

UI/UX DESIGN OF “PANAHAJ AJA” APPLICATION TO SIMPLIFY THE SCORING SYSTEM AT ARCHERY SPORT IN BOGOR

Maheswara Titan Ganiy¹, Aria Ar Razi²

^{1,3} Visual Communication Design, School of Creative Industries, Telkom University, Jl. Telekomunikasi No 1, Terusan Buah Batu – Bojongsong, Sukapura, Kec. Dayeuhkolot, Kabupaten Bandung, Jawa Barat, 40257
titanganiy@student.telkomuniversity.ac.id, ariaarrazi@telkomuniversity.ac.id

Abstrak: Panahan telah dipraktikkan sebagai olahraga sejak lama. Awalnya, itu adalah alat untuk berburu dan berkelahi. Panahan juga digunakan sebagai senjata perang selama berabad-abad, dan hingga saat ini, panahan resmi menjadi acara olahraga yang diadakan di seluruh dunia. Turnamen panahan internasional ini merupakan topik yang sangat menarik di banyak bidang, karena terdapat banyak jenis busur yang tersedia dan industri panahan memiliki teknologi berkelanjutan untuk membantu para pemanah mencapai tujuan mereka. Panahan terhitung sebagai olahraga paling aman dengan risiko cedera paling rendah. Hanya menembakkan anak panah dengan busur dan anak panah saja sudah membuat cara lomba memanah menjadi sangat sederhana dan mudah. Permasalahan yang paling umum dan nyata ditemui dalam arena panahan saat ini adalah pada proses scoring, dimana sering ditemukan kesalahan dalam penulisan masukan hasil panahan, sehingga terjadi re-scoring dan re-scoring. mengakibatkan posisi bermain tidak akurat sehingga memerlukan Data yang tertera pada papan posisi. Maka penulis mencoba membuat desain UI/UX yang diharapkan dapat terus membuat aplikasi online untuk mengatasi permasalahan tersebut. Dengan menggunakan metode kualitatif, penulis mencoba mencari jawaban atas pertanyaan bagaimana meminimalkan human error dalam kompetisi panahan. panduan warna akan membantu Archer memilih skor yang benar yang ingin dia masukkan.

Kata kunci : panahan, scoring, platform online, UI/UX

Abstract: Archery has been practiced as a sport for a very long time. Initially, it was a tool for hunting and fighting. Archery was also used as a weapon of war for centuries, and to this day, archery is officially a sporting event held all over the world. This international archery tournament is a subject of great interest in many areas, as there are many types of bows available and the archery industry has ongoing technology to help archers achieve their goals. Archery is counted as the safest sport with the lowest risk of injury. Just shooting arrows with a bow and arrow makes the method of archery competition very simple and easy. The most common and real problem found in the archery arena today is that of the scoring process, where errors are often found in writing inputs to archery results, resulting in re-scoring and re-scoring. resulting in inaccurate playing positions that require Data listed on the position board. So the author tries to create a UI/UX design that is expected to continue to create an online application to solve this problem. Using qualitative methods, the author tries to find an answer to the question of how to minimize human error in the archery competition. the color guide will help Archer choose the correct score he wants to enter.

Keywords: archery, scoring, online platform, UI/UX

PENDAHULUAN

In Indonesia, archery has become a sport that is quite popular with various categories provided, starting from the Standard bow category which is usually filled by children ranging from 6 years old to 23 years old, Recurve at 15 years old to 40s, and Compound which is usually followed by children from the age of 15 years and elders who can be said to be quite old, and the Barebow competition category which is attended by many ladies and gentlemen who are more or less 30 years old and above. In addition, there are also various traditional categories of bows such as the Horse bow which is usually studied at Islamic boarding schools and by religious leaders, Jemparingan which is heavily involved in the Yogyakarta Palace, Kyudo which is a traditional Japanese bow, and various other types of archery in Indonesia. Based on data from archeryweb.id in Indonesia alone there are approximately 214 archery clubs that have been officially registered in Indonesia itself, as well as many more archery clubs that use the names of schools, Islamic boarding schools, individuals who are still not officially registered in archery club data collection at Indonesia. Based on data from myarchery.id it states that there have been around 60 competitions that have been held so far in the time frame from early January 2023 to March 2023 when the author wrote this statement, one of which was the Bogor Archery Open, where the author was directly involved in the field as a committee, athletes, and also coaches at the same time in this event.

