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Google Glass Technology

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Abstract: Google Glass is a analysis development program by Google to develop an increased reality Head-Mounted Display (HMD). The meant purpose of Project Google Glass would be the hands-free displaying of knowledge presently obtainable to most sensible phone users, and allowing interaction with the web via voice commands. Google glasses are essentially wearable computers that may use constant package that powers humanoid sensible phones and tablets. This review paper is giving some basic ideas concerning GOOGLE GLASSES. All options of Smartphone and having internet facilities and adjustable to our eyes As Google glass is incredibly new and up to date technology, this abstract can facilitate to understand little concerning the Google glasses. This technology will be discharged in 2014[5].Google Glass is as art movement a convenience we've seen in recent times, a helpful technology for all types of individuals as well as handicapped/disabled.

Keywords: Virtual and increased reality, google glasses, eye tap, android, 4G.

I. INTRODUCTION

Google Glass is arranging to create wearable computing thought, and it's effectively a combine of glasses with associate degree integrated alert show and a battery hidden within the frame. Google glasses glass is nothing but technology on your face. We can use this technology of your smartphone while not use of your hands. It's a bit like alternative device having software package and every one other options that offered in smartphone however main issue is that its quicker, wearable and you'll be able to use it whereas doing day to day activities[4].A futurist wearable alert show with a mounted camera and cellular property. we have a tendency to get a deeper explore what Google thinks would be the sensible uses for the futuristic wearable show Google Glass can see a public in 2014 at the earliest.

Latest news is that developers are going to be ready to come up of 'explorer edition' units at some purpose in 2013 with a "broad shopper offering" inbound a year later.

II. TECHNOLOGIES USED

2.1 Wearable Computing:

Wearable computers, conjointly referred to as body-borne computers are electronic devices that are worn by the bearer underneath. This category of wearable technology has been developed for general or special purpose info technologies and media development. Wearable computers are particularly helpful for applications that need a lot of advanced process support than simply hardware coded logics.

2.2 Ambient Intelligence:

Ambient Intelligence (AmI) refers to electronic environments that are sensitive and conscious of the presence of individuals.close intelligence may be a vision on the longer term of shopper physics, telecommunications and computing.

2.3 Eye Tap Technology:

An Eye tap may be a device that's worn ahead of the attention that acts as a camera to record the scene offered to the attention also as a show to superpose a computer-generated representational process on the first scene offered to the attention. This structure permits the user's eye to work as each a monitor and a camera because the Eye tap intakes the globe around it and augments the image the user sees permitting it to overlay computer-generated knowledge over prime of the conventional world the user would understand. the attention may be a technology to reason underneath the 3 main headers for wearable computing (Constancy, Augmentation, Mediation)[2] for whereas it's in theory a constancy technology in nature it conjointly has the power to enhance and mediate the truth the user perceives.

2.4 Smart Grid Technology:

A smart grid is that uses info and technology to assemble and act on info, like info concerning the behaviors of suppliers and customers, in an automatic fashion to boost the potency, dependability, economics, and property of the assembly and distribution of electricity.

2.5 Android operative system:

Android may be Linux-based software for mobile devices like sensible phones and pill computers, developed by Google in conjunction with the Open French telephone Alliance. Mechanical man is open supply and Google releases the code underneath the Apache License. This open ASCII text file and permissive licensing permits the package to be freely changed and distributed by device makers, wireless carriers and developers. In Gregorian calendar month 2012, there have been some 700,000 apps offered for mechanical man, and therefore the calculable range of applications downloaded from Google Play, Android's primary app store, was twenty five billion[6].

2.6 Bluetooth:

Googles Glass can doubtless have network property through Bluetooth.

What this suggests is that Google Glasses can eliminate headphones also as earpieces and instead suppose vibrations that are conducted through the ear bones to permit you to listen to music and different audio content.

The advantage of exploitation this technology is that not solely are you able to hear music that you simply ar taking part in through this device, however you'll be able to conjointly hear conversations that are happening beside you.

