ARCGIS ONLINE APLICATION -HIGH SCHOOLS IN PRAHOVA AND VRANCEA TOUR

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Abstract

This paper aims to present an easy method to create an application using the ArcGis Online program implemented by Esri America. The main objective of the project is geographical location of high schools in Prahova and Vrancea Counties. To accomplish this application we have to create an account on the site http://www.arcgis.com, to locate the interest points on the available map, to shoot the respective high schools and to perform techniques steps make this work. Beneficiaries of this project are the students who want to get more information of the high schools they want to follow and the "University of Agronomic Science and Veterinary Medicine of Bucharest "in order to promote the University at this level. As conclusion, this paper aims to improve services by using current technology.

Key words: application, ArcGis implementation, coordinates.

INTRODUCTION

A geographic informational system is a computer system designed to capture, store, manipulate, analyze, manage, and present all types of geographical data with descriptive. (An acronym GIS is used sometimes to understand geographical information science or studies of information geospatial. In simple terms, GIS is absorbed by mapping, statistical analysis and database technology.) Areas of activity for GIS: businesses, governments, educators and scientists, environmental and conservation organizations, natural resource groups, utilities. The GIS technologies have occurred 30 years ago in view of the need to facilitate complex geographical analysis for which existing systems (CAD, DBMS) making processing and analysis of the data space both conventional and remote-sensing, integrated in complex databases, heterogeneous, GIS constitutes only solution by which can solve rational, thoughtful and effective increasingly difficult problems related to the use of resources terrestrial. GIS presents many layers of different information being different from a map where the information what you see is what you get. Another advantage of using this system is that the use of maps is not difficult this operation being similar with paper map with the same symbols and conventional signs. ArcGis Online is a cloud-based system for mapping and geospatial content management. ArcGIS Online base maps are designed to emphasize different views of our world, from physical to political. In this system people can log in, make maps and applications, then share their information with the world with few technical skills and needed materials. It is a content management system for geographic information enabling you to share your content and to power many types of GIS-based applications and end-user websites. Your users connect to these maps and apps to use your shared content that you manage in the ArcGIS Online cloud as well as in your own on-premises systems. ArcGIS Online is used by GIS professionals to publish their information

and bring it to life through the power of intelligent, online maps that encapsulate key sets of geographic information, beautiful cartography, advanced analytics, and workflows. Another advantage of the ArcGis Online Platform is that no matter what you use - desktops, browsers, smartphones, or tablets - you always have access to your content using the Internet. (Jack and Laura Dangermond founded Esri in 1969 as a small research group focused on land-use planning. The company's early mission was to organize and analyze geographic information to help land planners and land resource managers make well-informed environmental decisions). In the year 1993 Geosystems start sharing Esri products in Romania, activity pursued by the firm Esri Romania starting from the year 1999.

MATERIALS AND METHODS

Even the steps for creating this application are relatively simple; the later stage of collecting information, namely their introduction in the main system and achieve attractive graphical interface that is easy to use, is not an easily followed to go and completed without the necessary knowledge. To create this application, we used ArcGIS platform which has an online version (Figure 1) used by Gis professionals to manage and share their apps and geographical information.
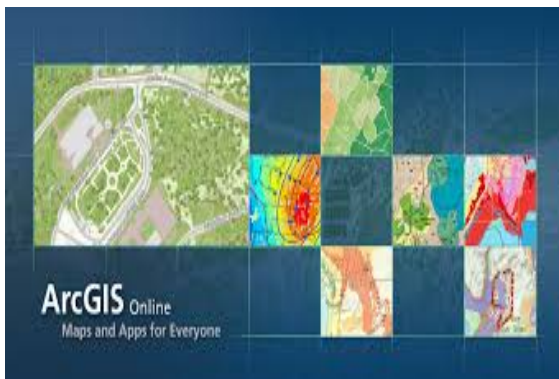

Figure 1. ArcGis Online picture

We used as example the tour of high schools in Prahova and Vrancea, thinking that might be useful for future students. The first step forward was to create a free account

http://www.arcgis.com site. After that we have created trapezius map we were interested in then we have added thematic layers to her and the final step in this stage was to save the result (Figure 2).
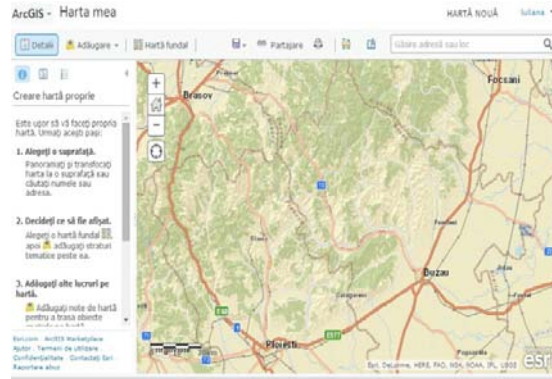

Figure 2: Map Keystone (http://www.arcgis.com –screen shot)

We have created a "Map Tour" application based on aforesaid map keystone. Following these steps, unprocessed version of the application looks as shown below (Figure 3).

