

Analyzing the Google Glass by Head Mounted Displays

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Abstract— Google glass is a wearable, voice controlled android device that looks like a pair of eyeglasses and displays data directly in the user's field of vision. The Google glass is an operating system based on a version of android and it can run app called "glassware". Technology can access like Wi-Fi connectivity, accent instructions, penetrating via GPS, and so on. Google glasses have approximately all features of a smart phone and also resembling a personal computer.

Keywords— Head mounted displays; Dual task paradigm; GPS.

1. Introduction

The Google glass is wearable, voice controlled "android" device. The Google glass displays information directly to the user's field of vision. The Google glass is an operating system. We are capable to apply this machinery of your smartening whereas not use of your hands. It refers to the photoelectric environments that are Sensitive and responsive to the residence of the people(2, 1). Google glass displays the information in a smart phone like hand format. Goggle glass was development by goggle the facility within Google devoted to technological advancement such as driverless cars.



Fig.1: Google glass

The device can communicate with mobile phone through Wi-Fi and Bluetooth and show contents on the video screen and also a voice commands to the use(2,2)(2,5)(3,1).

2. Working of Google Glass

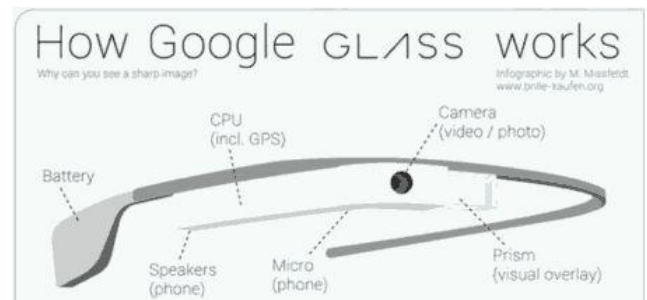


Fig.2: Workings structure of Google glass

In this paper the Google glass provide an image uploaded by the user's device and possibly a GPS locations. Google glass incorporates a dual core 1GHz processors with 682MB and a 5 MP camera (3,1)(3,2)(3,3)

3. Components of Google Glass

3.1 Camera

Google glass has the ability to take photo and record 720 PHD video.

3.2 Video

The tiny video display screen is attached with the glass that displays the crop up hands free data.

3.3 Touch pad

Touch pad is located on the said of the glass, allowing user to control the device through the screen.

3.4 Display

The explorers version of goggle glass uses a liquid crystal on silicon. The panel the lights and active pixel sensor site(2,3).

3.5 Advantages

- Privacy for the user.

- Compact and very easy to use.
- Google support
- Design that suits into any frame.

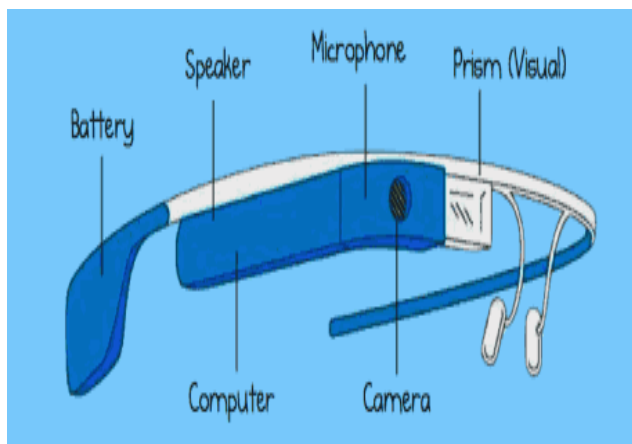


Fig.3:Componets of glass

3.6 Disadvantages

- Can receive picture without consent.
- Can be d disruption to the line of sight.

3.7 Actual method

The people can use a Wearable technology for easily communicate with other. By using Google maps, video chats on so on. Goggle glasses are like Smart phone.

3.8 Sensor Method

In my proposed system automatic calls are used in Google glass(GG).In future the Google glass can't take picture without user knowledge. Using sensor, we can locate the nearest place to the user.

3.9 Flow Chart

In the given flow chart processed for receiving the voice command. First the sensor searching the area to the nearest place. Using sensor we can make an automatic calls to nearest place. The nearest hospital is shown it will exist into the display screen otherwise the command will not be available finally the process will end (3,4) (3,5).

3.10 Features

- Record voice.
- Shows information.
- Sends message.
- Shows map.

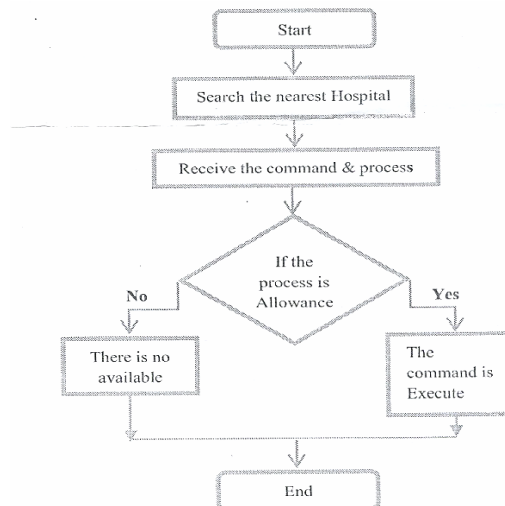


Fig.4: Flow chat of Google glass

3.11 Uses

Google glass is a head-mounted wearable computer developed by Google with the mission of producing a mass-market ubiquitous computer. Distinctiveness is the optical exhibit, which is inactive in the tangential hallucination with being emotionally concerned to a specially intended lightweight glasses frame.

❖ Technical specifications

- Android 4.0.4
- OMAP 4430 SoC 1.2Ghz Dual Core.
- 640×360 display.
- 5-megapixel camera.
- Wi-Fi 802.11b/g.
- Bluetooth.
- 16GB storage.
- 682MB RAM.
- Bone conduction transducer.



Fig.5: Technical specification

3.12 Google Glass Specification

Google Glass Specifications	
Display	High Resolution Display which is equivalent of a 25 inch high definition screen from eight feet away.
Camera	Photos - 5 MP and Record videos up to 720p
Connectivity	Wi-Fi - 802.11b/g , And Bluetooth
Storage	16 GB (12 GB usable + 4GB cloud)
Battery	24 Hours
Compatibility	Any Bluetooth-capable Phone. *The MyGlass companion app requires Android 4.0.3 (Ice Cream Sandwich) or higher.

Source: Business Insider
@artech011

Fig.6: Specification

3.13 Power Supply of Google Glass

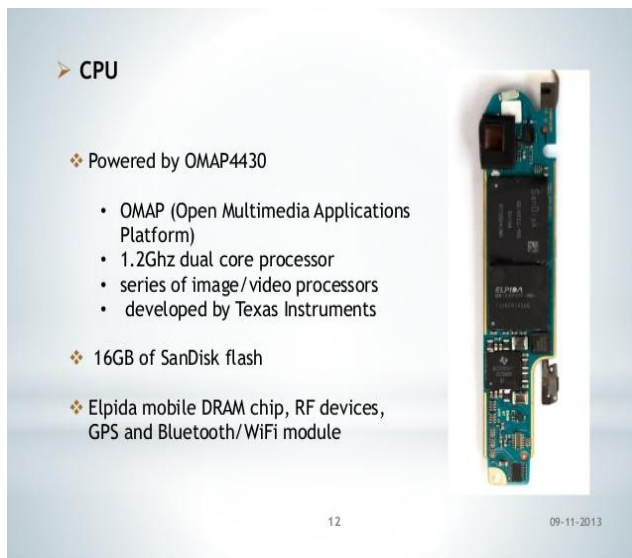


Fig.7: Power of glass

4. Conclusion

Google glass is the latest and effective technology in the current generation. Google glass ranges new technology information. It shows the nearest place through the sensor.

5. Future of Google Glass

- A few weeks ago, Google Glass Explorer edition headsets were shipped to press, developers.
- Video, picture, audio, and text linked from HTML/CSS formatted messages are derived using a web service demand to the Google Glass Mirror API.
- The API is not for developing true native applications.
- Using modern web etiquettes similar to web sockets, crisis responders can stream real-time information to people at the scene.

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