



Application go-sport as a solution to search information on facilities, places, partners, and sports events for students

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ABSTRACT

Sport is a physical and mental activity that is beneficial for people to maintain the body and develop the quality of health. This makes exercise an activity that needs to be done for everyone to maintain their stamina. However, the lack of information about places, facilities, partners, and sports events is a strong reason in terms of reducing student motivation in carrying out sports activities themselves. The purpose of this research is none other than to design an application that can help students get all sports information. These things are none other than to foster a strong desire to do sports activities. Through technology smartphone which has been owned by the wider community, this research creates a solution by designing an application called "Go-Sport". This study uses the "Design Thinking" method, which focuses on finding and understanding user needs to obtain an optimal solution in the form of the results of the features to be made. From this research, a design or prototype of the "Go-Sport" application was produced which is ready to be implemented and tested on users.

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1. Introduction

Sports can be interpreted as a physical and psychological activity that is beneficial to humans to maintain and improve the quality of someone's health after sports.

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In 2017, 63% of Indonesians exercise regularly for various reasons, such as losing weight, maintaining health, and wanting to get psychological benefits such as feeling comfortable [1]. Knowing the various benefits that can be obtained for the body after exercising, exercise is often referred to as the main factor in maintaining immunity today. This is an answer or common thread from the problem of students who nowadays often call themselves elderly because they get tired too quickly when carrying out their daily activities. Data obtained by 28% where deaths caused by modern chronic diseases are none other than due to the application of a lifestyle that is minimal in movement. Data from the Central Bureau of Statistics show that in 2015, less than a third of the total population, namely only 27.61 percent of Indonesia's population, exercised at least once a week [2].

By looking at the fact that the lack of sports activities carried out by the community can be considered concerning. Researchers are trying to create a system that is a solution to the reasons people are mostly lazy to exercise. Based on previous research, it was found that there was minimal student interest in sports, this was due to a lack of adequate media related to sports information [3]. Problems related to the difficulty of exercising habits are also caused because it is difficult to find sports partners, such as relatives or friends who have various reasons to say no when we invite them to exercise [4].

Previous research has been carried out by designing an E-Futsal application, which uses CodeIgniter 3.1.3 as a framework and JSON as a data format to support the Android operating system [5]. Research has also been conducted in designing applications that help sports activities, this research focuses on designing visual application designs. Because the visual design is easy to understand in an application design, it will provide convenience and comfort to users and meet their needs [6]. UI/UX development has also been carried out in research on boarding booking application designs, using the Design Thinking method [7]. This method is very helpful in collecting various ideas from various users to get a solution.

Based on the importance of attention related to the problem of the lack of sports habits in the community, the researchers designed the Go-Sport application, it is hoped that this application can solve and become a solution to the problems that have been studied. Because UI/UX prototyping designs are useful in iterative development, such as in action research methods [8]. By using internet access and smartphones, which almost everyone uses, they contribute to providing solutions to this problem through the creation of a mobile-based system. Researchers hope that the wider community, especially students, can pay more attention to their immunity through sports activities, none other than because there are applications that facilitate all information on places, facilities, events, and sports partners.

2. Method

The use of research methods is none other than as a benchmark in carrying out research steps. The tools and materials used in designing this application include hardware using an Intel laptop with 8GB RAM specs with SSD/512GB storage and the software used includes vs code, xampp. Then the web was also used for the design, including whimsical.com, and figma.com (by utilizing iconify assets, Unsplash, and others).

The Go-Sport application designer carried out the method of *Design Thinking*. The design thinking method is used to examine the process of understanding user needs and focusing on forms, relationships, behavior, interactions, and human emotions in producing optimal solutions [9]. Design thinking is a concept idea created by David Kelley and Tim Brown Method, who are none other than the founders of IDEO. Design Thinking does not only focus on what the user can only see and feel, but also focuses on the experience of the user/user experience [10]. There are several stages in the design thinking method, which can be seen in Figure 1.

