WIRELESS GOOGLE EARTH CONTROL SYSTEM AT RAILWAY/BUS STATIONS FOR TOURIST LOCAL ROUTE MAP

This project aims is providing wireless access to the Google Earth system through the mobile phone of the user. It is designed to operate in the railway and bus stations. This device is provided with an LCD where the Google earth map is displayed and this map can zoomed and can be moved in different directions so that the passenger can make use of the map from his normal mobile which need not require any GPRS facility. It also makes the user independent and need not depend on any person to know about the direction in which he has to reach the destination.

In this project we make use of the PC with internet connectivity. This PC displays the Google earth map on its LCD. When ever the passenger needs to find the path to his location he has to call to a predefined mobile number which is interfaced with the PC. The passenger can make use of the number pad of his mobile to drag and zoom the map in different directions.

The microcontroller is the heart of the entire project. It provides an interfacing between the mobile and the computer. The mobile connected to the microcontroller is enabled with automatic call answer option. The controller receives gets the commands from the mobile with the DTMF tones and provides the same information to the computer using serial communication. There will be a software application at the PC end which process the information received from the controller and performs the corresponding functions.

Features:

1. Wireless access to Google Earth map.
2. User friendly operation.
3. Map navigation can be done from the mobile.

This project provides learning's on the fallowing advancements:

1. DTMF decoders.
2. Embedded C programming.
3. Serial communication with the PC.
4. PC based software application.
5. PCB design.

The major building blocks of this project are:

1. Regulated Power Supply with 7805 voltage regulator.
2. Personal Computer with software application.
3. Max 232 interfacing between controller board and PC.
4. Micro controller.
5. GSM mobile.
6. DTMF drivers.
7. DTMF decoder.

Block diagram:

Wireless goggle earth control system at railway/bus stations for tourist's route map guidance