

Connor Popp

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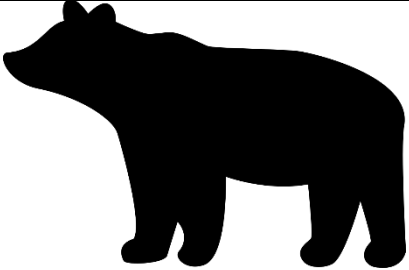
GIS Programming

Midterm Abstract

Bear a-Where: Yellowstone National Park is a citizen science project that allows users to report bear sightings inside national parks. This data can then be used by the National Park Service to track bear movements where they cross paths with humans for the purpose of minimizing negative bear-human interactions. This project will focus on Yellowstone National Park because of the high volume of visitors and well-mapped trails.

This app will leverage Esri.js and Survey123 to create a visually appealing front end mobile website. Building off what we learned the Js Stack Mobile Lab, the user-friendly site will display a basemap which will be automatically opened on the users current location after they approve location services. This map will be overlaid with the survey results feature class to allow users to see nearby bear sightings. Clicking on the bear sighting icon will open a pop-up that will tell the user what kind of bear (grizzly or black bear) and the date & time of the report. Users will make their own reports by clicking the “Report a Bear Sighting” button, which will take them to a survey form where they will input the location, answer a few questions to determine if it is a black or brown bear, and upload an image. In addition to the basemap, I will include the National Park Service’s Public Trails AGOL feature class to make it easier for users to accurately report a bear’s location on the trail.

Dataset	Source
Bear Sighting Survey Results (location, species, date & time)	ESRI Survey 123 form At https://arcg.is/0O95bO1

Topographic Basemap	<i>Source: Esri, USGS, NOAA, and other contributors.</i>
Nps_Public_Trails Feature class	https://mapservices.nps.gov/arcgis/rest/services/NationalDatasets/NPS_Public_Trails/FeatureServer/0
 Bear Icon	https://commons.wikimedia.org/wiki/File:Bear_(653)_-The_Noun_Project.svg This image is made available under the Creative Commons CC0 1.0 Universal Public Domain Dedication .
Information on Black bear vs Grizzly Bear Identifying Features	https://www.nps.gov/articles/bear-identification.htm

Wireframe:

