The Anatomy of a Web Map App: Part 1

Patrick McKinney

Cumberland County

pmckinney@ccpa.net

https://pnmcartodesign.com/

pmacMaps

Case Study: Esri Shortlist App

- Curated points of interest organized into tabs
- Requires an ArcGIS Online account
- Documentation:
  - Esri Story Maps Page
  - GitHub Project Page
- My Fork of Shortlist
- An example: Interactive Data Map
  - https://map.cumberlandbusiness.com/

Shortlist Build Process

1. Set-up Shortlist layer [and publish as service]

2. Create Web Map in ArcGIS Online and add layers

3. Create Shortlist app from Web Map

4. Configure Shortlist app

5. Deploy on ArcGIS Online or other Web Server

Let's Review the Shortlist Project Files!

Deploying the App

- Need a <u>web server</u> and <u>domain name</u>
- Domain Name Servers (DNS) translate the website name ("awesome-maps.com") into the IP address (70.42.251.42) of the web server
- Web Server is a computer connected to the internet where you can store the files for your app

Web Server Options

- Your organization has a server [?]

- Purchase a shared hosting plan

- GitHub Pages (free)
  - gh-pages branch > [username].github.io/[project]

- Apache (Linux) and Windows are common server platforms

Local Development Options

- The app lives on your computer (not internet!)

- WAMP/MAMP – Apache, MySQL, PHP

- Node.js and http-server package
  - Node cli { **http-server [path] [options]** }

Hyper Text Markup Language

- Describes & defines content of a webpage
- Markup languages are systems for tagging a document to indicate its logical structure
- **HTML** is like the skeleton for the page
- **CSS** provides rules for the styles and layout
- **JavaScript** provides logic for interactivity

Bare Bones HTML

```
<!doctype html>
<html>
    <head>
        […]
    </head>
    <body>
        […]
    </body>
</html>
```

It's In Your <Head>

- **`<meta charset="utf-8">`** - defines character encoding

- **`<title>`** - defines document's title

- **`<meta name="[x]" content="[y]">`** - provide info on page

- **`<link>`** - defines relationship between current document and external resource

- **`<script>`** - usually contains JavaScript code or link to a JavaScript file

Your `<body>` Is A Wonderland

- `<header>` - groups introductory or navigational content

- `<nav>` - section for navigation links

- `<section>` - container for group of related content

- `<div>` - generic container for content

- `<footer>` - section for content at end of document

Your `<body>` Is A Wonderland

- **`<h1>-<h6>`** - six levels of section headings
- **`<p>`** - paragraph of text
- **`<a>`** - anchor element; used for hyperlinks
- **`<ul>/<ol>`** - unordered/ordered list
- **`<li>`** - represents item in a list
- **`<img>`** - embeds an image into a document
- Too many tags, not enough time