

Microsoft HoloLens

The Microsoft HoloLens created in 2016 is a mixed reality head-mounted display/smart glass that enables users to create and interact with holographic images. These holograms can resemble very realistic and solid features whilst others can appear to be animated and ethereal. Users are able to project these holograms into a real-world environment in order to simulate ideas and prototypes which can be virtually embedded into real-world objects. They also have the ability to interact with the objects using their hands which makes these devices very attractive for many organisations. Multiple users are able to interact with the holograms simultaneously, therefore offering real-time simulation which can be extremely beneficial in complex projects. The HoloLens is suitable for many scenarios and professions including the overhaul of aircraft engines, prior to and during surgeries in hospitals, medical examinations such as X-rays, military geospatial intelligence, UI/UX designers, manufacturers, engineers and many more. The first generation HoloLens costs USD \$3000 and \$3500 for the second generation.



Pros:

- Useful and interactive
- Lightweight and comfortable for the user
- Engaging and the tracking of movements is very accurate
- Futuristic
- Easy to use
- Tasks are easy to complete, even without an instructor
- Recording functionalities are available

Cons:

- The device is bulky
- The vision can be limited depending on the scenario being visualized
- Users have to be careful of collision with real-world objects
- Expensive device and setup