

VEMEE ARCHITECTURE DESIGN OF WEBSITE FOR 3D VIRTUAL SHOW

Yudhistya Ayu Kusumawati, Nyssa Averina Liemantara

Visual Communication Design, School of Design, Bina Nusantara University
Araya Mansion No. 8 - 22, Genitri, Tirtomoyo, Kec. Pakis, Kabupaten Malang, Jawa Timur 65154
Indonesia.

e-mail : ykusumawati@binus.edu, nyssa.liemantara@binus.ac.id

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Abstract: In the pandemic, the stress level due to the covid- 19 outbreak has increased. Now the entertainment industry is required to provide a variety of entertainment so that people's stress levels will be reduced. The impact of high-stress levels can lead to social, economic issues. Therefore, stress and mental illness need to be solved immediately. This research aims to reduce people's stress levels because of the covid-19 outbreak. To achieve that aim, the researcher presents a solution in the form of an application and website of a virtual concert that will be held in 3D. The target to be achieved in this research is that this media is expected to reduce people's stress levels and develop entertainment in the music industry. In developing this research, the researcher conducted design thinking research and data collection methods by questionnaire. Although the solution provided is in the form of a website, it is possible to be developed into an application.

Keywords: architecture design, virtual show, website

1. Introduction

During this pandemic, the level of public stress about the COVID-19 virus is increasing. It is evident from research conducted by the Ministry of Research and Technology - the National Research and Innovation Agency of the Republic of Indonesia, which shows that 55% of people experience stress due to the COVID-19 outbreak, serious stress levels are 0.8%, and middle stress is 34.5% (Nasrullah, 2020). Seeing the mental state of today's society, the entertainment industry is required to give a variety of new entertainment. If this issue continues, excessive worry will arise, and life in society will be chaotic. One of the media that interests most people and never ends is the entertainment from the music industry. Therefore, now the music industry must make innovations that offer various types of entertainment so that it can reduce people's stress levels. At the beginning of the pandemic, the music industry succeeded in attracting people through the virtual stage. However, according to the research conducted by Media Indonesia, virtual concerts are also considered to have found a saturation point (Fathurrozak, 2020). Based on the research conducted by kumparan.com, with virtual concerts, singers have no interaction with the audience, making every musician feel lost. Virtually, the musician found the difference in the audience's voice of the media performance. The crowd's screams are analogous to the fullness of the comment's column (Ivanodei, 2021). Therefore, this condition makes several parties encourage a breakthrough from the music industry. One thing that can be improved in the music industry is changing virtual shows into three dimensions or 3D. This 3D virtual show will offer a new way for the public to enjoy music concerts, theater, and other performances. In this 3D virtual show, the show organizer will rent out a device that can show images and sounds around the audience so that it looks like a real illusion. While enjoying this 3D concert, the audience can invite the family to enjoy it together so that the atmosphere of the show is more alive than a virtual show in general. In this 3D virtual show, the audience will easily access it with the help of a website. This website is called "VeeMee!" that will provide all information about a concert, theater, performance, offer easy payment, and people can easily choose and enjoy the show. The name of the application and website "VeeMee!" is a shortened name of "Virtual Me" which means life will be happier and easier with virtual technology. With

the help of this new 3D technology and website as the supporting media, I hope that people will be more entertained, and it can reduce people's stress levels because of the covid-19 outbreak. Not only that, but this 3D method which is new in Indonesia could also develop the music industry. Even after the pandemic, this method was still used to check an offline shows schedule, to see shows information in the whole world, easy payment and to watch far shows in 3D.

2. Methods

State of the art research is taken from several previous journals that have been carried out to help develop information and data. The state of the art presented by the researcher will cover the research of the four previous journals in table 1 form. These four previous journals discuss the topic of virtual concerts in certain output forms.

