GIS 151: Lab 1

For this lab you will create a web-map and a web-based story map that shows thematic and reference maps and discusses the elements of each type.

Turn in: Upload the link to your Story Map application (it will have two maps and two images of maps) to Moodle.

Make sure to put your name, data and Lab Name (ie. Lab1) at the top of the document.

- Make sure you have covered the reading for week one before beginning this lab.

Learning objectives:
1. Distinguish between reference and thematic maps.
2. Manage data and folders.
3. Create a an online web map with symbols
4. Search of thematic data make a choropleth map
5. Create a web application display Story Map
6. Use Jing - or other image capture tool) to capture images

PART ONE

Step1. Folders
- o   Make a folder names GIS151. Do not put any spaces in the folder name.
- o   Inside that folder make a folder called Lab1. Again, do not add any spaces.

Step 2: Thematic and Reference Maps
- Find an example of a reference map and a thematic map.   I use google images and type in "reference map. When you find one that you like save the image in your Lab1 Folder.

Step 3: Create an ArcGIS Online Account
- Go to the webpage - https://www.arcgis.com/home/signin.html

- Sign up for a **public account**
- Choose **Enter Your Information-** Make sure to record this information as it is not really retrievable later.
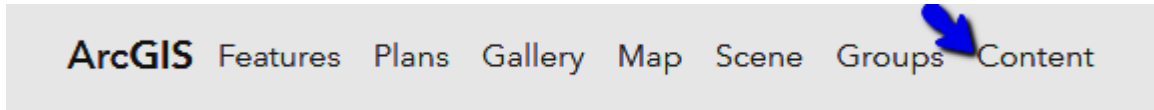
CREATE A PUBLIC ACCOUNT
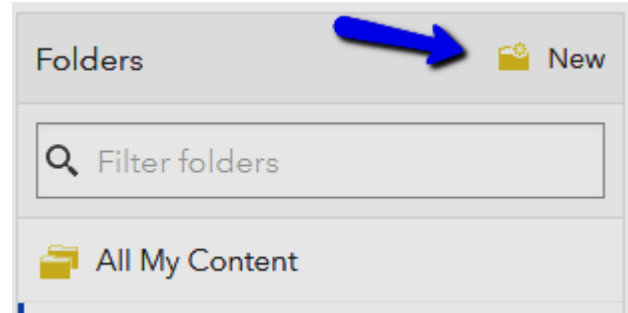
OR

Enter Your Information

- Fill in the field and check the box to accept the fine print and create the account.

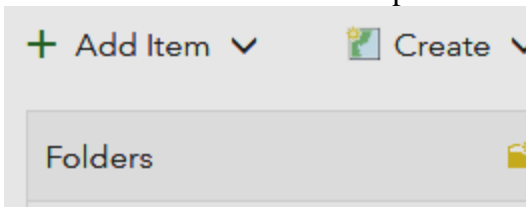- Click on the **Content** Tab

Step 4: Create an ArcMap Folder

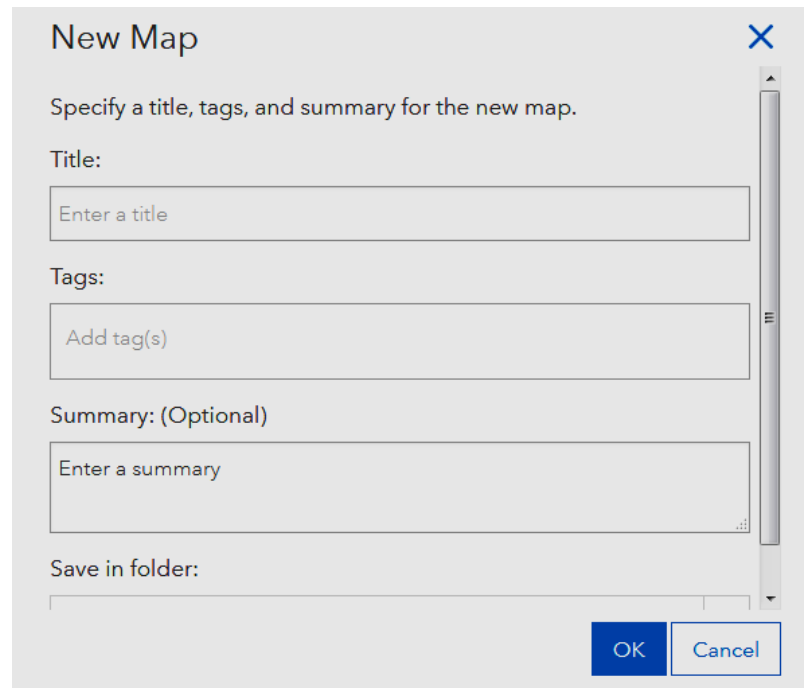- Click the **New** link

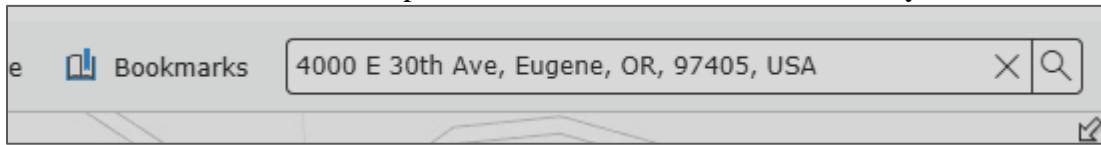- Name the folder GIS151Lab1

Step 5: Make a Map

- Go to **Create** click the dropdown menu and choose Map.

- Title: Your Last Name: Reference Map
- Tags: Map Types
- Summary: GIS 151 Lab 1
- Make sure it is in the Lab1 folder
- OK

New Map

Specify a title, tags, and summary for the new map.

Title:

Enter a title

Tags:

Add tag(s)

Summary: (Optional)

Enter a summary

Save in folder:

OK   Cancel

- Type the address of a place that is important to you in the search box – The example shows Lane's address. These will be published on the internet so do not use your home address.

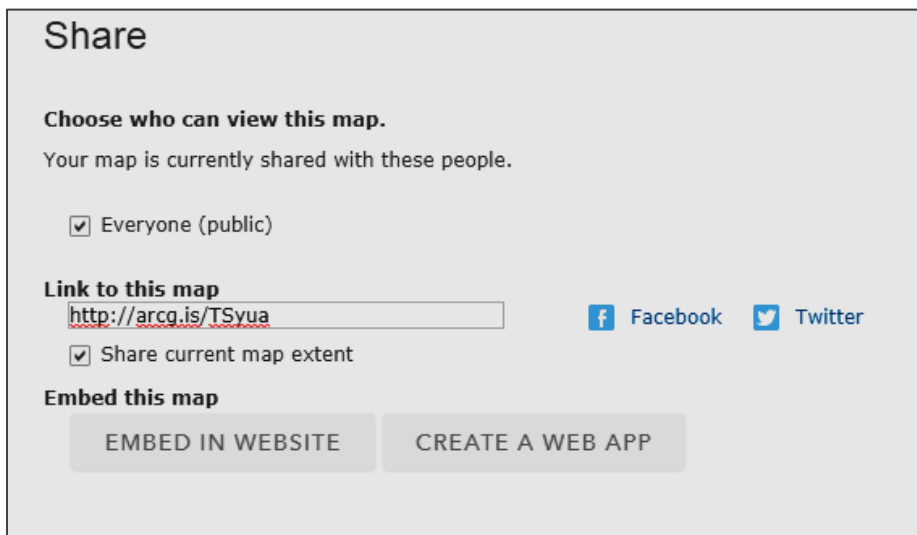| e | Bookmarks | 4000 E 30th Ave, Eugene, OR, 97405, USA | ✕ Q |

Step 6: Placing a Symbol
- Click the **Add** dropdown arrow and choose **Map Notes.**
- Name the Map Note and choose **Create**.
- Click the pushpin or stick pin then click on the location on the map.
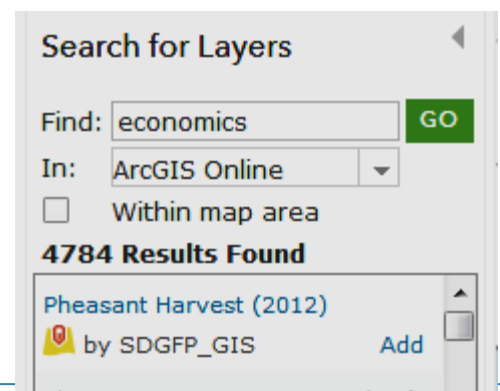
Step 7: Save and Share
- Click to **Save**
- Click to **Share**.

Share

Choose who can view this map.

Your map is currently shared with these people.

