Mobile Trainer Organizer Application

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ABSTRACT

Due to the exponential growth in mobile application (app) development, many fitness programs have been conducted through this platform. Anyhow, the difficulties of tracking trainees' progress and monitoring trainee food intake and activities are faced by trainers. Currently, most of the fitness programs are conducted in a chatting group. However, the information shared by the trainer can be abandoned by trainees as a lot of information was shared in the group. The goal of this project is to develop a mobile app that can assist the trainer of a fitness program in organizing their trainees' information and provide a communication platform for trainers and trainees. Mobile Trainer Organizer is a prototype of an android-based mobile app that consists of several features: (a) organize and store information, (b) monitoring platform of food intake and activities, and (c) information sharing interface that allows trainers to convey important information to their trainees. The app can be implemented in various fields of work other than a fitness program such as education, medical, and others.

KEYWORDS: Fitness, Mobile application, Trainer, Android-based, Organizer

1   INTRODUCTION

As stated by the World Health Organization (WHO) health is not only the absence of illness or disease, it also relies on a person's physical, emotional, and social health [1]. People simply regarded health as the absence of illness. Illness is a sensation, a feeling of unhealthy that is completely personal, interior to the patient's individual while the disease is a condition apply to a variety of signs and symptoms, anomalies associated with a feature or structure disorder and condition associated with a cause [2, 3]. People need to learn how many macronutrients they consume in food since a proper diet help to improve health conditions [4, 5]. A new iteration of the Food Guide Pyramid, known as MyPyramid, was introduced by USDA in 2015 as individual dietary guidance [6].

Society's demands and desires to improve health and promote positive lifestyles make fitness a crucial factor around which everything revolves [7]. Fitness is the ability to lead a life that is complete and healthy. General fitness means a person's ability to act more successfully with his or her abilities, which relies on the strongly interrelated physical, mental, emotional, social, and religious components of fitness [8].

As such technology begin to develop incredibly fast day by day, it also affects the demand for fitness mobile application (app) into the industry. Approximately, one out of five smartphone owners have at least one health-related app proved that the significant impact of the app to the society in this era of the modern world [9]. According to this trend, the chance to perform online training through mobile apps has been grabbed by health trainers. It is used as a communication platform where it eases the trainer to monitor, manage trainees' activities, and track their calorie intake [10].

As people tend to stick with their smartphones, this project approaches the mobile app as a platform to deliver the system. The current business process of the stakeholder faced several difficulties while conducting online coaching through the current platforms; Instagram and WhatsApp. The important information on trainees may lose due to poor data record management. Difficulty in tracking trainees' progress and ineffective training program faced by the trainer as some information was abandoned by their trainees because the fitness program mostly was conducted in a chatting group.

2   OBJECTIVE

The main goal of the system is to provide a platform that can help trainers to organize, monitor, and deliver information with their trainees. Thus, some related information was gathered and analyzed to develop and design the Mobile Trainer Organizer app via Android Studio.

3   SIGNIFICANCE (S)

The application eases the trainer to organize, monitor, and convey information with their trainees. Trainees were grouped in a section which eases the trainer to track trainees' important details such as their weight loss and daily routines. Information such as events, health, eat and exercise tips provided by trainers will be shared in a section and it is accessible by trainees on the application. Lastly, a section that eases trainees to update their daily routines regarding the options provided. Hence, their trainer will monitor through the application developed. Online chatting is provided as a communication platform between trainees and trainers.

4   METHODOLOGY/TECHNIQUE

Mobile Trainer Organizer Application was designed to assist the trainer in managing their trainees' online training. It was developed by an adapted waterfall methodology phases; requirement gathering and analysis, design, and implementation. As the first step in developing the system, a trainer was approached through her Instagram. An interview session had been conducted to understand the current process of the fitness program. As a result, the stakeholder's problems were extracted and gathered to design and develop the system. In the second step, the gathered data was used as the main reference to determine the main features of the system. Three important features were identified from the data collected to fulfil all the requirements from the stakeholder; organize and store information, monitoring the platform of

food intake and activities, and information sharing interface that allows trainers to convey important information such as events, health, and eating tips to their trainees.