Table 1. State of The Art Table

No	Researcher	Research Title	Methods	Research Differences	Result
1.	Kartini	Design of Location-Based Online Music Concert Ticket Ordering Information System (Kartini, Fahnun, & Pratiwi, 2013)	Qualitative Method.	The research aims of this journal are to introduce the positives of online payment tickets, show how to use the internet in society, and reduce brokers. To achieve the aims, they used a website.	The result showed that this website helps the audience to get a ticket easier and helps them to get more information about music concerts. Moreover, this media also makes the audience comfortable without being annoyed by the broker.
2.	Ricard Simon Sianturi.	Design and Build an Online Ticket Application for a Web-Based Music Concert UNIKA SOEGIJAPRANTA. (SIANTURI, 2021)	Quantitative Method.	The research aims of this journal are to know what factors that affect the user to order an online ticket and to know the process of making an online ticket order in the form of a website.	The result showed that there are lots of factors that make the user want to use this method. This method provides clear information about the concert and gives them an easy way to order a ticket. Not only that, but the musician is also easy to manage the audience order.
3.	Selvi Utari	The factors that encourage students' interest in watching virtual music concerts in the COVID-19 era. (UTARI, Nisyak, &	Quantitative Method.	The research aims are to know which of these three factors; fanatic, music genre, and new experience that most influence	The result showed the biggest factor that influences the student to watch concerts is the fanaticism factor.

		Saraswaty, 2021)		students to watch a virtual concert in pandemic covid- 19.	
4.	Antonius Titis Adhiti o Bintang Timur.	Mobile-Based Music Concert Schedule Application (Kick Gigs). (Timur & Pakereng, 2021)	Qualitativ e Method.	The research aims of this journal are to help people to get an easy and fast music performance. Not only that, but this research also helps musicians to share information about their concerts in the form of a mobile application.	The result showed that the musician can create an easy and fast concert and help them to promote their concert easier.

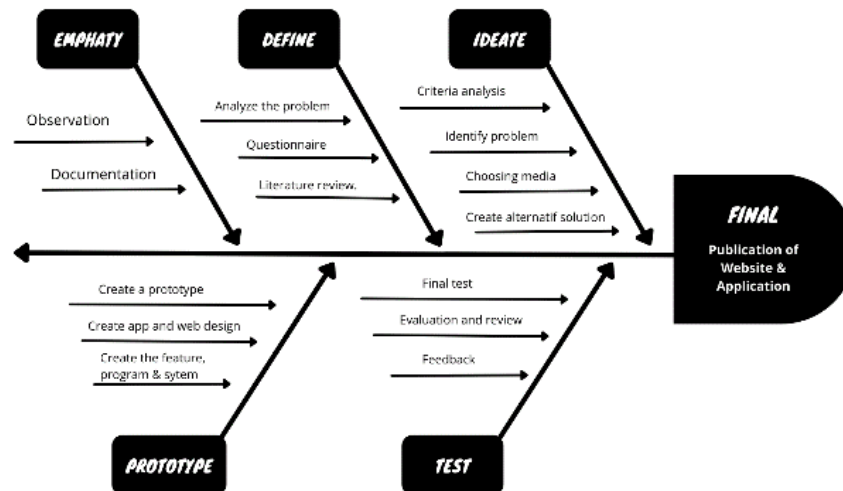
The journals above have done similar research but still have different objects to the features provided. The difference between the previous research and the research that will be carried out is this virtual concert is going to be in 3D. The website called “VeeMee” will provide all information, promotion about the concert in the whole world, easy online payment, and the concert schedule. Similarities and differences in existing research still provide benefit and support information that can affect future research so that researchers can produce better research results.

This study used quantitative methods with closed-ended questions to collect data. The questionnaire was distributed online due to the pandemic in the form of a google form to 31 respondents where the majority were women 61.3%, and 38.7% were men.

The questionnaire result shows that 96.8% of respondents are students and the rest are workers. Based on the results, 93.5% of respondents understand the meaning of a virtual show. The questionnaire stated that 58.1% had attended a virtual concert whereas 83.9% of them preferred concerts from America and Korea rather than Indonesia. Only 61.3% of respondents liked concerts from Indonesia. However, many parties claim that they have difficulty getting information about the show, from posters, payment methods, and others. That is also supported by data, 43.3% of respondents who agree with that statement. As for the cost, 19 respondents are willing to spend less than 100,000 to watch a virtual 3D show. As a solution, the researcher wants to create a platform that will help users easier to get all information about shows from around the world. The result shows that 73% of respondents chose a website as a platform that would help.

The research conducted by the researcher uses a fishbone diagram to describe the design thinking stage. Here’s the fishbone diagram.

Figure 1. Research Fishbone Diagram



The topic development is done with the design thinking method. This method consists of empathy, define, ideate, prototype, and test. The first stage is to gain an empathetic understanding of the problem (Swarnadwitya, 2020). This stage, the researchers tried to observe the problems around and paid attention to mental health problems during the covid-19 pandemic. This part also describes human physical and emotional needs.

