

GIS based Indian Virtual Map

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Abstract

In this map provides accurate zoom of the 3D view of any location in a very detailed manner with navigation controls. The 3D view gives realistic view of the location in original presentation whereas 2D view does not give a clear indication and images of the location. This 3D view has the options of day and night view using time slider and also has the option of shadowing. This 3D view shows a very detailed virtual view of any building, schools, colleges, offices etc with the detailed approach of the location with navigation keys through website. This map in 3D view gives a satisfaction of visiting any location in realistic manner.

Keywords: ASP.NET, GIS, Microsoft Internet Explorer v11, Skyline Terra Explorer pro, VM Server

1. Introduction

A tool is used to design the two dimensional polygons and the line, 3D modeling view of buildings, plants, ground vehicles, air vehicles, streetlights and roads, then add, the more features of photographs, information details, route navigation, day and night view, display the 360 degree view and also about that place are stretched together and user the impression of a 3D view of the two dimensional map.

The functionality of the map provides accurate zoom, every side of rotation, move to, adding exact location, global shadow, Timer Slider, Snapshots, interior route navigation are inbuilt together. And it is a new technology, especially for proprietary Virtual Map application, to combine the display features of this Map with powerful GIS functionalities, and it's had more functionalities are used.

Now the technologies are improved, we are all using the internet in the electronic devices, in this concept to be visualized in the website, so we are using the map to searching, locating and know about the place of reality view of virtual visualize in our electronic devices.

In this way, to visualize the world, we are all easily interacting, observing and learning as soon. And this concept of this map is used to 3D visualization on those areas of its media publishing, transport projects, tourism and its etc.

2. Learning about that Map

Normally, those are all using map for the purpose of searching and locating the area, same way of this map is used for the purpose of searching and locating the area, but in that map is visualize the virtual view of the map, it will display the real and the originality view of 3D modeling map using geographical information system based on the map. And it's the map is depend upon the Geo-spatial process.

It is a computer application that's installed on the client system and enables the clients to 3D view representation of the Map and installed that program in the system, it serves as software clients and request imagery from a remote server, and the look and quality of imagery requested depends on this new technology and the data models are used. Data models, which are stored on a remote server, are comprised of terrain database, 3D effects models, and day or night views are varied in color and resolution process. These are interact the virtual database server, then adding the information, photographs and other data's are stored in the terrain database.

When a map view is streamed over the Internet from the server to the client. However, downloading high resolution imagery of the entire earth's surface over the Internet would take years and its fast Internet connection. The concept of this new technology is that the clients are first presented with larger, and it's using the earth map on

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to fix the 3D modelling buildings and to display the new virtual map in real time process. Finally the display of this map includes a 3D view of the buildings, roads, gardens, vehicles (ground and air), street light, underground mode, Route navigations are inbuilt together. And the view of Sathyabama University uses this concept Figure 1.



Figure 1. Overview of Sathyabama University, India.

We are using this concept to develop our project on this map should be visualized in our University of Sathyabama in India. We are adding more features in that map, if you are comparing from other 3D map to our map are better than that, it's having the originality and real view of visualization, then we are using an interior route navigation also inbuilt together, for the purpose of interior navigation control is used. For example of any organization, it's have number of blocks are there, so somebody newly entered into the organization, it will go to CEO Office how should go to that office, it will ask anybody or else somebody waiting for it.

Now, we should use this map to locate the correct location using the map for the reason is it's have the interior navigation control is there, just you should enter the location name on the searching tab, it will display the correct location, easy to reach the correct location.

Then the modelling view of visualization is used to display the Sathyabama University in India and the Figure 2, Figure 3, Figure 4 and Figure 5 are the 3D modelling view of Sathyabama University in India.

Those are using this map is visualized in the 3D view of the real world, so in this way is easy to interact and communicate with others, it is the most useful map and its observing easily. In this map is an internet based map, so all are using this map in any electronic devices and its etc.



Figure 2. Arch Building.



Figure 3. Administrative Building.



Figure 4. Central Library Building.



Figure 5. Architecture Building and Boys Hostel.

3. Design Process and Procedure

- In this Map designing process is used to design the map using a tool of Terra Explorer, it is a powerful, easy to use tool for editing, analyzing, annotating and publishing Geo-referenced 3D terrain database, created.
- By overlaying unique or proprietary information onto a 3D map, the user creates an exciting, interactive application that highlights specific features of an area, showing function, relation and proximity along with a distinct view of the area.
- Finally, draw the every polygon's using two dimensional options in a tool, after build the buildings, gar- dens, street lights; fix the vehicles of ground vehicles, air vehicles and its etc. Then add the images to design the outer view of buildings and gardens.

4. Development Process and Procedure

- After the completion of designing part, using this design- ing to develop a web page, so we are using the ASP. NET program are used to develop a web page, now we should design the web page after adds the designing of using this map, then enter the coding to combine each other.
- All the development process of designing in the virtual map, designing the webpage, developing the web page, then after completing the process, we should add the webpage to the website of the main frame.
- Everyone should access this map on that website and easily interact and observe itself. In between the virtual database server is interactive to this map and its etc. It is an internet based application, if you are access to open with webpage and it does interact with this map.

- Finally, It will exactly locate the area using latitude and longitude value and its process of searching from compared to the values. After locating and reach the exact area.

5. Flow Chart

In this Indian virtual mapping process are used for 3D visualizing view of any object from the two dimensional map, and the process from web page is directly interconnect to the virtual machine server after directly interconnect to the terra explorer viewer and in between the data's are taken from the stored terrain database. And the Figure 6 is the flow chart of overall process in that project.

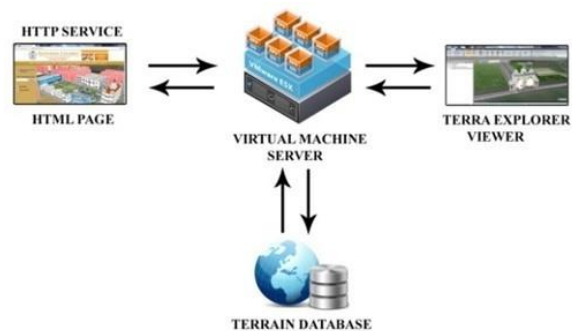


Figure 6. Flow chart of our project.

Finally, it will access the web page for a virtual visualization view of our map and shown the 3D object modelling view and using more functionalities in our map.

6. Discussion

They have a number of maps are used, all are using to locate and search the area, but each and every map can differ from another, its call the updating of the map features for the purpose of more process and operation are functioning.

The same thing we are using different maps, beginning all are using two dimensional view maps are used, but still everyone should use the 3D map and 2D map, but everyone easily should interact to 3D Map, for the reason is it's the real and originality view of visualized map are used.

In 3D map is used to visualize the virtual view of objects are displayed. Everyone should saw the two dimensional view it's all are expecting it is not the exact view of modeling images in two side views, but now all are using 3D view, everyone should easily interact and observing the reality of view.

For the reason of developing the 3D visualization map is used to interact and observing the map. All are using, the way of concept in this map is locate the correct destination and observing the way of the area and its etc.

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