Putting it all together: Development of a generic, modular, and reusable web mapping site implementing the Esri JavaScript API and the Dojo Toolkit

ABSTRACT

This application research attempts to describe and develop a generic, modular, and reusable programming codebase for use with the Esri ArcGIS API for JavaScript and the Dojo Toolkit. The intent is to create an application that can be easily ported from one project type to another with configuration alterations and style changes. These alterations and changes will enable and disable web mapping site functionality and design layout. In this sense, there is a fundamental change in how the web mapping site operates and how it looks to the user. The three tenets of generic, modular, and reusable are the focus of this research. For the web mapping site to be generic, it must not have code specific to a project type (except within the individual project configuration files). For the web mapping site to be modular, functional code must be able to be removed (turned off or disabled) without the rest of the site being affected. This is handled as well in the individual project configuration files. For the web mapping site to be reusable, the code must be able to be copied and placed in a new location, reconfigured, and deployed to exhibit a new unique site without any major code changes (aside from the individual project configuration file changes). If all of these tenets are met, then the application research project may be considered a success.