Figure 3. Initial version of the application (http://www.arcgis.com-screen shot)

To give effect of this application we have realized high schools of these two counties photos. The Ideal formats for these photos, recommended by ArcGIS, are 1000x667 pixels for the main picture and 120x80 pixels for the thumbnail. We have done the resizing of photos in "Photoshop" program. We have uploaded them on the web site http://www.flickr.com because we have needed the URL of this. To customize the application, we have added interest points by placing them on the map,

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shown in the right sight of the web site page. We have introduced the corresponding URL's, the main photos, the thumbnails and finally we have added a short description about specializations, facilities, level of education and we have shared this with everyone. We can view both the application as well as points on the map, with different symbols (Figure 4).
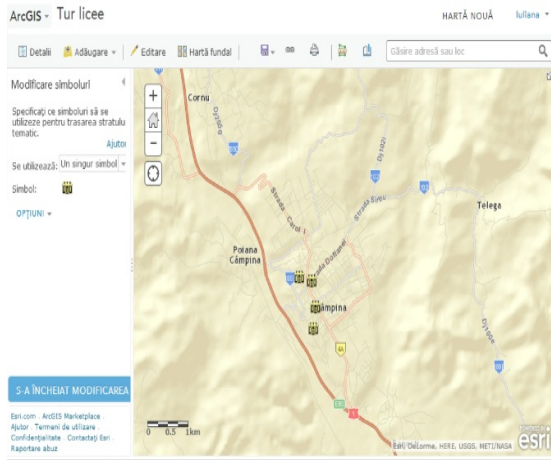

Figure 4: High schools on map (http://www.arcgis.com-screen shot)

RESULTS AND DISCUTIONS

The end result of these steps is the final form of the application (Figure 5). These type of applications have many advantages, from accessibility to the advantage of low cost.
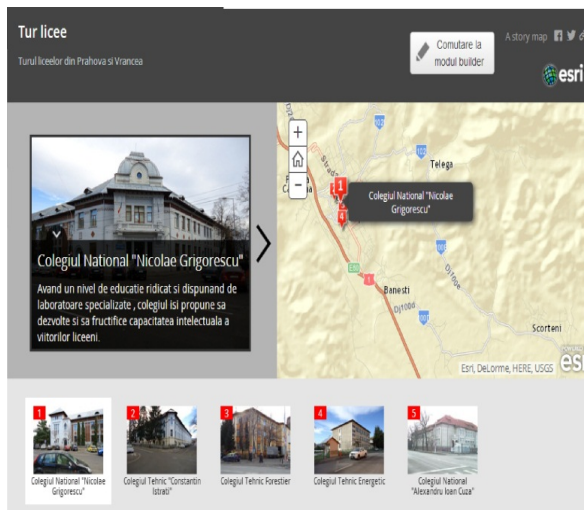

Figure 5: Final form of application
(http://www.arcgis.com-screen shot)

In addition, this service can be used by people who are not specialized in this area , such as: web creators who combine geographic content and tools to build web pages and apps with the data, people without GIS software or training, geographic information specialists for sharing detailed data, analysis models, and tradecraft / workflows with one another, as well as with the broader community, system architects and developers who need to integrate mapping and geographic functionality in their solutions. Also this application could be created in "Esri maps for Office", another product implemented by Esri America that make dynamic maps of your spreadsheet data right in Excel. People can create color-coded, point, clustered point, or heat maps. Then they can share their maps through ArcGIS Online or copy them into your PowerPoint presentation or document. They can also create an organization and share the information only in this. The only difference between the two ways of creating the application is that in "Esri maps for Office" data are entered into an Excel table (which contains fields: name, caption, color IC, main picture URL, miniature URL and coordinates) and then insert this table in "ESRI maps for Office". (Figure 6)
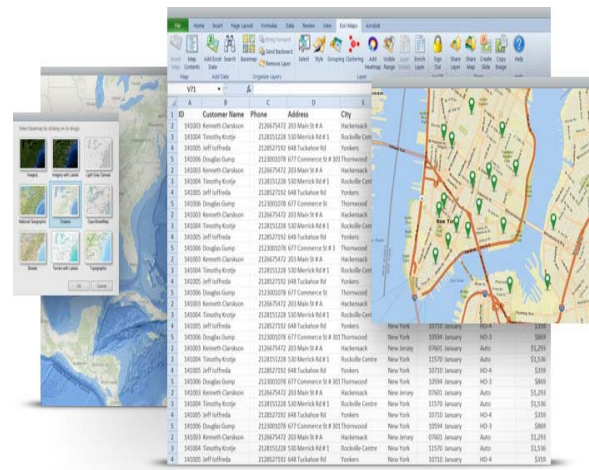

Figure 6: Esri Maps for OFFICE (http://www.esri.com)

CONCLUSIONS

The draft examples of how to work in ArcGis online has been designed specifically to help current students, future students, of these high schools and the University of Agronomy Science and Veterinary Medicine in Bucharest beneficiary's future students, will have the opportunity to learn about services and programs for the study of such high schools and this project will be used for a future caravan for the presentation of the University dropping of these counties. A good information before statues study program will follow in the next few years at the university will help future students to take appropriate decisions for their future.

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