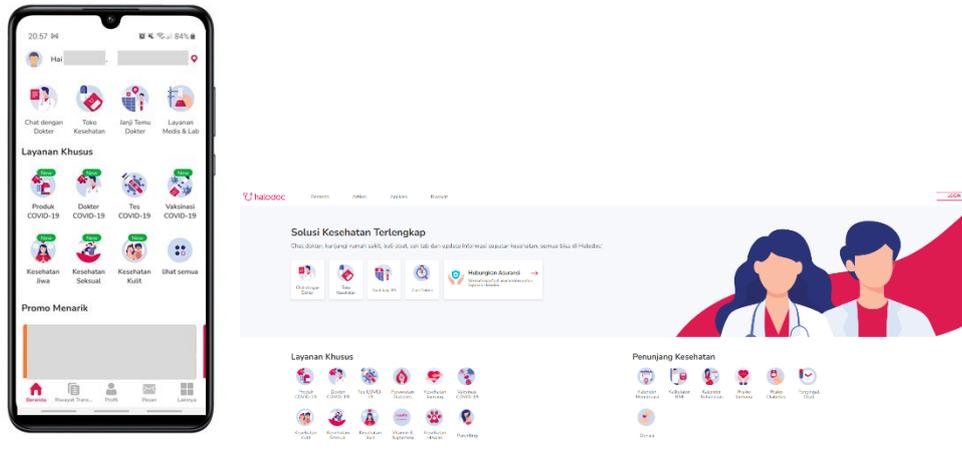


Figure 2. The Halodoc Interface in Smartphone and Website

3.1. Special Service

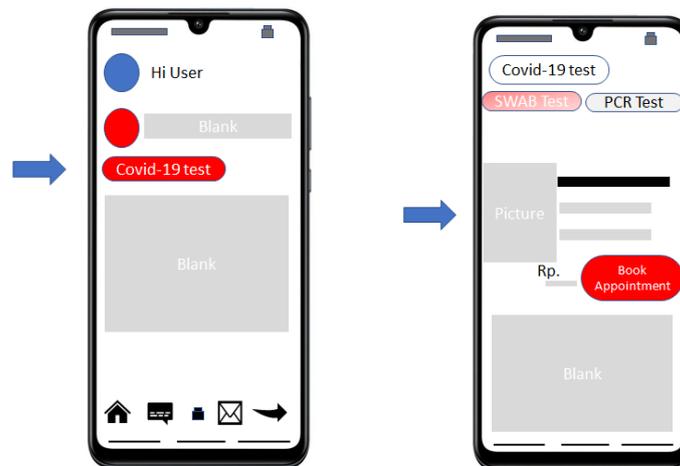


Figure 3. The Example of Choosing Service in Application

The display showing items and the description is able to give easier choices. The user after taking the Covid-19 test can know the results just from the application whether the results it is positive or negative. The application offered various packages based on the needs. Then choose the Make Appointment to choose test location. On the next page, choose the date and time. The service is spread out based on user location.

3.2. Medication Reminder Feature

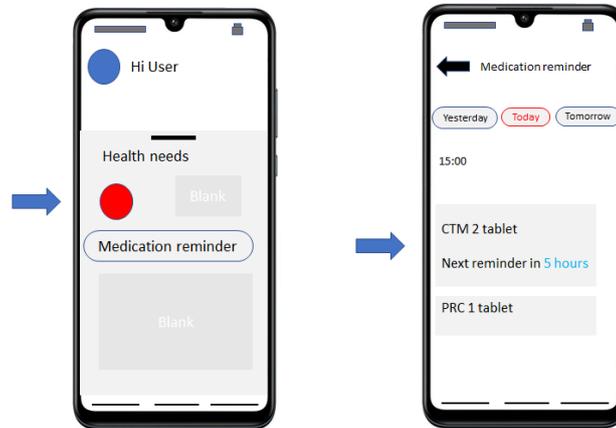


Figure 4. Medicine Reminder Feature

After the health consultation, the doctor will advise with the time and drug amount based on the recipe. With the Health Need menu, the user can arrange the medication schedule so not to miss the schedule. The notification will give a reminder in gadget with the time that has been set but the user based on doctor recipe (see Figure 4).