Furthermore, at the defined stage, the researcher tries to determine the main purpose and the core problem to find a solution. At this stage, the researcher also creates a questionnaire to help research development. The researcher made a questionnaire with the quantitative method to obtain data from respondents' answers. After that, the researchers conducted data research on the previous research and journals. This part, research data taken from literature reviews is very important because it's used to develop the study so that this research has a valid data source based on the facts.

At the ideate stage, the researcher focuses on developing ideas to solve the problem. In this process, the researcher is required to explore any possible solutions to solve it. Based on the questionnaire that has been distributed, the researcher finds out the final solution, namely by developing a virtual concert into 3D with the help of a website as a platform.

Next is the prototype stage or known as an experimental stage, where the chosen idea builds into the form. This process used to make users feel easier to imagine the design solution given. It's more convenient to explain the ideas with prototypes than words. In this part, the researcher will create a design, system, features, and programs. In this research, the researcher will make several prototypes about the website design.

Last is the test stage where the researcher will collect feedback from respondents and evaluate the development of the 3D virtual shows website and the features presented. In this part, the researcher must invite the user to use the design process in daily life. In the process of testing the prototype, every respondent will give the researcher feedback. The next step is an evaluation which is used to determine a suitable final solution. After conducting the final test, the next step is to produce the solution in the form of a website of the 3D show that is ready to be published.

3. Result and Discussion

In this part, the researcher will show a visual concept of the prototype for the solution in the form of a website. The design process begins with the color theory, typography, layout until the user interface will be described in this part.

Figure 2. VeeMee’s Logo



At first, the logo functioned as a differentiator between products (Rustan, 2013). A logo is a brand identity that is used to market the brand and give a good impression to the public about the brand itself (Putri, 2021). This website provides various virtual 3D shows called "VeeMee" which means "virtual me". Virtual Me means people can easily enjoy various shows in virtual 3D. The design concept of this website is elegant and simple according to the target audience, which mostly comes from teenagers and adults. Therefore, the website logo design is simple, which only combines a few straight lines from the letters V and M. The combination of thick and thin straight lines also adds an elegant impression to this design. Logo elements are not aligned but up and down interpreted as a musical wave in a show.

3.1 Color Palette

Figure 3. Color Palette



Color plays an important role to attract customers. Using the right colors will interest customers to try out the website and help them easier use it. Therefore, the color selection should be based on the target audience and the products offered by the website. Shows, performances, and concerts are usually held at night and enjoyed by teenagers to adults. Therefore, this website will use dark colors such as black and gray to give the impression of night shows. Dark colors can also help overcome eye strain and increase customer focus so that customers become more relaxed when accessing this website (Gunawan, n.d.). This website also uses a light color combination such as pink, blue, and orange which is stacked with dark colors to match the dark tones. These light colors are used to create an expressive impression of the shows offered. For content, researchers will use white to create contrast so that it'll be readable. The black color on this website represents elegance and simplicity, the gray color shows maturity and independence as if representing the target audience, and the white color represents cleanliness and clarity (Sitoresmi, 2021).

3.2 Typeface

DM Sans Aa Bb Cc Dd Ee Ff Gg
DM Sans Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq
DM Sans Rr Ss Tt Uu Vv Ww Xx Yy Zz

Figure 4. Typeface

Typography is the knowledge or ability to arrange letters or characters for visual publications, both printed and non-printed (Kusrianto, 2013). Typography has the main function as a transmitter of information that must make the reader feel comfortable when viewing writing or text [14]. In the application of typography, readable and legible elements are very important. Readability means writing or text can be read easily. While legibility means that readers can recognize written text and its letters easily. After considering readability and legibility, the researcher finally chose the “DM Sans” font to be used as the title and content on the website. This font is a hook-free font, so it has clear legibility both from far and near and looks modern (Putri V. K., 2021). In addition, this font also displays simplicity and to the point. Although this website uses only one font, the researcher combines bold, thin, and italic features to create differences between title and explanations.

3.3 Illustration

Illustration or photo design is one of the most important things in a UI design. This is because the illustrations and photos are visual forms, so it is easy to attract people's attention. In addition, illustration can help users easily recognize the concept of a design, illustration and images can communicate a text more attractively, illustrations are also possible to reduce frustration (Ramadhan, 2019). For example, when a user sees a blank slate in the first use of the product, the illustration can be used as a hint for what the user will do the first time. The concept of this web design is simple and elegant. Instead of using illustrations, this web design focuses on using concert photos as backgrounds. The photos used in this web are some photos showing musicians with colorful lights on stage. In addition, on the artist page, the researcher uses the artist's photo as the background.