In archery competition events so far in Indonesia, the use of the scoring system in archery competitions can still be considered to lagging behind other countries, as the author observed in various competitions, and also from the author's coach observation where other countries have used digital applications in the form of automatic scoring systems that are directly connected to DOS competitions, while in Indonesia they still use the manual method. in the form of handwriting on a piece of paper and transferring to a DOS table to enter in Excel to get the results of the athletes' positions, so there are many mistakes and errors from the athletes and the organizers. The archery scoring system is actually quite simple. Just shoot arrows at the target in the competition category. Those who can get the highest score by looking at where the arrow hit the target and calculating the total score of each shot. fixed then calculate the total score, the archer with the highest score will advance to the knockout round, the whole process remains the same, whoever gets the highest score wins the round and so on until they get it 1st 2nd and 3rd winner at the end of the contest

Archery itself in Indonesia is regulated by official state and international organizations. In Indonesia, the official government organization for archery is the Perpani or the Indonesian National Archery Association based in Jakarta, Gelora Bung Karno headed by the President. Illiza

Sa'aduddin Jamal, SE; Daily chef. Major General Muhammad Hasanuddin Thoyieb, MM; Vice President Perpani was established on 12 July 1953 in Yogyakarta on the initiative of Sri Paku Alam VIII and concurrently served as President of Perpani for 24 years from 1953 to 1977 and joined FITA (Fédération Internationale de Perpani). Tir AL Arch) in 1958. As for the official world archery association, it is now owned by FITA or more commonly known as the Switzerland-based World Archery. Its entire history is so not widely available that the data cannot be accurately completed.

In archery competitions in Indonesia, the biggest problem encountered directly on the field is that during the competition, the scoring process always uses paper and manual Excel, leading to errors in writing, calculating and input into the system, there are errors in Excel frequently. happen. , writing errors on the score sheet so that they have to be crossed out and rewritten. These errors are most commonly found in outdoor competition conditions where athletes must continue to be forced to focus in conditions of fatigue, pressure due to the weather, and the pressure of the competition itself. Based on the data found, more or fewer archers will make 2 to 3 writing errors in each competition session, which is mostly caused by athletes starting to lose focus due to the pressure of the race. In the data input process errors are also often found, where the results of the printout results of the position and score often have errors in the total score which results in the athlete's position dropping so that he is not included in the elimination category, this will be fatal and can also result in chaos between the coach and the organizer as never happened in the RR Archery Jakarta Open competition.

Archery score calculation applications are quite widely available on the internet, one of which is My Archery, but this application still has many shortcomings, one of which is that this application can only be used for data collection of individual training scores for athletes not intended for competition purposes, while World Archery uses well-known applications in international competitions usually use lanSeo, the drawback of this application is that the UI UX is still not good and quite confusing, so that if someone is using it for the first time it is quite troublesome, and this lanSeo requires users to take certification first abroad, making it difficult for novice users and small clubs who don't have a lot of money for needs like this, forcing them to continue using the manual method as it has until now. Digitizing many things in the world has become common, especially in the world of sports like football, which uses sensors on the ball and on the field to know the goals are scored, read them from the website and more. In this problem, the archery world also requires a digitization process to simplify the calculation system in archery competitions, both reducing input-output errors and helping archers score better, help the committee handle incoming and outgoing data. in archery competitions. This scan can

be initiated with a specific application for archery competitions in the form of a mobile application and a desktop application.

RESEARCH METHOD

This final project design data will use quantitative data, the data obtained will be in the form of data collectors, experiences, and interviews, with the participants, committees, coaches, and parents of athletes. Quantitative data is meant here as data that can be obtained based on research aimed at obtaining social data to obtain phenomena at the scene with a description of the results of the study. (Moleong, 2010: 6).

CONCEPT AND DESIGN

After the research process and data collection from various sources related to the topic they wish to work on, the authors will start designing how to create a UI/UX design suitable for use with the research and identified problems described in the previous chapters.

Creative Concept

The archery competition UI/UX design concept here focuses on rearranging the buttons to suit the archer's needs, color-coding each button, and using it in the archery competition judging process to eliminate misjudgments and mistakes. contributes to reducing The judging process for archery competitions, and the authors hope to simplify the judging process for competitions and reduce any mistakes that can be found, again in hopes that no more extra work will be put into the committee. It eliminates errors that often occur when a committee moves data from paper to digital data entry. The design will consist of two types, the first one will be the mobile that is going to be used for the archer on the field of play, and the second one is the desktop version which will be used for the committee to maintain the competition.

Design

The idea came from the author and a friend of the author who has been involved in archery competition for many years as an athlete and as an archery competition official, but according to the author the problem continues to exist in the field of competition, It says it is not resolved. And the co-authors have taken the initiative to solve this problem encountered in the archery competition process so far.

Application

By creating this app into two sections, it will help the archer and the committee to focus on their jobs efficiently, the archer will be using the mobile-type application to score the score

on the go at the field of play, while the committee will be using the desktop to monitor the data input and output that are going through the archery competition.

