



www.intetics.com

© Intetics Co

MUNICIPALITY ENABLES CIVIC ENGAGEMENT IN ONE MONTH THANKS TO A GIS WEB-APP BY INTETICS

OBJECTIVE

To make information about Kharkiv's parks and recreation areas easily accessible to the public.

CHALLENGE

Ukraine's second largest city, Kharkiv, contains numerous parks and recreation areas that provide different services and amenities. The recreation areas are managed by the Department of Communal Services. To make information more accessible to the public, the Department wanted to build an accessible Web-GIS based application. The app needed to help citizens locate a park and obtain information about recreation activities in their community, find parks or recreation areas near them and help discover activities that interest them.

SOLUTION

The Department of Communal Services turned to Intetics, who has over 15 years of experience in software development and implementation of GIS technologies. Intetics'

strong cross-functional team uses effective innovations in system architecture design, GIS processing and analysis, and software development. This allows the teams to effectively deliver:

- Adaptive planning;
- Evolutionary development;
- Early delivery;
- Continuous improvement;
- Rapid and flexible response to change;

The flexibility and iterative process enables Intetics to deliver a high-performing product in a short span of time.

To build an efficient Web-GIS application for the Department of Communal Services, Intetics first had to design a flexible GIS system architecture that could support a wide range of functions. Based on the analysis of the client's business requirements and user needs, the following functionalities had to be included in the system's architecture:

- Optimal database design and data storage for various spatial data formats;
- GIS software technology for effective data processing and data analysis;
- Server platform and Server Performance that must

THE WEB APP ALLOWS THE PUBLIC TO ACCESS PARKS INFORMATION 24-7 ON ANY DEVICE

- handle peak processing load;
- Network bandwidth and remote site connectivity that must be adequate to avoid traffic contention;
- User work flow software design and Application development that is easy to use for inexperienced users.

After identification of system's key features, the system architecture was designed. The Intetics field team and call center then collected the relevant information about parks and recreation areas, including park name, recreation opportunities, addresses and locations. Finally, Intetics GIS specialists analyzed the collected geodata, processed it and stored it in a unified spatial data storage system.

Based on the architecture and verified data, the new web-app could now be built, focusing on the user experience. Based on its previous investigation of user needs and client's goals, Intetics narrowed down the features that must be included in the app. The final list of features that were built into the web app are:

- Address locator panel to obtain the location of parks using an address;
- Recreational activities panel to search and select parks on a map that satisfy search criteria;
- Geo-location to define the current user's location;
- Comment window to evaluate and form an overall rating for the city's parks;
- Capability to share the map with different social networks;
- Base map panel.

The development of the application by Intetics GIS developers included both back-end and front-end development, both closely associated with the product's requirements.

RESULTS

Due to work with Intetics, the park and recreation department received a quality and high performance web GIS system that could be used by citizens of any technology experience level to find and share the city's parks and activities. Thanks to Intetics' flexible and iterative approach, the development of the entire system took only one month, instead of three months that it usually takes for such a system to be built. The quick time frame not only allowed the client to save on costs, but it also meant that they could engage with citizens quicker.

The developed application by Intetics provides access to information about parks and recreation activities in the city 24 hours a day, seven days a week.

“Thanks to Intetics, which quickly developed an easy to use Web-GIS application, Kharkiv residents and visitors can identify an area of interest for recreation and directly interact with the map where-ever and whenever they are in the city.”