3.4 User Interface Prototype of VeeMee Website

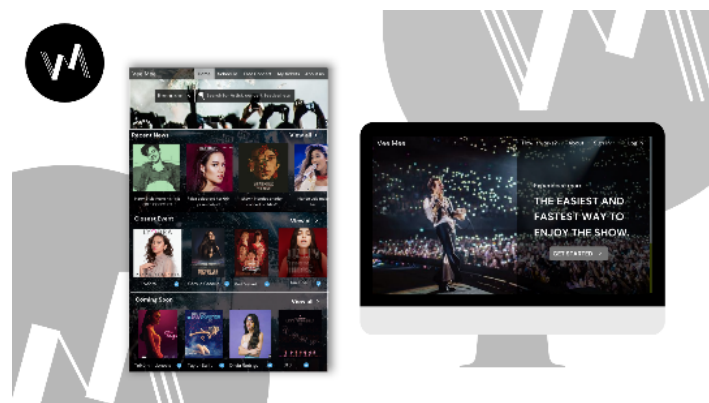


Figure 5. UI Design for Home Page

Based on the questionnaire result, respondents chose a website as a platform to solve the problems raised. The following is a prototype design regarding website features that have been made by researchers based on the respondent's answers. On the first page, the user needs

to log in or sign into their account before being able to access the web. If they don't have an account, they will be asked to do registration and fill in their data such as email address, password, and name.

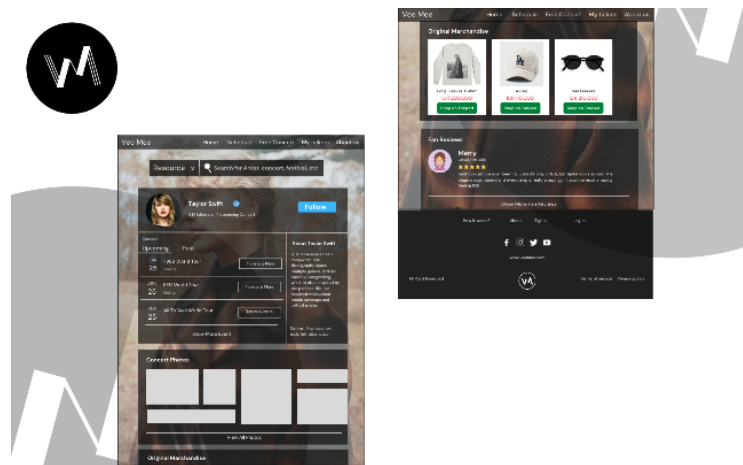


Figure 6. UI Design for Artist Page

If the user clicks on the artist account, a page continues to the artist page. This page contains all information about the artist, starting with name, short biography, a list of the past and upcoming concerts, the artist's merchandise, fan reviews and photos about previous concerts. In the concert list, the user will be able to see the date, time, and place that the concert will be held. In addition, if the user wants to see reviews of the previous concert, the user only needs to click on the "fan review" and "concert photos" sections. Users who want to buy exclusive merchandise from their artist can also be seen on this page and can proceed to the payment section with the help of the online shopping application "Tokopedia"

