

# GOOGLE GLASS TECHNOLOGY AND ITS IMPLICATIONS

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## ABSTRACT

Google glass interacts to the world through android operating system. It is a new technology which includes smart phones options and internet facilities. Virtual reality and augmented reality are the most commonly used features. Google has developed wearable computer named as optical head mounted display. It working on voice commands and useful to handicapped and disabled people. It consists of 4G technology, smart clothing, android system, eye tap and wearable computer.

## INTRODUCTION

Google glass is designed in the shape of eyeglasses. It displayed in smart phones. Using this People can communicate with internet through voice commands. It also camera attached to it. The memory is 2GB RAM. The storage consists of 16GB flash memory. 12GB is used for this technology.



### Four generations of Google glass:

**First generation:** In this generation the use of television camera named as “analysis of glass”.

**Second generation:** In second generation used to define the effect of camera.

**Third generation:** This generation includes the control mechanism of focus in glass.

**Fourth generation:** The problem which arises in focusing the lens is solved in this generation.

## FEATURES

### Virtual Reality

The virtual reality is defined as an artificial environment to develop the software user’s real thing of real world. It is used in the field of education and training to experienced senses of vision and sound.

### Augmented Reality

It defines the direct or indirect living things on real world environment. it is used for sound, video, graphic and navigation. It is easy to handle and a useful for all kinds of people. It is mainly used for navigation, social and networking purposes

### DISPLAY

The Google glass utilizes a liquid crystal display, Different colour framework and LED display.

### CAMERA

Google glass Click photographs and record videos.

### TOUCH PAD

A touchpad is situated in favor of Google glass, which enables clients to control the gadget by swiping through a course of events.

## TECHNOLOGIES USED IN GOOGLE GLASS



### A. Wearable Computers

It is an electronic device. This technology is specifically used in the field of media and information technologies. It provides interaction between user and the computer. This system can perform multiple tasks at a time. This is used for some of the advanced software and requires some hardware computations.

### B. Android Operating System

Android is a linux based operating system. It is commonly used in mobile devices and familiar in society. It is developed by Google. This technology can have any version of android (i.e. alpha, beta, chocolate, kitkat, lollipop, marshmallow and ice cream cake, orio)

### C. Bluetooth

Google glass has the facility of communicating through Bluetooth. Google glasses can eliminate headphones because the vibrations through the headphones to the earpieces will distract.

### D. Eye Tap

Eye tap acts like a camera for capturing pictures and audios that is seen by the user. This is fully based on the user's eye because the eye works as a monitor for capturing or recording pictures.

### E. Smart Grid Technology

Smart grid is technology used to assemble the information's in atomic fashion to increase the potentiality and the distribution of electricity.

## APPLICATIONS

Google glass is developed by third party developers. Some of the Google glass applications are as follows, Google maps, Google+, Gmail, facial recognition, manipulating the photos, exercise, translation, and sharing the information's through some of the social networks such as twitter and facebook.

### A. My Glass

My Glass is an app that is offered by Google regarding to android and ios application.

### B. Voice Activation

Google glass can be controlled by voice actions instead touchpad. To activate the Google glass the users have to turn 30degree upward. Or tap the touchpad and just say "OK GLASS". By saying the command glass is activated and users can start to do their actions such as taking a picture or recording a video.

## USES OF GOOGLE GLASS



### A. Health Care

Drchono, California is based on e-medical record company and has developed a new application for the device which is named as "wearable health record". This can be used by the doctors who registered the drchono app for glass. This app is used to record a consultation with complete permission of patients. In the electronic medical record the patient's videos, notes, photos are stored based on the cloud storage technique and collaboration service and it can be shared with the patient on request whenever the details are needed for the patient in order to commit in other hospitals or some other medical improvements.

The use of Google glass to acquire images of a patient's retina named as "GLASS FUNDOSCOPY") is a technique on the cover of journal for mobile technology in medicine.

### B. Journalism and Mass Media

A web project named as "VOA & GOOGLE GLASS" explored a technology's uses in journalism. Another term called as "GLASS JOURNALISM" which explores the device's application in journalism.

### C. Military

Google glass is being currently used for army people who are used to track various animals and birds in the jungle and it is the first device to use in military.

### D. Sports

In international Olympics committee they took goggle glass to the youth Olympic Games and put them on a number of athletes from different disciplines.

## GOALS OF GOOGLE GLASS

This is most successful and wearable technology used by people. Society has use eyeglasses to a large degree because this is the best kind of technology. The main goal of Google glass is to take the base sensory experience of the people and more livable, more enjoyable, more beautiful way. People who use the goggle glass will forget that they are wearing it and it looks like wearing regular glasses. It is becoming a mainstream technology. Even though glass is not even a real user's product, it's publicly tested prototype that's in development.



## WORKING OF GOOGLE GLASS

Google glass combines numerical functions and some of the features in a small unit. It is a technical masterpiece. In addition feature of mobile phones and camera it includes internet and GPS (GLOBAL PROCESSING SYSTEM). The main feature of Google glass is the visual layer that is placed in augmented reality. This augmented reality layer facilitates a new useful possibilities.

### **ADVANTAGES**

- a) User convenience
- b) It shows emails through voice commands.
- c) It is easy to capture pictures and record audios.
- d) User friendly and easy to handle.

### **DISADVANTAGES**

- a) It cannot be used people who have the defect in their eyes.
- b) It cannot be used while driving.
- c) It is more sensible.
- d) Face recognition may be easily misused.

### **CONCLUSION**

Google glass is a fast developing technology. Even though it is sensible easy to use and found an easier way for wearing compared to normal glasses. This is a revolutionary technology introduced by Google.

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