



IMPLEMENTATION OF 4G BASED HOME AUTOMATION USING IOT

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Abstract: 4G in today's form has evolved from wired telephones to analog wireless sets to digital wireless communication with high speed data transmission. The evolution of 4th Generation has to be through 1G , 2G & then 3G. In this research we will use 4G technology and IOT based Home Automation and we will need to transfer multimedia data such as status of device on/off and sun intensity. Here data is stored on remote database server and instruction is set from users end to set the status of devices on/off. In this way user can manage the domestic appliances. Here we are also using feature of Virtual Presence of 4 G technology. A virtual environment has been developed as there are button to increase the sun intensity, switch on / the house hold devices so that user could use Virtual Navigation feature of 4G Technology.



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Keywords: 4G, IOT, IP, HOME AUTOMATION, 3G, 2G, 5G, Solar energy system

[1] Introduction of 4G

4G, short for 4th generation, is fourth generation of mobile telecommunications technology, succeeding 3G. A 4th Generation system would be expected to provide support to potential & current applications including mobile web access, IP telephony, gaming services, high-definition mobile TV, video conferencing, 3D television, & cloud computing. The first operational cellular communication system was set up in Norway in 1981 & was followed by similar systems in United States & United Kingdom. These first generation systems provided voice transmissions by using frequencies around 900MHz & analog modulation.

The term 4G has been kicking around for a few years now so chances are you've probably heard it mentioned at some point or another. Simply put, 4G is shortened name for fourth generation of wireless data transmission networks set-up by mobile phone industry in order to offer more

bandwidth & greater speeds for everyday mobile device operations, such as messaging, video calling & mobile TV.

You might have been using 3G phones for a while & used internet over air, but 4G is basically more speedy & stable. Like your home broadband in comparison to your previous dial-up modem service.

[2] DATA RATE COMPARISON

First ,when wireless generation started ,it was analog communication. That generation is 1G. They used various analog modulation for data transfer. Now when communication migrated from analog to digital ,foundation of latest communication were led. Hence came 2G.

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