Augmented Reality Vs. Virtual Reality

Basis of differentiating	Augmented Reality	Virtual Reality
Definition	A view of the physical real-world environment with superimposed computer-generated images, thus changing the perception of reality, is the AR.	VR refers to a computer-generated simulation in which a person can interact within an artificial three-dimensional environment with realistic-feeling experience using advanced devices.
Devices Used	Uses cell phones to display layers onto the surrounding environment on its screen. In this case, phone or tablet apps are the actual AR interface. Cameras can likewise superimpose layers onto the world as the user looks through the lens.	Accessed through a headset. The real world is blocked out and replaced by the generated environment. The information provided by the VR device can include visual display, sound, touch and smell and taste in advanced settings.
Level of Immersion	Not a completely separate environment. It is a layer on top of the user's physical environment, and it generally depends on features of real world to properly express its content.	Completely immersive system. A VR device completely blocks out the user's physical environment and generates a virtual display.
Reality Generation	Coded for phone apps, and rendered reactively depending on the user's location but does not need an advanced engine to render.	Often instantly rendered as the user plays, if a game engine is present, or they can be pre-rendered, in which case they are static. 360-degree videos in VR are completely pre-generated.
Live or Pre-Programmed	Has more potential to be reactive to the physical world because AR is integrated into the user's physical environment, any changes occurring live will also occur to the augmented reality layers. Augmented reality can react to the real world primarily through noting the user's coordinates and changing its display accordingly.	Although virtual reality can react to a user's input during media like a video game, it does not, react to the physical environment. The VR world and the real world are separate and nonreactive, and the VR media is pre-programmed.
Applications	AR media often takes the form of marketing campaigns or artwork.	VR is especially good for video games or augmented movies. Also used for treating disorders such as phobias.
User Interaction	The user interacts with the real world	The user does not interact with the real world. He interacts with the virtual world only.
Sensors used	Need sensors like such as accelerometers, GPS to collect data from the real world.	Sensors are not heavily used as user is isolated from the real world rather it needs more advanced technology to give a life-like feeling in a virtual world.
Cost	The cost for implementing AR is lesser than implementing VR. Even a mobile phone has resources to implement an augmented reality.	For VR implementation, dedicated high-cost equipment is necessary, with more processing power, graphics processing and complex algorithms and software.
Examples	Google Glasses is a good example for a sophisticated augmented reality product. Among AR apps, IKEA, Home Depot are shopping apps. Snapchat also uses AR.	Virtual reality gadgets include Oculus Quest VR Headset, Sony PlayStation VR, Oculus Rift VR Headset.