Virtual World Using Virtual Reality

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ABSTRACT

Virtual world is a virtual reality application meant for smart phones that support virtual reality. Virtual reality is one of the most eminent growing areas in level of technology. In this application, a simulation environment has been setup just like virtual world as copy of the physical world. Physical world that we exist has lot of limitations and disabled/handicapped people cannot surround with their disabilities. Once we wear the VR headset we login into a virtual world and appear as an avatar in the virtual environment. Our friends and community members will appear near to us. So we can create a social interaction between them, a new level of social network. We use controller to navigate in the environment that helps to visit various infrastructure build in the virtual world.

Key words : Virtual reality, head tracking

Virtual reality is a computer-generated simulation of a 3-D image or environment that can be interacted within a real or physical way by a person using special electronic equipment, such as a helmet with a screen inside or gloves fitted with sensors

Head tracking is a technology that enables the VR software to determine where the users head is in a predefined space. Head tracking in VR is normally used together with hand tracking and in some instances even finger tracking.

1. INTRODUCTION

This world is limited with all sufficient matter we see and understand. Just think about a world something more than a physical world. This can be made a reality now. Lots of advanced situations had evolved in this world still people are not effective with the way present world looks. So researchers related to vision of human races has reached to raise the chances to make some virtual forms. An advanced technology is in its peak developing version that has been evolved from such a virtual component was known as Sensoroma. It's time to develop a secondary world, which is realistic and can be only effectively possible through virtual reality. The term virtual reality defines immerse multimedia

or computer -simulated reality. It's a computer technology that replicates an environment which may be real or imagined and it simulates a user's physical presence that environment in a way that allows the user to interact with it. Virtual reality has achieved an adequate level of development so that it can be considered in innovative applications such as education, training, and research in higher education. Virtual reality offers both opportunities and challenges for the educational sector. Apart from the cost challenges, educational benefits of implementing virtual reality remain compelling. It also discusses the benefits of using state of-the-art 3D photo realistic interactive and immersive, virtual environment for engineering undergraduates postgraduate teaching and learning and training.

The project virtual world is creating an auspicious virtual content that human feels he is in a secondary world with realistic features of present world where many limitations of physical world can overcome. Here the education, social networking, transportation, recreation formats and entertainment become more near and virtual with very low cost by installation if needed in physical world.

2. LITERATURE SURVEY

In the area of geographic information system, there a real ways two methods to get 3D virtual reality, one is to use a 2D professional platform such as ArcGIS software to get the virtual reality by secondary development, the other one is to use a 3D or 2.5D software as a platform for development ,such as the Skyline software. In this a different platform is used, Unity3D , which is usually treated as game development software, as a virtual reality development platform[1].In the case of the training of people for working in teams remotely in virtual spaces is combined with a classical workplace training situation. New Shopping concepts are used here [2].Education can be provided at center without traveling but for value too. In this paper it mainly explore the effectiveness of virtual environments (VEs) in psychotherapy for social phobias [3].Avatar representation method is used to represent people.

This platform development have high source of avatar. More better tasks can be introduced [4].Functioning of the engines along with the automotive functioning is explained in this

paper. High parameter of network port system introduced. Positioning of user developed [5].

This enables a single user in a trivial virtual world, able to do little more than stagger around the polygonal scenery. Real tasks can be accomplished by geographically dispersed participants linked via telecommunications networks [6].Very low method of rendering or architect format is used. Telecommunication used by Ethernet so needed system [7].VR technology is as influential factor in education as it has ever been.

 Academic institutions demands on the basis of facility to provide significant computing knowledge in order to the successful transformation of students into industry is satisfied by this technology. It is mostly implemented for Automobile sector[8].Performance criteria are particularly optimizes user experience while tracking head movement in the Oculus Rift Development Kit .It Increases the sense of immersion over most prior headsets[9]

Firstly, the hierarchical approach of geographic information system is adopted in the study area, and the study area is further divided into four layers: Terrain Layer, Building Layer, Transport Layer, Vegetation Layer, additionally, the raw data of Terrain Layer can be obtained by GPS measurements. Secondly, all the geographical entities which related to different layers are converted to 3D model. Thirdly, the 3D models are imported into the Unity3D, and programming is done with JavaScript language in Visual Programming Language Editor in order to achieve Game objects and Scenes [10]. This enables a single user in a trivial virtual world, able to do little more than stagger around the polygonal scenery.

real tasks can be accomplished by geographically dispersed participants linked via telecommunications networks[11].Very low method of rendering or architect format is used.

Telecommunication used by Ethernet so needed system[12].In this multiuser VR system, several networked participants can move about in an artificial 3D shared world and see and interact with objects, processes, and other users present in the world[13]. TCL (Tool Command Language) interpreters attached to objects supply interesting dynamic and interactive behaviors to things in the VE [14]. A model of virtual seminar room is created that matched the actual seminar room in which subjects completed their various questionnaires and met with the experimenters. The lowest self-rating would result with a negative audience, immersion, maximum co-presence, and minimum perceived audience interest. The highest self-rating would be resulting with alternative combinations: Negative audience, lowest co-presence, and highest perceived interest. Higher perceived audience interest increases self-rating and gradually reduces public speaking anxiety. Co-presence seems to be amplifying things, making a "bad" situation worse and a "good" situation better [15].

3. CONCLUSION

This system develops a virtual format of the physical world with maximum features. Many various factor related to physical world is associated to implemented in the virtual format. The most advanced technology that posses reality other than physical is used by virtual reality which is also defined as Near reality using advanced various VR headsets. Many features such as social network, education, medicine and communication can be developed to this format VR headset technology is used to create the virtual format of the system. Graphics modulated First person controller is the prime part of being the user of this system. Multi-user system is used for networking and communications aids between user. It is a computer-simulated technology that replicates real and imagined environment. Stereoscopic 3DmodeisusedforVRheadsets.By this system we can create physical limitless virtual world while the real physical world contains lot limitation. More enhanced and near reality is introduced in many field such as Education, Medicine and Commercial. Social networking generation chances to more reality level where faking can be stopped and most people reduce their lack of confidence by indirect communication

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