Next, the interface of the system was designed by using the storyboard to visualize and arrange the layouts and contents of the app. The main features of the app consist of organizing, monitoring, and delivering information features that were designed using a suitable layout. As the last step, the smartphone application's whole plot was translated into code. In this venture, the Android Studio will be used as a code. The functionality required to develop the mobile app is supported by using this program. At the end of this phase, the third objective will be achieved which is to develop a mobile app based on the analysed information.

5   RESULT

As a result of conducting this project, the app was completed and ready to be used by the user. There are 20 use cases are identified for the mobile application with the involvement of two actors; the trainer and the trainee. The trainer is able to manage their profile, view, and comment on their trainees' activities, post events, and tips. The trainee is able to manage their profile, update their activities in which it can be seen by their trainer, view event, and tips that have been posted by their trainer.

At first, the user of this mobile app needs to create an account before they are able to access the system. By having access, the trainer and trainees have the system functionalities that can be accessed respectively. Most of the use cases can be access by the trainer while the trainees have limited access. Fig. 1 shows the user interfaces and their component within the app. The main page was divided into four sections; activity, group, tips, and events.
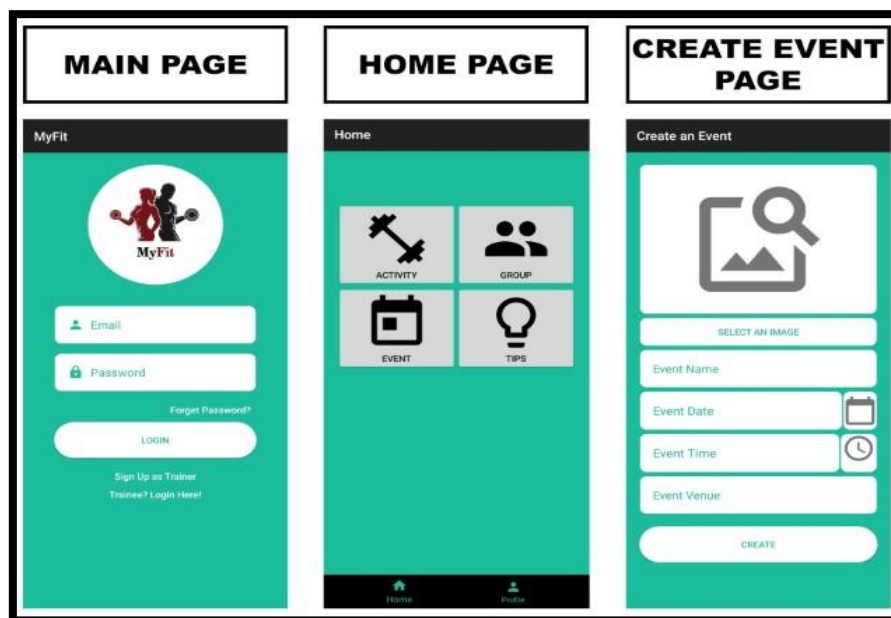

Fig. 1 The user interface of Mobile Trainer Organizer Application

The activity section is the main section of this app. In the trainee's view, this section records their daily activities such as food intake and light workout. They can view, delete, and edit activities that had been created. For trainers, this section enables them to view, comment, and suggest on their trainees' activities. This will help the trainer and trainee to organize their works and at the same time eases trainers to monitor their trainees. The group section will link

the mobile app with the other online platforms that are WhatsApp and Telegram. Linking with WhatsApp and Telegram is necessary as both apps are mostly used by the user.

Tips section has been created to achieve the objective of conveying information. Tips will be created and shared by the trainer in this section. The trainer is able to view, modify, update, and delete the tips that had been created. As for the trainees, only viewing the tip is permitted. The event section consists of the information of all events such as the title of the event, date, time, and location. The event can only be created by the trainer and it can be viewed by all users of the mobile trainer organizer application.

6   CONCLUSION

Mobile Trainer Organizer app provides essential support to the trainer in managing their training and activities as well as support for the trainees. The components of the app can be suitably assisting the trainer and trainees as it has a common icon and the flow of the app smooth which ease them to use it. In the future, this app will be able to assist various types of users that exist in the world and could become a necessary app to be used. For future enhancement, it is suggested that all events that have been created can be sorted by criteria such as date or alphabet to make it easy for searching purposes. It is also recommended to conduct the usability and functionality testing on the developed mobile application.

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