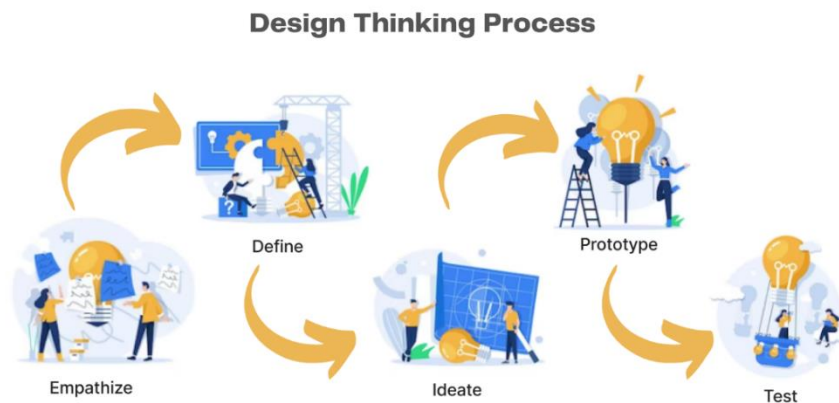


Figure 1. Design thinking process

1. Empathize

At this stage, observations and surveys were carried out utilizing direct interviews with informants, namely students from those who like to exercise to those indifferent to sports activities. This stage is to find out how to see the resource person with their environment, so they can understand what the resource person needs. The target informants in this study were students who seemed to like sports, rarely exercised to never exercised, from the ages of 18-20 years, both boys and girls.

2. Define

At this stage, the researcher groups the problems obtained in the Emphatize stage based on the topic to facilitate development by using an affinity diagram to analyze

clustering problems encountered. In this regard, the defined stage is the stage where we try to unify the findings from the empathize stage obtained from the user, to gain user focus which will be poured on the system to be created as a solution [11].

3. Ideate

The idea stage is the process of solving various possible solutions and obtaining a variety of solutions, enabling us to go far and provide various ideas [12]. At this stage, the researcher uses the method *section on how might we* collect ideas in solving existing problems to make it easier for researchers to develop applications. These ideas are summarized as shown in Figure 2.

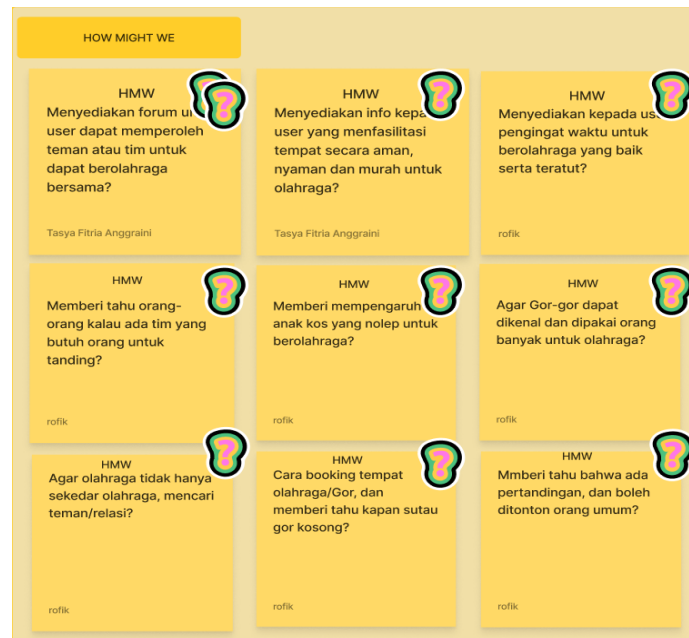


Figure 2. Section “How might we”

4. Prototype

At this stage, the researcher tries to put ideas into solutions in the form of real application designs or prototypes. Researchers are trying to describe how users can get various information with this initial design. In this regard Tim Brown & Wyatt said that the prototyping stage is the process of updating an idea as a real product that is clear and usable by users which are then tested, repeated, and improved [s]. The prototype of this application can be seen in the following figure.

