Virtual Shopping Application for Android Devices Using Virtual Reality

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ABSTRACT: The customer turning their faith on purchasing their project in online.But the real visualization and product reliability can'tbe seen in online.Hence this paper deals with a virtualization of the road and shops where the person can directly go search shop and purchase it in the real time and also customer can directly buy the product in the retail shop and also it gains the navigation of the information.

KEYWORDS: virtual reality, 360 degree viewing, 3d viewing, interactive search, augmented reality.

I. INTRODUCTION

In ancient period people are played in somewhere places like ground, outer area nowadays the people where played the game in own home by using the virtual technology. The virtual technology is also used in medical field it's helpful for some medical operation by this method avoid the people fear and some interference because by this technology the people imagine and feel they are standing in somewhere places. The virtual reality means interface between the user and computer by graphics. Nowadays VR is used only for game, motion pictures, medical field and so on.

Now VR technology is implemented for online shopping. Nowadays online shopping mean people just watch the product picture , quality, prize it's just like a information about the product only. People can't check the product by demo and spend more time for searching the product is available in which road side (area). Due to this we are decided to create application for online shopping by this VR technology it's useful to people efficiently it can be easily find out which product people needed and product are available in which area by virtually.

Here we use android domain to develop the "virtuashop" (virtual shopping). Recently the people are using the android mobile phone. In android mobile phone have lot of application like game, web application etc.., additionally we create application for shopping virtually. People can gathered the product information and access the shop details easily from somewhere place.

VR application are used in various field like game, military, education, healthcare, entertainment, fashion, business, entertainment,

Engineering, sport, media, scientific visualization, telecommunication, construction, film, programming language these are the application are used recently. Based on this existing application we can create and implement the virtual online shopping on android mobile.

"VirtualEShopping" is one of the virtual online shopping. In this website the people need to register name and password for login into the mall. By this method people can watch and buy the product in only one mall. Here people can share their information by social network. People just choose the option "i want it" and "i buy it" for the product purchasing.

But "Virtual Shop" people should identify the product and where is located by this application. By this application data are collected from each shop on surrounding area. Then people easily identify the location of shop and product virtually without moving their place.

By this application save the time for customer and seller make comfortable both sides.

II. RELATED WORKS

In 1860 panoramic murals was implemented. This panoramic murals was initiative step to developed virtual reality technology [1], Vehicle simulator was implemented in 1920 [2], 1962 sensorama was implemented this is one of the mechanical device it's have ability to multiple sense like sound, smell, touch and sight the sensorama was developed on basic of "Experience Theatre" is wrote by "Morton Heilig" [3], in Air Force they are using visual flight stimulator to trained the pilot virtually it's developed by "Thomas A. Furness lll" in 1966 [4], "The Sword of Damocles" was first virtual reality(VR), augmented reality(AR)and head mounted display (HMD)system developed by "Ivan Sutherland" this implementation done by help of his student "Bob Sproull" in 1968 [5], street which can be viewed by virtual reality this implementation done at "MIT" in 1977 its first launched Aspen Colorado the street photos are gathered and viewed by virtually [6], the "Jaron Lanier" was implement "goggle and gloves" this device is useful to seen and move something virtually in 1980 by this implementation virtual reality were populated [7], in 1991 the "Computer-Simulated Teleportation" was developed by "Antonio Medina" he is a "MIT" graduate and "NASA" scientist this technology is used to "drive" the mars rover from earth termed as "Mara – Earth – Mars" signal [9].

By overall above reference papers is used to develop "Virtuashop" this application is used to view and check the product on shop virtually.

The virtual reality makes an dramatic adventure in this field where the innovation many thi8ngs lead to creativity where it process the information and showing it reality environment to the user. The virtual reality made an remark in the gaming field where Microsoft play station has its vital role where people can directly involved in the game and play in the real time environment aspects .hence

III. METHODOLOGY

The virtual reality plays an vital role in various field in which all the steps is discussed as far we seen many methods .hence we are assigned some modules and steps for which our project is to be concerned

3.1.360 degree visualization

The people now changing to a dramatic world of virtual things.Which means that without negligible work how the work is completed?a person gets complete visualization when he explore the things in reality . Where this virtual reality plays a vital role. Panorama is the technique which merges the multiple photos together. Hence we apply the above techniques for displaying of the street through the above concept. Hence the customer can get a real world experience for which he can explore the thing on aspect of the world.without being there a customer can walk in to the street by which the person can know the complete information about the that street. Hence for the implementation of above modules we have used virtual tour software for which user can view the street from any degree any angle and also the viewers get excited.