IMPLEMENTATION

The archery competition scoring application here will only reach the User Interface design and User Experience design stages using the Adobe XD and Figma programs so direct testing cannot be carried out because it requires expertise in other fields (coding) which are not included in the author's realm as a student Visual Communication Design.

Sketching

Throughout the process of sketching the author tries to develop a UI and UX design that in the hopes will be able to be implemented in the designing process in the digital format.

Color

The color that the writer uses is based on the Indonesia flag color and also mix with the archery target that uses in the archery competition. The reason is to help the archer indicate which button they need to press on the scoring condition to minimize the error on the field of play.

Typography

The typography that the writer chooses is Montserrat, the reason is the font was easy to read for the archer and committee in the stressful condition on the field of play.

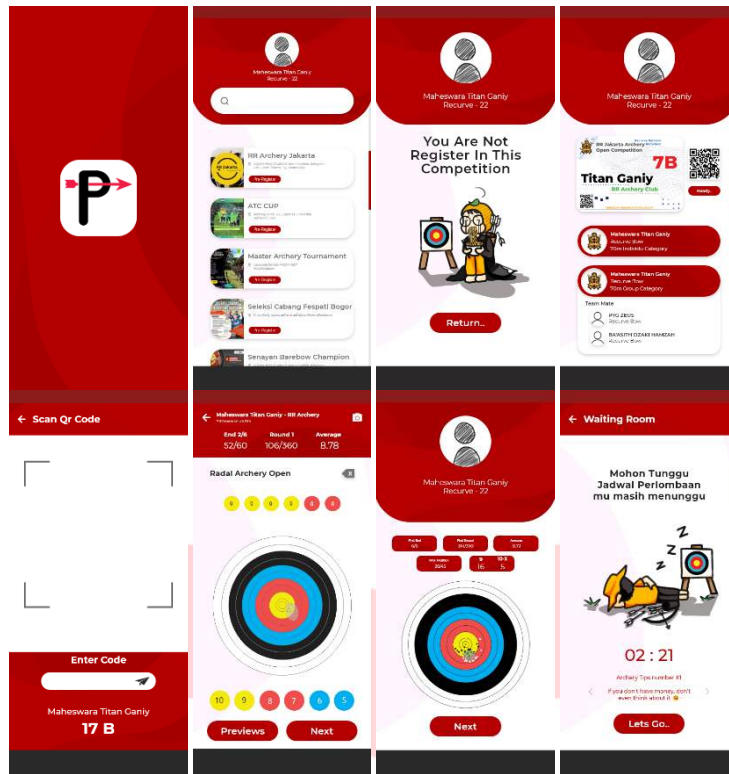
Button

The design of the buttons was created as simply as possible so the archer and committee will be able to locate what they need to press in the stressful full condition where they need to act quick as possible.

Text Fields

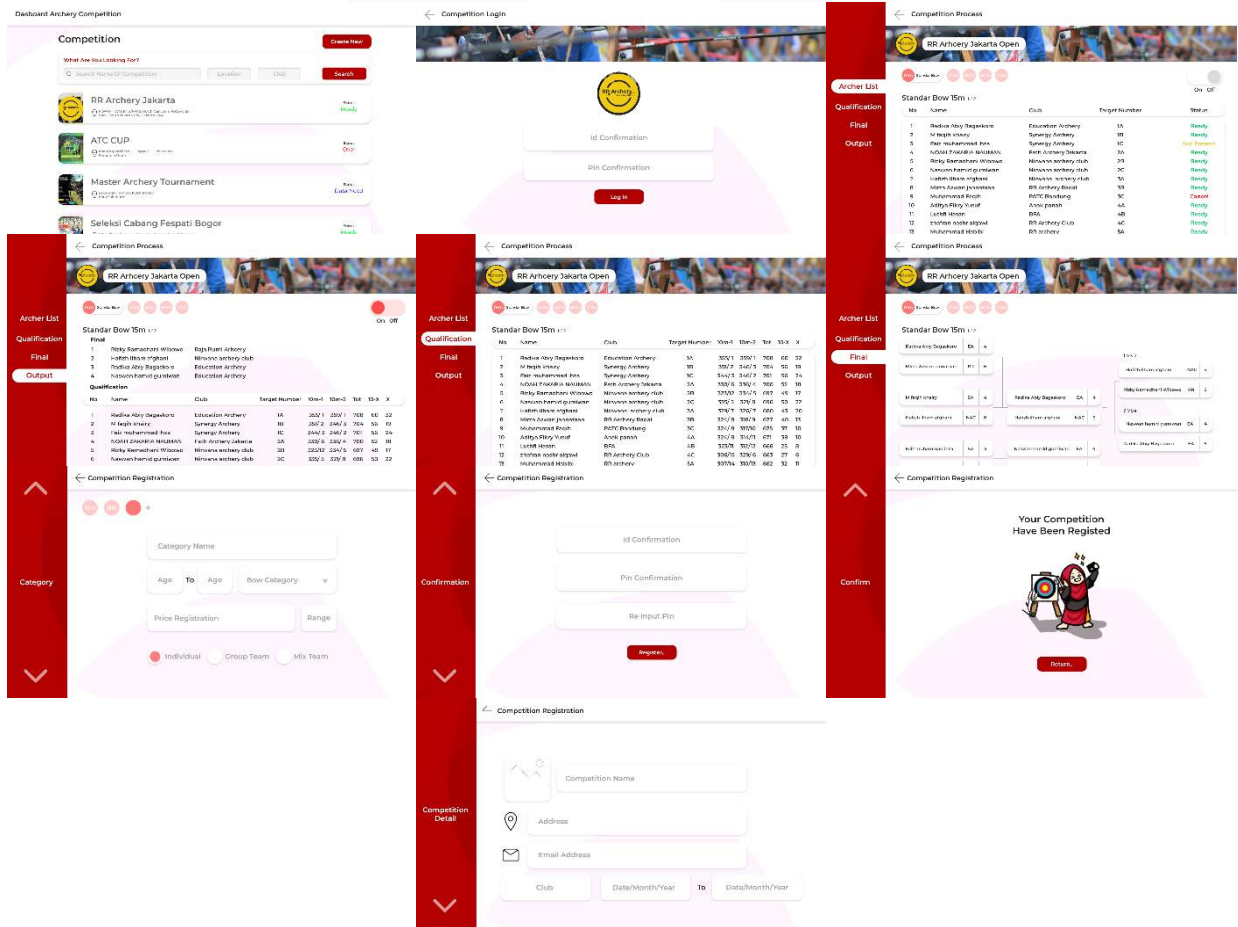
The text field actually will be used only at the start of the competition where the archer needs to input their data or search for their competition, and the other part is used for the committee to input archer names and edit the data that have been input to the system.