☑ Everyone (public)

Link to this map

http://arcg.is/TSyua   f Facebook   🐦 Twitter

☑ Share current map extent

Embed this map

| EMBED IN WEBSITE | CREATE A WEB APP |

- When you are finished, click beside your name in the upper right corner and choose to return to your profile.
- Click Content OR go back to the original ArcMap Link and sign in again.
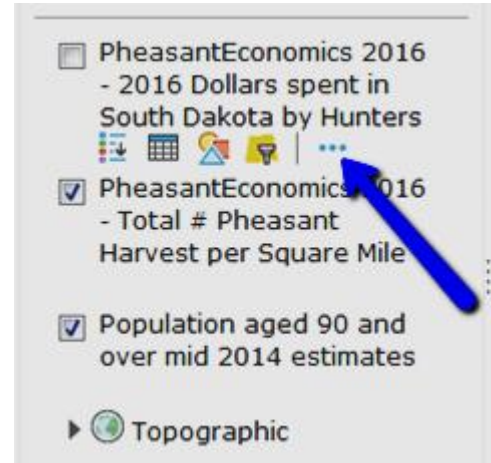
Step 8 Make a Map with Streamed Data

- Go to **Create** click the dropdown menu and choose Map.
- Title: Your Last Name: Lab 1 Thematic Map
- Tags: Map Types - Thematic
- Summary: GIS 151 Lab 1
- Make sure it is in the Lab1 folder
- OK
- Go to Add data
- Search For Layers
- In the Find box, type a theme

Search for Layers ◄

Find: economics   GO

In: ArcGIS Online ▼

☐ Within map area

4784 Results Found

Pheasant Harvest (2012)
📍 by SDGFP_GIS   Add

- In: Set to ArcGIS Online
- Unclick Within this map.

- Add layers and evaluate them.
- When you are done choose Done Adding Layers

To remove unwanted layer you can open the layer properties by hovering over the layer until you see the tools options.

- Click on the three dots and choose **Remove**.

- Save and Share Public

You should now have created two maps. One is a thematic map and the other is a "reference map with a point you added for location. You should also have two images – One of a reference map and the other of a thematic map.
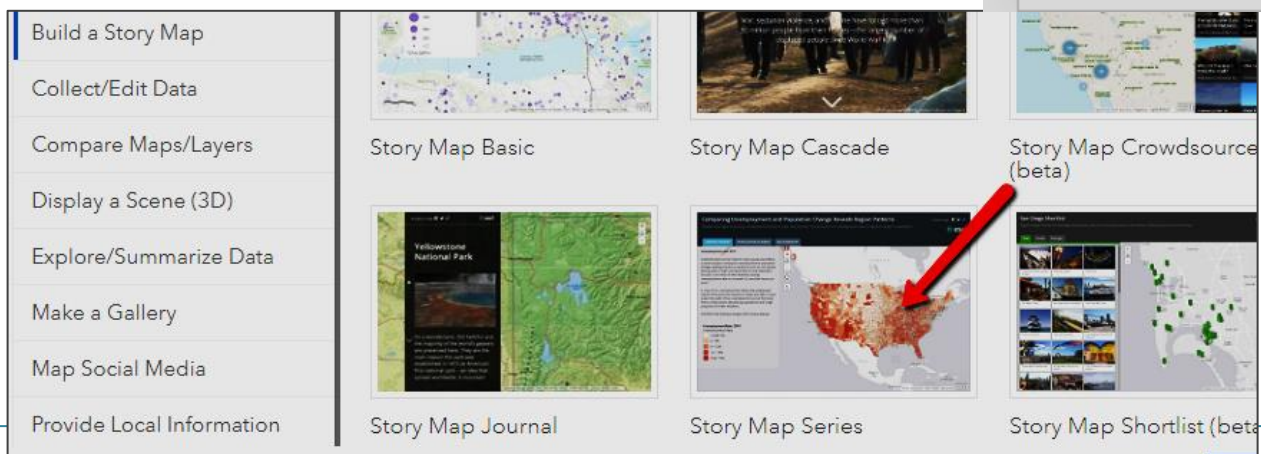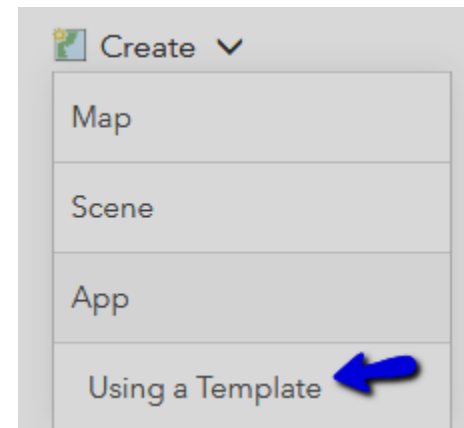
The next part of the lab will be to create a Story Map application and host your maps and images.