2.7 Wi-Fi:

Google Glass also has a property to connect through the Wi-Fi.

III. HOW IT WILL WORKS?

The device can probability to communicate with mobile phones through Wi-Fi & Bluetooth and show contents on the video screen also as answer the voice commands of the user.

Google place along a brief video demonstrating the options and apps of Google glasses. It principally concentrates on the social networking, navigation and communication.

The video camera senses the atmosphere and acknowledges the objects and folks around. The complete operating of the Google glasses depends upon the user voice commands itself.

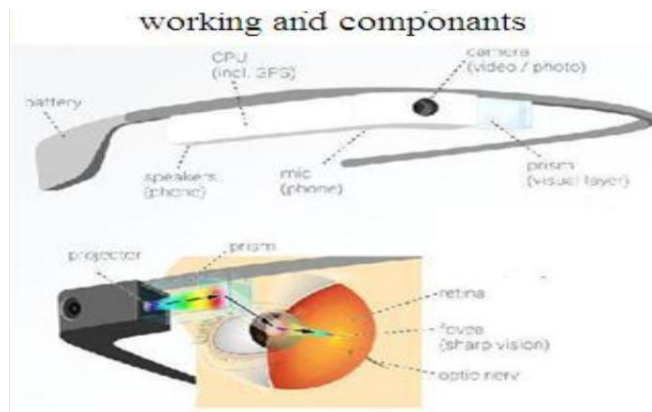


Fig: Working and Components

IV. DESIGN

Following are the components of google glass:

4.1 Video Display:

Its options with the tiny video display screen that's display the crop up hands free data.[1].

4.2 Camera:

It additionally has the front facing video camera with that photo and video is taken in it.

4.3 Speaker:

Google glasses are designed to be hands free wearable device which will be build or receive calls too. Therefore a speaker is additionally designed by the ear.

4.4 Button:

A single button on the spect of the frame the glasses to figure with the physical bit input.

4.5 Microphone:

A mike is additionally place in, which will take the voice commands of the user. This mike is additionally used for having telecom communication.

V. ADVANTAGES

- Easy to wear and use.
- Sensitive and awake to the presence of individuals.
- Fast access of maps, documents, videos, chats and far additional.
- A new trend for fashion lovers along being associate degree innovative technology.
- A spectacle based mostly laptop to reside directly on your eyes instead of in your pouch or pocket.
- A helpful technology for every kind of handicapped/disabled persons.

VI. APPLICATIONS

6.1 you'll be able to build calls via Glass:

Google Glasses can be build calls by merely speech the device. If you wish to call a friend, simply say"OK, glass, call my friend, Karen" and it initiates a call. It's that easy[6].

6.2 The translation is simple, sensible and fun:

Imagine the potential of having the ability grasp and determine street signs in foreign languages, languages being spoken around you and having the ability to drag up connected information just by Google Glasses looking at objects. that's the ability of Glass to shrink the planet.

6.3. Say "take image" to capture a picture:

The Glass unit responds to voice commands like "take a picture" and takes snapshots of no matter object you're staring at. The photographs are mechanically uploaded on to your Google+ in period [7]. This can be a superb thanks to take shots of these rare moments while you're engaged in associate degree activity while not distraction from it.

6.4 With Google Glass you'll be able to record hands free, Just like taking snapshots, recording works in an exceedingly similar method by telling glass to record the activity you're engaged or staring at. What's even additional wonderful is that the ability to share what you're seeing on a Google resort lives?

6.5 If you are lost Google Glass can come back to your rescue .If you're ever in an exceedingly strange location and can't finish your method back, Glass involves your rescue by mentioning directions to your destination from wherever you're. You now not need to drag your map with you once driving or biking since all the directions, including the gap and also the calculable time of arrival, are right there on your face.

VII. CONCLUSION

Thus we've got overlook a replacement approaching device that is gonna to be discharged in market by the top of 2014 and which can be revolutionary device referred to as a google project glass. These devices can modification the medium of communication within some years.

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