Virtual reality has a longer history than some may think. It's roots go as far back as 1838 when the first stereoscope was created by Sir Charles Wheatstone[1].

A stereoscope is a device that, when looked into, will give the illusion or perception of depth to the human eye. The stereoscope works by having each eye look at it's own image and lens. The images shown to each eye will blend into one and provides the illusion of depth or, as we call it "3d". This process of "tricking" the mind is called Stereopsis[2]

A stereoscope that many are familiar with, and still created today, is the View-Master[3]

<SOMETHING INTERACTIVE>

In 1968 Ivan Sutherland created one of the first Head Mounted Displays, or HMDs for short. This head mounted display was quite formidable - it was so heavy, they had to attach it to the ceiling. Due to this size, they named this HMD "The Sword of Damocles[4]. Although this device was only able to display wireframe images, it was still well ahead of its time.

<SOMETHING INTERACTIVE>

In 1975 Myron Krueger created his VR lab called videoplace[5]. This VR experience was unlike those that preceded it because it provided users the ability to interact with the virtual environment. This was possible by having multiple cameras film the user, and project the users silhouette onto a screen along with a virtual world. So users could interact with the virtual world by moving their body in real life.

This interaction would eventually lead the way to more modern VR applications.

In 1985 the company VPL Research, Inc was established[6]. This was one of the first companies to specialize in VR products. One of their revolutionary products was called the data glove. This glove was used to manipulate objects in a virtual world. When paired with a head mounted display, which they called the "EyePhone" - spelled with an E.Y.E. EyePhone users could move their hand inside the glove in the real world, and see the affect inside the HMD.

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[1] (n.d.). Charles Wheatstone - Wikipedia. Retrieved October 9, 2019, from https://en.wikipedia.org/wiki/Charles_Wheatstone
[2] (n.d.). Stereopsis - Wikipedia. Retrieved October 10, 2019, from https://en.wikipedia.org/wiki/Stereopsis
[3] (n.d.). View-Master - Wikipedia. Retrieved October 10, 2019, from https://en.wikipedia.org/wiki/View-Master
[4] (n.d.). The Sword of Damocles (virtual reality) - Wikipedia. Retrieved October 10, 2019, from https://en.wikipedia.org/wiki/The_Sword_of_Damocles_(virtual_reality)
[5] (n.d.). Videoplace - Wikipedia. Retrieved October 10, 2019, from https://en.wikipedia.org/wiki/Videoplace
[6] (n.d.). VPL Research - Wikipedia. Retrieved October 10, 2019, from https://en.wikipedia.org/wiki/VPL_Research

<SOMETHING INTERACTIVE>

At the start of the 1990s, VR starting to gain additional applications. NASA had a partnership with VPL and started leveraging the HMD and glove combination to create the Virtual Interface Environment Workstation, or VIEW for short[7]. This allowed operators to simulate their work in a virtual environment, or do real work-based interactions remotely.

In the late 1990s, VR finally started to make headway in the medical field. Georgia Tech and Emory University's medical school partnered to create a number of VR worlds.Their goal with these VR experiences was to treat Vietnam veterans that were suffering from PTSD[8]. They were able to perform exposure therapy in a safe controlled environment for veterans.

<SOMETHING INTERACTIVE>

In 2007 Google released the well known street view. This was a spin off from a Stanford University study called The Stanford CityBlock Project[9]. Although project was not full virtual reality, it did provide a virtualization of the world around us. Eventually Google took this idea and integrated it into VR, along with it's Google earth offering. The app is available today for many VR headsets.

<SOMETHING INTERACTIVE>

In 2012, the company Oculus VR was created by Palmer Luckey and funded via a kickstarter campaign to create a HMD primarily for video games at a reasonable price. The kickstarter gained over 2.4 million in investment while on kickstarter. Eventually in 2014, Facebook purchased Oculus for 2.4 billion. Right around this time, many large tech companies started working heavily in VR including Google, Sony, and Samsung.

<SOMETHING INTERACTIVE>

Now-a-days VR is generally available to everyone. The cost of most VR systems are the same cost of an average game console, but even this is a significant improvement compared to the past. Now even more companies exist in the VR space, and significant funding is helping drive innovation. Some professionals believe this market can be as big as 800 Billion by 2024, which is a huge statement since the current market cap of VR is only 8 billion today.

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[7] (2014, June 12). The Virtual Interface Environment Workstation (VIEW ... - Nasa. Retrieved October 10, 2019, from https://www.nasa.gov/ames/spinoff/new_continent_of_ideas

[8] (n.d.). Untitled - David Gotz. Retrieved October 10, 2019, from https://gotz.web.unc.edu/files/2013/10/icat.pdf

[9] (2013, November 21). The Stanford CityBlock Project - Stanford Graphics. Retrieved October 10, 2019, from http://graphics.stanford.edu/projects/cityblock/