Online Interactive Decision Making Feedback GIS Tool

URISA Ontario Student Bursary
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Project Description

An online decision making web / mobile interactive platform for obtaining public opinion to take informed decisions in the urban planning domain. Using the open sources GIS data and spatially recognizing patterns to further enhance the understanding of an infrastructure development in neighbourhood. This online feedback tool/platform allows key stakeholders to share their insights and simultaneously maps the data for better visual interpretation. The mapping of the data spatially on a map would allow the key stakeholder responsible to make informed decisions.

Purpose

The purpose of the platform would be to create transparency between the stakeholders and the infrastructure being built around their neighbourhood. Allowing the public to share their opinion emphasising on a much broader spatial perspective and to understand the needs based on geographic location of the comments. The purpose of such tool would help the city builders evaluate the concerns and use the feedback to take necessary action whenever necessary. This platform purpose is to be used as a

tools and a means of communication to offer better urban planning for the city, town or country.

The implementation of such tool would create meaningful participation and a sense of purpose between the involved stakeholders while creating much self awareness in the community. This will help keep the community leaders and city planners stay informed about public opinion to make right decisions during the planning, consulting and implementation stage. The live data acquired from the respective stakeholders, would help study the demographic population living around the particular project. This can be expanded on many considerable levels of geospatial analysis and further analysis can be performed to understand the key points from the population. From buffering analysis (distance) by a click of a button for the user to help generate distance information.

The sole purpose of this tool is to allow the users to interact with the online web/mobile portal in a much user friendly manner while simultaneously generating geospatial data for the GIS, urban planners and City developers to read the data for better use. This platform/tool would support controlled list arguments and opinions as well as top ranking questions by the majority for the builder to answer during public hearing/public announcements meetings.

The Solution

Solution is to help create self awareness between the communities as well help the city planner take informed decisions for the betterment of the communities' thoughts and concerns. The solution this will provide means of transparency which will allow for better decisions without losing resources and time. Increase effectiveness to have the projects run with time not against the time. As the data is collected and visualized on a map, it will make it easier for the data to be analysed in a free manner, giving the time to take necessary steps to make changes and review decisions before they can be implemented.

The spatial data retrieved from the stakeholder would be strategically profiled and a pipeline of information will be generated so the responsible builder of a particular project can not only review the comments but also understand the comments made from the demographics in accordance with age, gender, living area, education status etc. The data that is retrieved qualitative and quantitative is to be formed in an attribute table format similar to that of ArcGIS software by witch the data will be formalized to provided various GIS visualization and analysis. In other words their insights will simultaneously be mapped out, for better visual interpretation and understanding of the geolocation of decisions coming across the city. Also, for qualitative data in particular a third party open source sentiment analysis algorithm by Stanford University can be applied to analysis the positive and negative comments.

Lastly, with all such features, the platform will help generate user data from proactive to reactive levels of interactions on projects, generating more psychological insights for the responsible architect urban planner to consider. This tool may be used as a means of resources to help in the decision making process with much live and large user backed feedback.