MOBILE UI DESIGN



Pictures 1.1 UI Mobile
Source : Personal Documentation

DESKTOP UI DESIGN



Pictures 1.2 UI Desktop
Source : Personal Documentation

CONCLUSION

By fixing the use of manual scoring system in archery competition and replacing it with a proper app this do help a lot in archery scoring system in competition, the reduce of any error in data input process do seems look significant and help the committee processing data easily. With all this proper mobile and desktop application that have made archery community will be able to work out much more and more better in the future.

Writer do satisfy with the result of the application, but the project it self do still need an improvement in the future. Writer hope with this application archery community or other researcher will put interest in upgrading this subject.

BIBLIOGRAPHY

Jannah, M. (2017). Kecemasan dan Konsentrasi Pada Atlet Panahan. *Jurnal Psikologi Teori Dan Terapan*, 8(1), 53–60. <https://doi.org/10.26740/jptt.v8n1.p53-60>

Retrieved April 19, 2023, from https://er.knutd.edu.ua/bitstream/123456789/15361/1/ITPF2020_P392-393.pdf.

Holmlid, Stefan. "Interaction design and service design: Expanding a comparison of design disciplines." *DRS Digital Library*, . (n.d.). Retrieved April 19, 2023, from <https://dl.designresearchsociety.org/nordes/nordes2007/exploratorypapers/10/>

"Home." *Oplib Telkom*, . (n.d.). Retrieved April 19, 2023, fro

"How to score an archery target | Archery 360. (2016, December 27). Retrieved April 19, 2023, from <https://www.youtube.com/watch?v=WUgH5IbxuT8>

Ir., Betha Sidik,. *Pemrograman WEB dengan HTML. Five ed., vol. One, Bandung, Informatika Bandung, 2014. One vols.* (n.d.). Retrieved April 19, 2023, from https://www.academia.edu/53010725/Penerapan_Metode_Design_Thinking_Pada

a_Model_Perancangan_Ui_Ux_Aplikasi_Penanganan_Laporan_Kehilangan_Dan_Temuan Barang_Tercecer?from_sitemaps=true&version=2 Suyanto, Muhammad.

Multimedia Alat Untuk Meningkatkan Keunggulan Bersaing. Yogyakarta, ANDI Yogyakarta. (2014).

Razi, A. A., Mutiaz, I. R., & Setiawan, P. (2018). Penerapan metode design thinking pada model perancangan ui/ux aplikasi penanganan laporan kehilangan dan temuan barang tercecer. *Demandia: Jurnal Desain Komunikasi Visual, Manajemen Desain, dan*

Periklanan, 3(02), 219-237.

Tschimmel, K. (2012). Design Thinking as an effective Toolkit for Innovation. In *ISPIM Conference Proceedings* (p. 1). The International Society for Professional Innovation Management (ISPIM).

