Web GIS Term Project

Grading: 150 Points

Overview

The term project in this class is open-ended. You can use this project to generate a product and/or explore a technique in more detail. Note that this project cannot rely solely on ArcGIS Online technologies. It must incorporate some web development (HTML, CSS, JavaScript, jQuery, etc.) and web mapping with the ArcGIS API for JavaScript or the Leaflet JavaScript API. Here are some example projects that I would deem to be acceptable.

- ❖ Create a series of lab exercises that explore web GIS and web mapping topics that could be used by others.
- ❖ Create an app using the ArcGIS API for JavaScript that makes use of a variety of techniques and samples.
- ❖ Learn to use a technology not covered in the class, such as a different mapping API or server-side technologies.
- ❖ Learn some server-side techniques to add functionality to an app, such as how to access and manipulate data in a database using SQL and PHP.
- ❖ Explore responsive web design in more detail with media queries and/or Bootstrap.
- ❖ Learn to implement jQuery to improve a websites functionality.
- ❖ Create training material for a short course on a web GIS topic.
- ❖ Create instructional videos or an instructional webpage to show others how to complete a web mapping, spatial analysis, or GIS task.
- ❖ Create a responsive, multipage website that includes web maps.

Pitch

You will need to pitch your idea to me in the form a short write up. The pitch must include the following:

1. A statement of the objectives of your project. What are you trying to accomplish? **(Up to 2 Points)**
2. A list of technologies you plan to use (for example, ArcGIS Pro, ArcGIS Online, ArcGIS Web AppBuilder, HTML, CSS, JavaScript, jQuery, ArcGIS API for JavaScript, Leaflet JavaScript API, etc.) **(Up to 1 Points)**
3. A list of key data sources. Note that this does not need to be complete at this stage, but you should note at least what types of data you will need and were they may be found. **(Up to 2 Points)**

4. A list of the components of your final deliverable. What products to you plan to produce? **(Up to 2 Points)**
5. Create a timeline that indicates when key phases of your project will be completed. Note that I am willing to look at early drafts or components. **(Up to 2 Points)**
6. A discussion of any concerns moving forward. Are there any issues that may hold up or complicate your progress? **(Up to 1 Points)**

Deliverable

Your final deliverable will be graded using the rubric provided here.

Criteria	Exemplary Performance	Score
Meet Objective/Goals	Your product/deliverables meet the goals set out in your pitch. You have accomplished what you set out to accomplish and have done so through the development of a quality and professional product.	**Up to 10 Points**
Structure	Your product/deliverables are easy to follow, logically organized, and accessible to your intended audience. The products are functional and usable.	**Up to 20 Points**
References/ Citations/ Credits	You correctly cite the source of any references, data, maps, graphics, videos, etc. used in your product. If you make use of any code, the source of the code should be noted.	**Up to 10 Points**
Data Visualization	All data are adequately symbolized and described. This can include the use of labels, pop-ups, color, size, visual hierarchy, etc. All your maps and graphics should be of professional quality and appropriate for you intended audience.	**Up to 20 Points**
Data Appropriateness	The data used in your products are adequate to meet your objectives. Make sure that you use data that are appropriate for your intended purpose. Poor data should not impact the effectiveness if your products.	**Up to 20 Points**
Design and Presentation	All products/deliverables should be well designed, including layouts and grammar. All products will be assessed including	**Up to 40 Points**

	documents, web apps, web maps, and web pages.	
Technical and Functionality	All products should work as intended. This includes any web site elements, pop-ups, widgets, and interactive maps.	**Up to 20 Points**