

Virtual Shop Using A-Frame in Vr

Arti Bhagwan Padhy, Kanchan Bhaorao Wanedkar, Pooja Chandrakant Sali

Computer Engineering Smt. Indira Gandhi College of Engineering Ghansoli, Navi Mumbai

Submitted: 01-05-2022

Revised: 04-05-2022

Accepted: 08-05-2022

ABSTRACT—Ecommerce shopping is developing day by day. Now a days shop your favorite thing in home without going outside is the best thing for customer and sellers of all over world. Shopping offers many advantages, such as 24/7 opening hours and a stronger focus what you want you can take time for this. This is complex type, means open a online physical store is not that possible we have really work hard on it. Because creating this stuff is not for advantages of customer but also for sellers which are selling their item from a new way of store.it is very new for them also. Virtual Reality (VR) has the capability to create new shopping experiences that mixture of real stores which is near our home and the e-commerce simple websites and virtual store which are look like cartoon which we see in tv. Furthermore, we designed and implemented an Web VR online which will give you a physical store view. Really COVID -19 hits every one very hard. If the lockdown has demonstrated anything to sellers, it's the power of online shopping with virtual shopping feel. Because of pandemic all types of business are hurt,all type of people affected by this.so what is wrong in this if we can make this worst situation good by creating new stuff.

Keywords—Virtual reality ,VR software.3D tools,Nlp chatbot

I. INTRODUCTION

Things by store bargain with shopkeeper, take some discounts all are love by everyone. There are so many shopping websites which are available on social pages, internet as well as near our home there are so many shops .if we see everywhere is shopping market available. E-commerce is increasing very rapidly we all are using this very high amount. But then the bad time come, none other than COVID -19 which destroy this shopping experience. From past two years e commerce has increase but that feeling of going to shopping stores and choose thing after trial is gone completely. Scam about wrong product is also one problem in

online shopping.so we created a e-commerce website which is virtual reality based. VR is nothing just a platform were reel and real life interact with each other ,they mix with each other and give a feel of gaming site. video games. We examined that shopping experience for online and offline is different. User will not enjoy online shopping like offline, so if in online is become mixture of online and offline is not it amazing and different? From our research 3d shopping in AR and VR giving new graphics, interface and new way of shopping.. The COVID-19 pandemic has affect the small shop owners and force them to close their source of income.

II. LITERATURE SURVEY

In our many research scientist said AR and VR are new future for world .they attracting sellers as well as user by their new technique in 2014 and 2016 respectively. If this will applied in our normal commerce site they will create new way of shopping.

In our research VR using in many fields and also research on VR is also happening.. Vr use for crating a stuff which look like cartoon. Previous study simply said that study of VR is not depend on only how it works instead it is more depend on for who it is important and the people which are going to adapt it or using this, selling it. In simply how many will use it the way of their using is also import for creating stuffs like this.many scientists are researching that this technique how will survive in this world.the chances of this increased because of past two years whatever is happened.

There are more positive response on VR/AR just because of they very new to this world where all same thing sell in different way.So develop our project in this is a big opportunity for all of us,can we do this?then how?and what is use of VR for user ?there are so many questions for this but the answer is only VR which will give us new way of shopping.

