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HW3-Essay

Oculus Rift

Ever since the beginning of gaming we have been pushing the boundaries on graphics and how realistic the game feels. Lately the new craze has been virtual reality and one company, Oculus, has built the first well-working virtual reality goggles. This article will be a summary explaining the concepts behind this new technology and how its pushing the boundaries on gaming in the 21st century. Oculus has raised a lot of money for their new piece of technology, dubbed as the "Oculus Rift", it has certainly paid off.

The device itself looks how you'd imagine, a giant pair of goggles that go around your head and over your eyes; a little big but worth it. Some of the hardware components that create this immersive 3D experience is a 7 inch LCD screen with each eye having 960 X 1080 resolution and both eyes combining to form 1920X 1080 resolution. You also don't have to worry about your friends in the room; the device includes your hookups for DVI and HDMI to display it on your TV or monitor. The field of view for the user is 90 degrees horizontally and 110 degrees diagonally. The Rift has a head tracker, which they call an Adjacency Reality Tracker, that can run up to 1000 Hz. This is a vital piece to the device because you want to make sure the tracking latency is just right to avoid lag and provide the realist virtual experience. Just like many of your gadgets today the Rift features a gyroscope and accelerometer. They even added a magnetometer which helps to accurately track your head relative to the Earth's position, kind of like a compass, but more advanced.

Right now the Development Kit II is available for $350 and is currently platformed for Linux, OS X, Windows, and Android. With console support coming later on. This includes their software development kit for companies to incorporate the device into new and upcoming games. Their are several games that support the device such as Half Life 2, Bioshock , and Skyrim; with many being developed as we speak. The release date for the consumer, non-dev version, is likely to be released this coming summer. Oculus stated that the consumer version would include better

specs, like an increased resolution screen.

As you can tell the Oculus Rift looks promising. The device has many features which are only going to improve and is taking gaming to a whole new level. All in all the Oculus Rift is a very impressive new piece of technology which is likely to pave the road towards affordable, immersive 3D virtual reality gaming.

Sources:

https://www.kickstarter.com/projects/1523379957/oculus-rift-step-into-the-game

http://www.oculusvr.com/

Picture Source:

http://www.forbes.com/sites/erikkain/2014/03/25/microsoft-should-have-acquired-oculus-rift-not-facebook/