3.2. Data collection from shop

We creating the aspects of this project from which customer can shop from the retailers .the purpose of this project is to customer should buy the product in shop rather than online. So that customer can get the real world experience and he would can get directly get things without searching by each and every shop. And also user can handle aspect of the environment it also enable real time simulation of the things where it step to be development one.

3.3 Search engine implementation for shop

The analysis of the shop and the requirement specification is required is to be needed since by displaying the details of the product is required of the component work is to be analyzed in the aspect of which the listing of items and shop respondance it should able to display the search optimization of which the phases on the listing with their reviews of the product and system. Hence the result displaying mechanism for which listing product available with the shop and the product listing can be displayed.

3.4. Displaying demo and simulation of the product

The reason for applying this project a customer who is purchasing this product will not get hands on working and demo from the technical expert. Hence by implementing this feature on this project we can get customer on complete satisfaction.Hence most of the people spending much time in shopping. Searching itself is requires a lot of time rather than buying it.Hence in the shop market. Only gives a hand on working of the product. Hence the mechanism of which the shop is not only based internet on the but also the customer analysis.

3.5. Facebook integration for products and shops in the street

The face book involved much among all and also first social network to having more 100 million .hence integration of shop and product is required to currently see the feedback and practical usage of the equipment for which it is required on the specified.

3.6. Specifying customer review generating offers

Hence the business which is implemented should attract the customer aspect of which the system on which the things .to hold the customer along the life time is should be considered for developing the environment for the situation of the life terms.

IV. RESULT & DISCUSSIONS

The result of this project is exempted as the skill in output of the product. Where the navigation of the shopping is obtained in virtual reality. Hence customer is really satisfied on the system for its things. We had implemented the 360 degree view where the user can get real time experience for shopping. And also we implement the search engine optimization query interval and implementation for the aspects of shop person to list their products in customer search in the queue. Where the advertising is make in order to displayed the results.it also help in customer reviews and suggestion among the products it reduces the customer searching from the streets.

V. CONCLUSION & FUTURE WORK

Virtual reality is vast field & its reality is worked on the aspect and so it depends on the various field .we developed the project which is based on the environment where the shopper can view it in the android phones and also easily navigate the shop through the reality works out. It also specifies the mechanism of which customer can get the things and also it plays the future generation of user can shop the product by virtually searching it in the android phones and it also allows user to chose the right decision to chose the product from the right choice. And it also simulate the term and its realistic application overall in the world.

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REFERENCES

1.) Faisal Qureshi and Demetri Terzopoulos "Smart Camera Networks in Virtual Reality" Vol. 96, No. 10, October 2008 |Proceedings of the IEEE

2.) F.Z.Qureshib Intelligent perception invirtual camera networks and space robotics, Ph.D. dissertation, Dept Comp Science,Univ. Toronto, Toronto, ON, Canada,2007

3.) J.D.Foley,A.vanDam, S.Feiner, and J. K. Hughes,ComputerGraphics: Principlesand Practice. Boston, MA: Addison-Wesley, 2011.

4.) F. Qureshi and D. Terzopoulos,BVirtual vision and smart cameras, in Proc. 1stACM/IEEE Int. Conf. Distributed SmartCameras, Vienna, Austria, Sep. 2007, pp. 87–94.

5.) Passing, David and Eden, Sigal (2010) Enhancing time-connectives with 3D Immersive Virtual Reality (IVR). Journal of Educational Computing Research

6.) Barab, S. A., Hay, K. E., Barnett, M., & Squire, K. (2001). Constructing virtual worlds: Tracing the historical development of learner practices. Cognition and Instruction. 19(1), 47-94

7.) Eden, S. (2008). The effect of 3D virtual reality on sequential time perception among deaf and hard-of-hearing children. European Journal of Special Needs Education, 23(4), 349–363.

8.)Eden,S,&Passig,D.(2007)Three dimensionality as an effective mode of representation for expressing sequential time perception. Journal of Educational Computing Research, 36(1), 51-63.

9.) Passig, D., Eden, S. &Heled, M. (2007). The impact of virtual reality on the awareness of teenagers to social and emotional experiences ofimmigrant classmates.Education & Information Technologies. 12(4), 267-280

10.) Abdul RahamanWahabSait, and Mohammad NazimRaza, "A Virtual Environment Using Virtual Reality and Artificial Neural Network",(IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 2, No. 12, 2011.