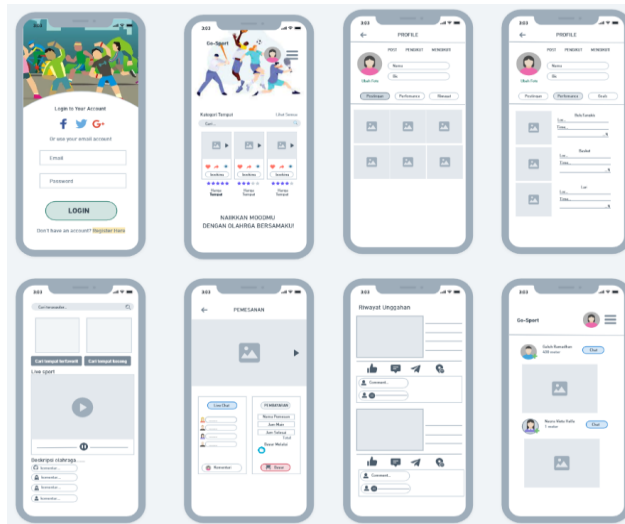


Figure 3. Go-sport application prototype, personal 2022

5. Test

At this testing stage, the designer will test existing solutions from the application design and receive feedback [13]. The researcher tries to test the design of the Go-Sport application on people who are around the researcher, especially students. To get a response, and get various data needed to develop this Go-Sport application. In this phase, we are instructed to create the best possible product and use reviews and responses from pen-testers to improve prototypes, learn more about users, and develop solutions from various perspectives and conditions [12]. Researchers found several problems that could be solved and developed to improve the performance of this application design.

3. Results and Discussion

Based on research results obtained from literature studies [4], as well as interviews that have been conducted with several sources who often exercise and never exercise, researchers found problems that are often used as a strong reason for not exercising for most people. They have difficulty finding places that have good sports facilities, friends to exercise with, teams to play with, and also information related to sports events. The results of interviews conducted with informants can be seen in Table 1.

Table 1. Description of intervies results

Questions asked	Answer given
Is there time for sports?	Informant 1: There must be activities to exercise even though in college there are assignments but still make time for sports. Informant 2: There is, but usually it is used to hang out with friends and there is a feeling of laziness that comes even though friends have invited me. Informant 3: There is, but because on weekends I go home from where I came from, so there is no time.

Is exercise necessary and important?	<p>Informant 1: Very important. When I was little I was often sick, then in elementary school, and junior high school I often played sports. Finally, the habit has continued until now and the body's immunity has increased.</p> <p>Informant 2: The body mustn't be stiff because we as boarding school children just lie down.</p> <p>Informant 3: It's important if you don't exercise you will feel tired easily.</p>
Is it easy or not to find a sports partner or a sparring team?	<p>Informant 1: Easy. The problem is that I have found a friend who has a passion for sports. So if you want to exercise, we can invite them, or vice versa, we can invite them.</p> <p>Informant 2: It's hard to find friends to play sports with because there are so few friends.</p> <p>Informant 3: It's hard to find a futsal-sparing team and badminton friends. The problem is that you rarely meet new people, only play sports with friends you know.</p>
Are there difficulties in finding a place for sports, facilities and so on?	<p>Informant 1: At the beginning, it was really difficult. Sometimes there are no friends in Gor, it's embarrassing to join. Since it's been a long time since I've been living in a boarding house, I already know a bit about the places where sports are usually made, I already know friends who can invite us or we can invite them to do sports together.</p> <p>Informant 2: Difficult to find a place and lack of knowledge about costs</p> <p>Informant 3: Yes, it's difficult, sometimes we only know about it from friends because of the lack of information.</p>

From the information obtained from the interviewees, the researcher concluded that most people do not find sports information quickly and easily. Information about places, sports facilities or teams that want to compete can usually be found by word of mouth or depending on the relationships they have. All problems, difficulties, and user needs are facilitated by an application called "Go-Sport" which has the following features:

1. An application that provides detailed information and reviews of sports venue facilities and can book venues or facilities directly.
2. An application that provides information about sports events and sports news that everyone must know.
3. Applications that can be made to communicate with friends or new people. This application allows people to add relationships, especially when looking for sports partners. Evidenced by the user upload feature, chat feature, and live streaming feature.
4. The following figure is an explanation of the Go-Sport application design.