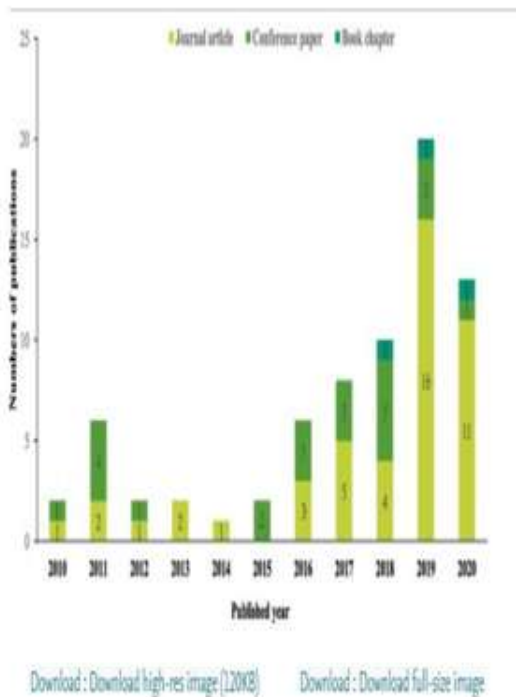
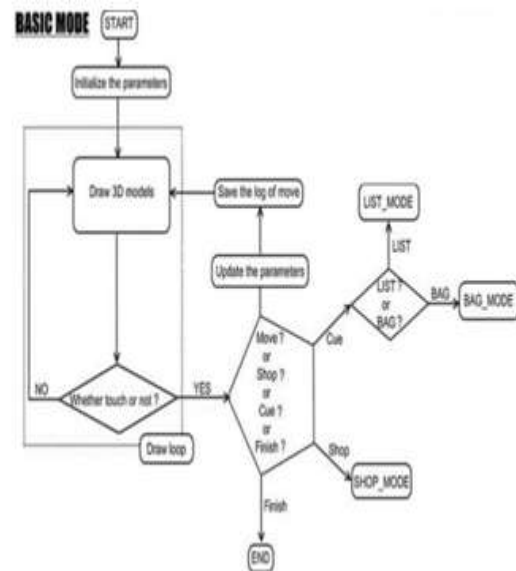
III. METHODOLOGY

We all know the games which give you a feel like we are experiencing them in real life used in very high amount, but what they used because they provide those experiences which are not available in real world so they used in high amount.

For our project methodology we refer many software in which first one is unity 3d it is a system which provides a VR experience by using assets we can upload or import so many objects in our store which look like a real shop. By using camera angles, light and all x,y,z axis we can create a room or project with proper measurement. But our system was not enough for unity 3d so we dropped the idea of using it. But because of unity 3d software reference doing a project becomes a little bit easier and also understandable. Because we now have an idea of what we want and how we will use it. Then we take another site called A-frame. In which languages are they by coding a VR experience we can feel. This VR technology is very high efficient and also it takes more time to develop. Also for developing this, the system should be high their requirements are high. Normal PC cannot handle the load of heavy software so they should be high specific laptop. Now days laptops are not available for everyone. And the one who has their system is not capable of taking the load of software like unity 3d.

IV. PROBLEM STATEMENT

This VR technology is very high efficient and also it takes more time to develop. Also for developing this, the system should be high their requirements are high. Normal PC cannot handle the load of heavy software so they should be high specific laptop. Now days laptops which have high specifications are not available for all. And the one who has their system is not capable of taking the load of software like unity 3d.



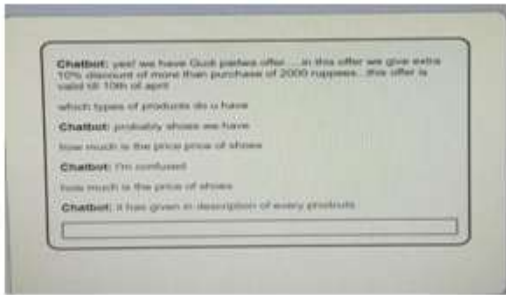
VR shopping increase in years

5. AFRAME VR

We started searching free Virtual Reality software that will help to develop VR look. The first tool we came across was unity. It's a really 3D feel giving system but it is not supporting our system, so we started using A-frame. A-frame can be developed from a HTML, CSS and JAVASCRIPT file without having to install anything. A big chance to create VR by coding. By HTML, CSS and JS the content will create, by creating the room we can look whole room in 360 degree it is actually look like a room or shop.

