Virtual Field Trips Made Easy with Story Maps

2014 Esri UC
Jesse Wickizer
Background

The Maps101 division of Maps.com provides schools with social studies education materials.
Virtual Field trips!
Background

Use Story Maps to Inform and Inspire Your Audience

Story maps combine interactive maps and multimedia content into elegant user experiences. They make it easy for you to harness the power of maps to tell your stories.

WHAT'S A STORY MAP? FOLLOW US
What are Story Maps?

Convenient templates or “Web Apps” built with the *ArcGIS API for JavaScript* that are used to tell a compelling story.
What are Story Maps?

They use a web map, hosted at ArcGIS Online, as the background and overview of the story.
What are Story Maps?

There are several templates/layouts to choose from.
How do I make a Story Map?
How do I make a Story Map?

Application settings

Select the application layout you want.

Three-panel Layout

Integrated Layout

Selected layout

Title:

Subtitle:

Display legend

Maximum Zoom: 9

Popup Width:

Maximum Popup Height: 300

Include 'Zoom out' link button in popups

SAVE  RESET  DONE
How do I make a Story Map?

//The ID for the map from ArcGIS.com
webmap: "04744b7ad124458489ea821da3129352",
    //The id for the web mapping application item that contains configuration info - in most
    //cases this will be null.
appid:"",
    //Enter a title, if no title is specified, the webmap's title is used.
title: "",
    //Enter a subtitle, if not specified the ArcGIS.com web map's summary is used
subtitle: "",
    //Display legend
legend: "true",
    //specify a proxy url if needed
proxyurl:"",
    //Modify this to point to your sharing service URL if you are using the portal
sharingurl:"",
    //add default template options. This includes the bing key, sharing url, proxy url,
    //and any service urls (geometry, geocode, print)
    //that may be needed by the template.
bingmapskey: commonConfig.bingMapsKey,
helperServices:commonConfig.helperServices
function createMap() {

  if (configOptions.legend === "false" || configOptions.legend === false) {
    $('#legendCon').hide();
  }

  if (embed === "true" || $('#mainWindow').width() < 768 && embed !== "false") {
    $('#header').hide();
    $('#legendDiv').css("max-height",200);
    dijit.byId('mainWindow').layout();
  }

  var mapDeferred = esri.arcgis.utils.createMap(configOptions.webmap, "map", {
    mapOptions: {
      slider: true,
      sliderStyle: "small",
      nav: false,
      wrapAround180: true
    },
    ignorePopups: false,
    bingMapsKey: configOptions.bingmapskey
  });
}
Change Story Map Functionality

- **shortlist-storytelling-template-js**
  - The Shortlist story map application template by Esri
  - Updated on May 20

- **playlist-storytelling-template-js**
  - A storytelling template that organizes point data sets from a CSV file embedded in your web map into an organized interactive list
  - Updated on May 20

- **side-accordion-map-storytelling-template-js**
  - A storytelling template for publishing a web map to a general audience; includes accordion side panel and dropdown legend. Responsive design supports most devices with a single URL.
  - Updated on May 13
Change Story Map Functionality

- Clone the repo to your desktop.
- Create a new branch for your own master.
- Branch off that to start customizing.
- Use your favorite IDE to edit the code.
Example

Zooming functionality in *Playlist* template

*Smithsonian’s 20 Best Small Towns to Visit in 2013 (and 2012)*
From the blues to the big top, we’ve picked the most intriguing small towns to enjoy arts and smarts.

What makes a small town big on culture? This year *(red)* and in 2011 *(blue)* we sought a statistical answer to this question by asking the geographic information company Esri to search its databases for small towns and cities that have exceptional concentrations of museums, art galleries, orchestras, theaters, historic sites and other cultural blessings. Happily, the top towns also boast heartwarming settings where the air is a little fresher than the smog in the city.
Example

Zooming functionality in *Playlist* template
Locate current functionality in code

```javascript
layer.queryFeatures(query,function(result){
  var graphic = result.features[0];

  if (!graphic.infoTemplate){
    graphic.infoTemplate = layer.infoTemplate;
  }

  if (graphic.getNode() && domGeom.position(graphic.getNode()).x > getSidePanelWidth()){  
    var mapPos = domGeom.position(dom.byId(mapSelector));
    var point = new ScreenPoint(domGeom.position(graphic.getNode()).x - mapPos.x, domGeom.position(graphic.getNode()).y - mapPos.y);
    openPopup(graphic,_map.toMap(point));
  }
  else{
    on.once(_map,"extent-change",function(){
      _map.infoWindow.hide();
      openPopup(graphic);
    }));
    panMapToGraphic(graphic.geometry);
  }
});
```
Example

Change code

```javascript
layer.queryFeatures(query, function(result) {
  var graphic = result.features[0];

  if (!graphic.infoTemplate) {
    graphic.infoTemplate = layer.infoTemplate;
  }

  if (zoomAndCenterEachPoint) {
    var featureZoomLevel = _map.getZoom();
    if (graphic.attributes.ZoomLevel) {
      featureZoomLevel = graphic.attributes.ZoomLevel;
    }
    on.once(_map, "extent-change", function () {
      _map.infoWindow.hide();
      openPopup(graphic);
    });
    centerAndZoomToGraphic(graphic.geometry, featureZoomLevel);
  }
})
```
function centerAndZoomToGraphic(geometry, zoomLevel) {
    _map.centerAndZoom(geometry, zoomLevel);
}
Example

Publish Changes

[Node.js logo]

[Ruby logo]