3.3. Chat With Doctor Feature

The main feature is real-time chat with the doctor to their expertise based on the symptom or the general doctor for lighter symptom.

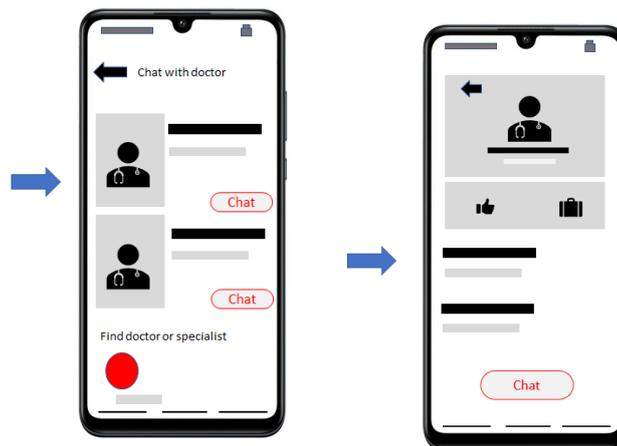


Figure 5. Chat With Doctor Feature

The mechanism is the same as consulting with a real doctor in Health Service Centre. Halodoc gives a feature that attempts to make the health service easier with the help of a verified and experienced doctor. As shown (see Figure 5) in the doctor selection it can be searched by the doctor or the expertise. After choosing the correct doctor, the next display will provide the doctor's biodata, rating, and working experience. There is an option to search doctor or specialist to give more detailed information on specific complaints such as obstetrics, children, and internal medication.

3.4. Community and Technology Relation

The health service application becomes a bridge to connect everyday health needs [5]. Technology development is able to give a safer feeling, making quality live, and supporting economy [4,5]. The relation between the virtual world and the real world is a part of the 5.0 Society. The next automation developed is artificial intelligence [5]. Halodoc is one of development that can give a solution for the health community. The important factor to make the user get all of the information provided is various supporting information such as the next step and tips to overcome the problem [7]. The cycle occurs with scheme shown in Figure 6.

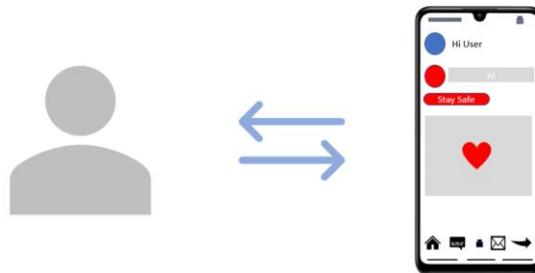


Figure 6. Information Cycle

Monitoring all of the health information is a supporting factor for the community to maintain their health. The next solution is a smarter innovation that utilizes artificial intelligence to diagnose health problems earlier.

3.5. Future Health Service

It is to know that to raise and increase community participation to maintain their health is with innovation in health service. With the innovation like this, the community will routinely check their health and coupled with a point exchange feature that can be collected as a reward.



Figure 7. Health Application Supporting Device

Accessing the needed information is easier because it's compatible with various gadget. The user can effectively schedule to consult without having to long queue in the health service center. The interface that used from some of the user-friendly gamification element presence as the beginning for 5.0 Society Era between community and artificial technology as everyday health information support [10]. These available features are in line with the ease of technology which is widely used in various fields of human life [11-15].

4. Conclusion

The advance of technology will encourage humans to develop and understand every change that is made. From what was deemed impossible it will become impossible in this case the Gamification concept. It can provide a value of appreciation from the service owner from points and reward system or paid access for a certain feature. With this method, the gamification system in the health sector can be used as a way to encourage and increase public awareness of their health conditions with the encouragement of the right system, easy access to services, and rewards that can be collected, it will attract many people to try this service.

Health Service Application in the 5.0 Society Era is designed to attract people who need a consultation before being diagnosed by the doctor with a gamification user interface that is simple and easy to use. It should be underlined that gamification is not something to make games. But to make people become part of the process of maintaining health and aware of their health conditions.

Acknowledgement

We thank the Universitas Komputer Indonesia for assisting in writing this paper. High appreciation to the Universitas Komputer Indonesia Entrepreneurship Paper team who always support us so that we can write good paper.

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