6. Making Website

Languages like HTML & CSS always used in e-commerce but they do not look like a real shop in this past 2 years because of COVID-19 e-commerce is using in high amount. By using HTML, CSS and JavaScript we made one VR room and then we inserted 3D products. By coding we built a chatbot in which we add some offers, after this we make a chatbot.



7.NLP CHATBOT

NLP stands for Natural Language Processing. Using NLP technology we made a nlp chatbot. but this is not only a simple chatbot, in this we add one idea which is we use our daily life. nobody in this world who is not doing bargaining everyone loves it. in simple e-commerce websites this option is not available so we add this in our site. we add some offer for user in which he/she bargain with us for their product price. user can do exactly same thing which they do outside shop and sellers.

V. 8.RESULT

By doing this project we teach that this type of online website is possible. creating stuffs like this is possible, giving user a new way of shopping is possible. virtual shopping decrease gap between online and offline store. The result of our project which involve the bargain option for user which he/she enjoy. user will enter the screen and then login to our page and then user will enter in a room which look like some kind of room or we can say store which is virtual reality based.

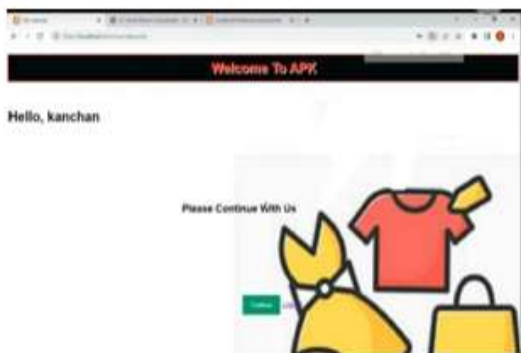


Fig.1

This our main screen which will open on website in this first user have to login and sign in to enter shop

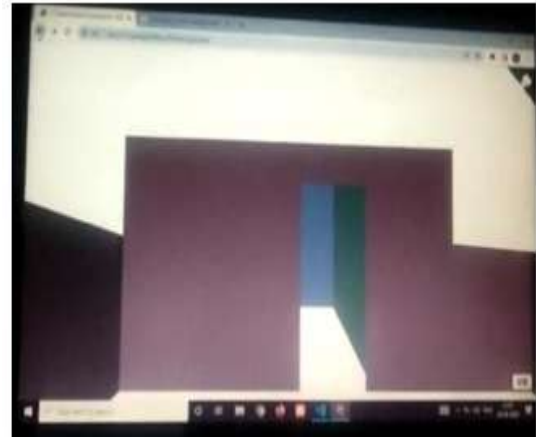


Fig.2

By clicking on the ground the new screen will visible where our product is available Bargaining chatbot

Angle 1

Our site is 3d based so product also 3d which will show angles by clicking and using cursor.

Angle2



Angle 3



Fig 3

There are angles of 360 product which will give you real feel.

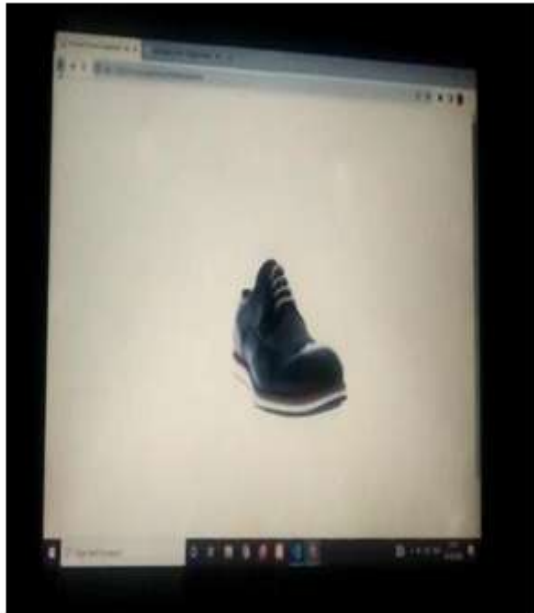


Fig 4



Fig 5

Angle 4



Fig 6

After selecting product the paying option will visible

In which user can pay and he/she want to bargain then chatbot option is available