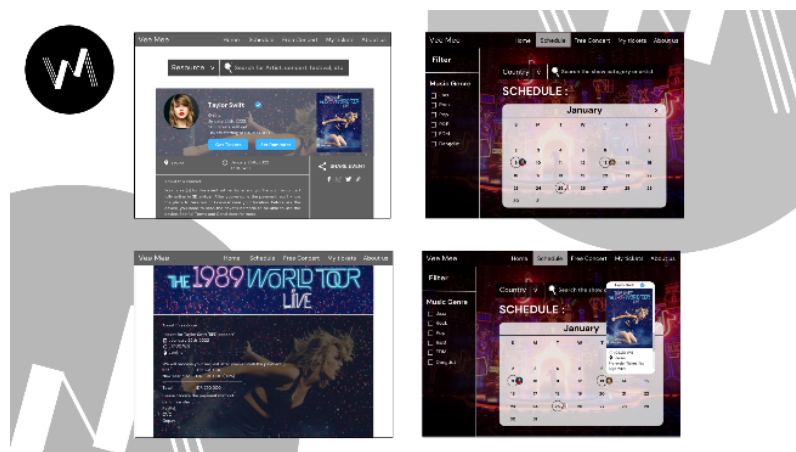


Figure 7. UI Design for Payment and Schedule Page

Users who want to order tickets can click the "tickets & more" section on the artist page. After that, the user will see more detailed information about the concert. Concert detail information includes the date, time, place, price, and so on. After booking the tickets, the user will continue to choose the payment methods such as bank transfer, PayPal, OVO, Gopay, etc. The user that gets the promo code from their email will be automatically entered into the payment page.

Researchers also present a scheduling feature on this website where users can easily see the list of the closest to upcoming concerts in one calendar. To check the schedule of all shows on the website, the user must type the show's category in the search column. The show's categories are musical performances, music concerts, and theater. After that, the user also needs to select the country and the music genre. After filling in these three points, the user will see a calendar with several shows inside. When the user clicks on one of the shows on the calendar, the details of the show will appear. Detailed information can be in the form of time, place, date, players, and so on.

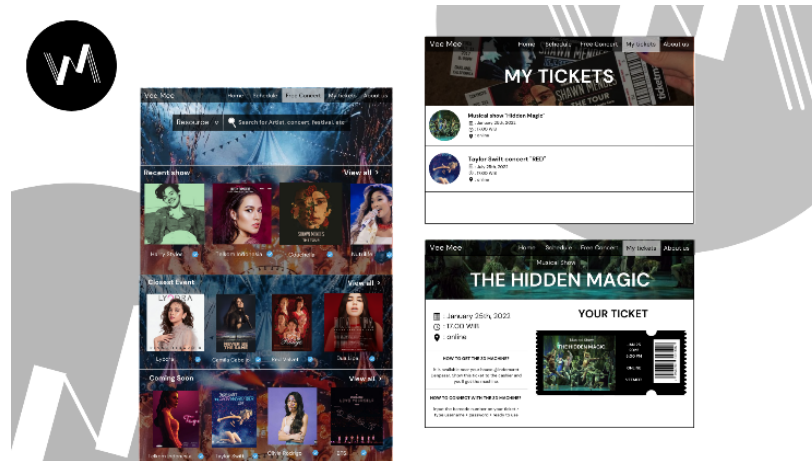
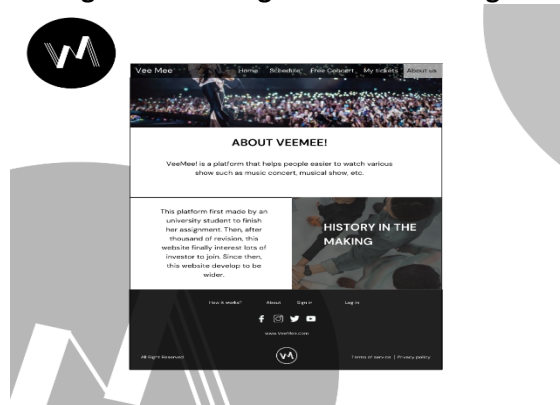


Figure 8. UI Design for Free Concert and My Ticket Page

Not only does it provide a paid show, but this web also provides several free shows. On the "free concert" page, the user will see several free shows arranged with the closest held. Users can also search for the shows in the search column based on the country, show category, and music genre. After successfully ordering tickets for the show, users can check tickets on the "my ticket" page. On this page, the user can check the ticket history, list of the ticket, and digital ticket. The digital ticket will contain detailed information for the show such as date, time, place, players, and ticket code. Later, the code on the digital ticket will be used as access to use the 3D machine.

Figure 9. UI Design for About Us Page



The "about us" page will describe the "VeeMee" website itself. This page will begin with the history of the web, definition, vision, mission of the company, and so on. By accessing this page, users will be able to get to know this website more and know the people who work behind the greatness of this website.

4. Conclusion

In this paper, the author wants to provide a solution to reduce people's stress levels due to covid-19 by developing entertainment in the music industry. The solution given is to create a website that presents a new way to watch a show with 3D technology. With this new method, it is hoped that people will be more entertained during this pandemic. This website is called "VeeMee" where this website also provides various supporting features that will help users such as the show's schedule, various choices of shows such as a music concert, theater, musical from around the world that is free to be paid, and others.

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