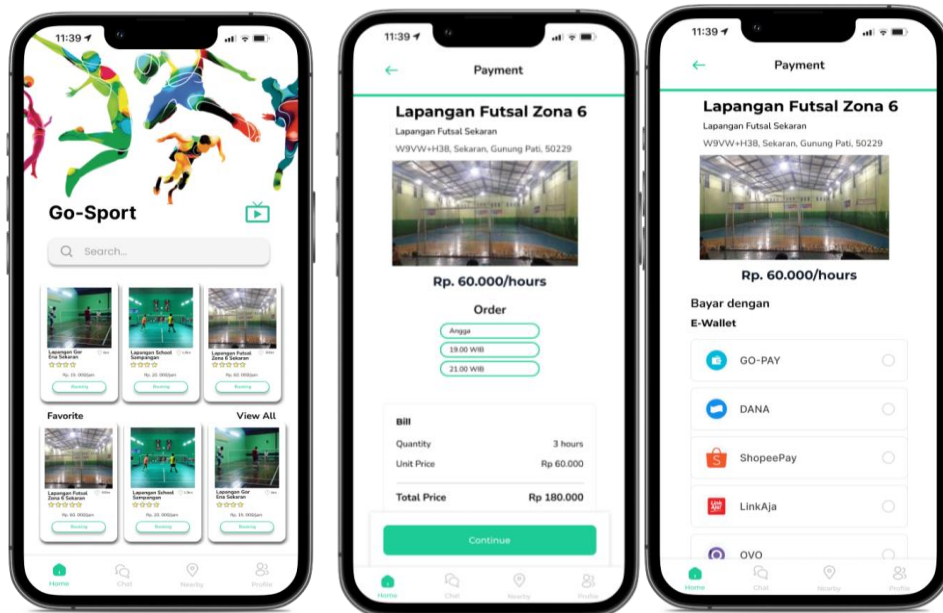


Figure 4. Display of the sports venue booking feature

In this section, users can take advantage of it by searching for information regarding sports venues and facilities that are rented out. Either by searching directly in the search field or getting information directly from the recommended initial view. If you click on one of the sections, complete information regarding the sports venue will appear. Such as hourly cost information, location, field details, and so on. In this section, users can also freely order sports venues. Figure 5 shows the display exploration, and live streaming.

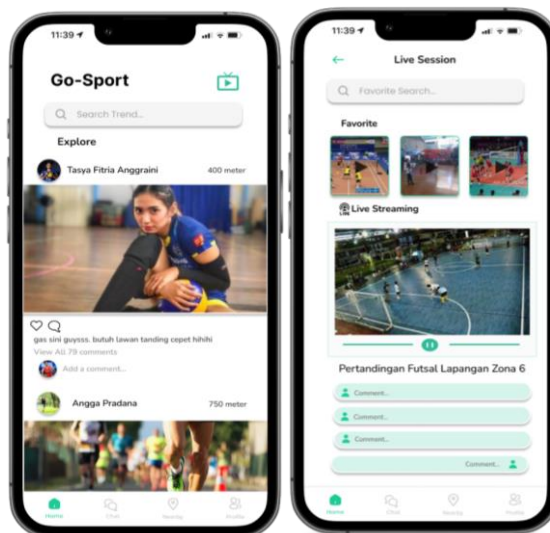


Figure 5. Display explore and live streaming

This part plays an important role in finding sports friends or you can say adding relationships. Users can share their activities, especially in the field of sports. Likewise with other people. This application provides a place for people who know or doesn't know each other to communicate, discuss, and so on. People can be motivated to exercise because they see other people's sports activity posts that are

very interesting, people can share exciting events that will be there or can be called a place to make announcements or interact freely through the comments or chat fields. Live streaming also plays a role in winning people's hearts to be interested and want to exercise because of the excitement.

4. Conclusion

It can be concluded that the Go-Sport application design is quite effective in helping people, especially young people, carry out sports activities. This is because the application is a platform that provides various sports information in the form of facilities, venues, events, and sports partners. The design of the application is indeed made by loading information that is quite complex, none other so that users choose and use this application because it is indeed feasible to have. Users don't need to have trouble finding a place by coming in person and choosing a gym or other place because they are loaded online in this application. And of course, it is equipped with location information; moreover, the design of this application is made by adding location features that make it easier for users to exercise and other convenience features. Likewise, it's easy to find partners, opponents, and solutions to other needs. Even though there are still several activities that may not be available in this Go-Sport application design, researchers see an interesting opportunity for further development of the application. In the next development stage, it is hoped that in making the Go-Sport application, an optimal level of efficiency can be achieved.

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