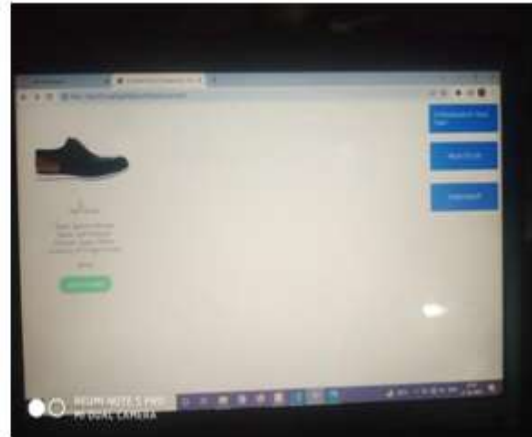


Fig 7

Bargaining is favorite part of shopping when user want to bargain they can chat with us there are some discount offer available in chatbot.after the payment option will come.

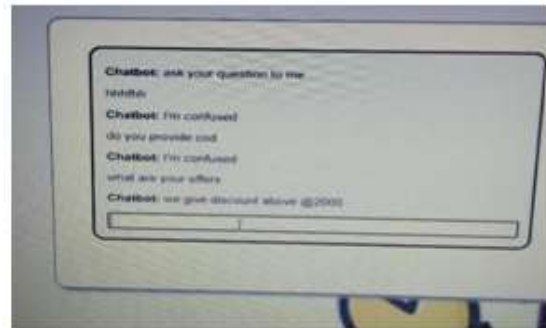


Fig 8



Fig 9

VI. CONCLUSION

In conclusion, We created a website which is virtual reality based ,in which people chat with us and tell what they exactly what want . Virtual shopping is also helping to offline sellers and the future of offline stores. The impact of lockdown destroy the future of street workers. now they can

invest in websites like this they can do business in this which is same like offline just one difference which is seller will work online like offline in different form. if the next developer want to do some changes like advance features they can add in this. because every next day new techniques are developed and new features can add in this.

REFERENCE

- [1]. <https://www.iberdrola.com/innovation/virtual-reality>.
- [2]. https://en.wikipedia.org/wiki/Virtual_reality
- [3]. <https://www.editorx.com/shaping-design/article/ar-and-vr-web-design>
- [4]. <https://nap.nationalacademies.org/read/4761/chapter/18>
- [5]. <https://www.britannica.com/technology/virtual-reality>
- [6]. 1—26 (2004). 7. Parhizkar, B., & Zaman, H. B.: Development of An Augmented Reality Rare Book and Manuscript for Special Library Collection (AR Rare-BM).
- [7]. In Visual Informatics: Bridging Research and Practice, Springer Berlin Heidelberg, 344--355 (2009). 8. Dias, A.: Technology Enhanced Learning and Augmented Reality: An Application on Multimedia Interactive Books (2009). 9. Martín-Gutiérrez, J., Saorín, J. L., Contero, M., Alcañiz, M., Pérez-López, D. C., & Ortega, M.: Design and Validation of An Augmented Book for Spatial Abilities Development in Engineering Students.
- [8]. Computers & Graphics, 34(1), 77--91 (2010). SCARLET: Mapping out a User Journey. Augmented Reality in Education. Retrieved from <https://teamscarlet.wordpress.com/2011/09/12/mapping-out-a-user-journey> (2011).
- [9]. https://in.top10quest.com/ws?q=virtual%20reality%20event%20platform&asid=tq_web_in_06&mt=b&nw=g&de=c&ap=&ac=26174&cid=16573977756&aid=133814113919&locale=en_IN&gclid=Cj0KCQjwma6TBhDIARIsAOKuANwBHP7iYSvfg_Ib86GfKB15ivvI9f2v4WhDbyOtBCdryiDCPGMkaAIPxEALw_wcB.