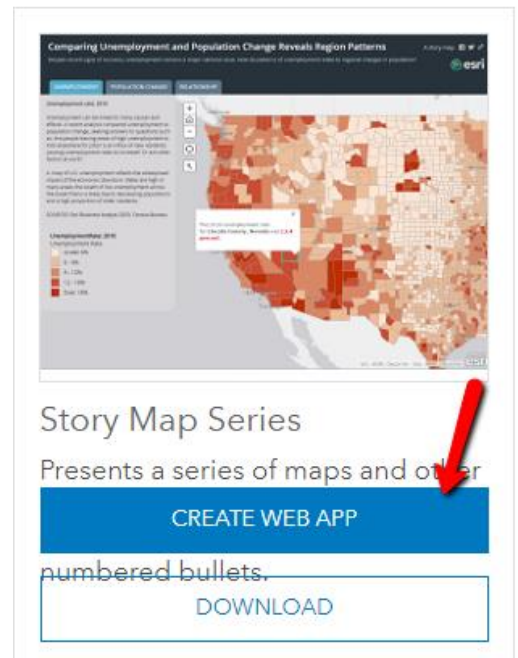**View my Story Map example with directions**   - http://arcg.is/118DyT

PART TWO

Step 9: Create a Web Application to Share Maps

- Go back to your Content click you name and then click My Profile
- Click **Create → App → Using a Template**
- Choose **Build a Story Map → Story Map Series** (Each template has different options. This one will allow multiple pages.)
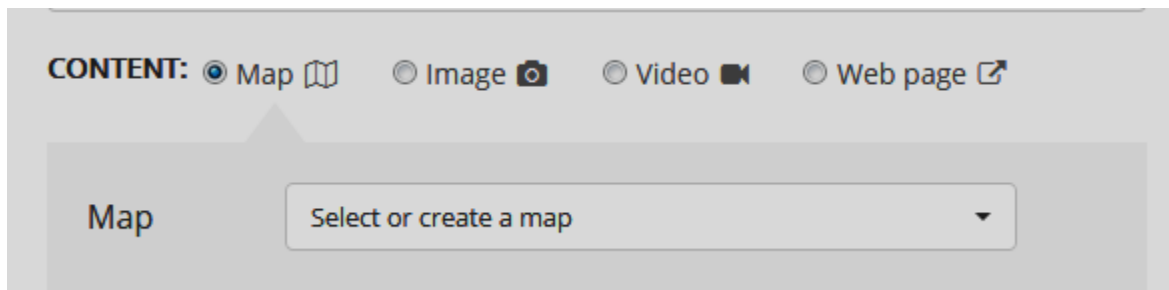
- Choose to **Create WEB APP**

- Title: Last Name Lab 1
- Tags: Map Types
- Summary: GIS 151 Lab 1
- Make sure it is in the Lab1 folder
- Done
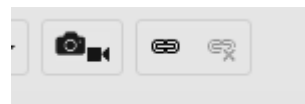- Choose Tabbed
- START
- Click the left arrow.

Step 10. Setting the First Map and Tab

- Tab Title: Reference Maps
- Select the first map you created called Your Last Name: Reference map

- Write a couple sentences introducing yourself.
- Click the **Camera** and then choose the **Upload** option.

- Navigate to the GIS151→ Lab1 folder **on your computer** or flash drive and click on
  your image of the reference map.
- Then discuss the elements of reference maps and why the image and the map you created
  would be reference maps.
- Save

Step 11: Add a Thematic Map with a Legend.

- Click the Add Tab to create a new tab.

- Name the Tab Thematic Map
- Select the Thematic Map you created.
- Click Legend in the **Extra** space.
- Upload the Thematic Map address link. Discuss the elements of thematic maps.
- Save

OK There May be a Problem Here

The app defaults to show the same map area or map extent as the first map you added. If your first map focused on the world, so will you second map. This is a setting you can fix

Step 12: Change the Default Settings

- Open the **Settings** window

- Click the Map options tab and unclick Synchronize map locations.

While you're here change the legend placement

- Click the layout options
- Choose legend placement → Dropdown.
- APPLY
- Save

Step 12: Finish and Share the Story Map

- When you are done → Share → Public
- Copy the URL to paste into the word doc

Step 13: Check Your Maps and Apps

- Log out of ArcGIS online – Why do you need to log out?

If you are still logged in you maps and app will open even if it is set to private because you have access to view on your account. You must set both the maps (steps 7 and 8) and the story map (Step 12) to public.

- Access the URL you passed in the word doc to check the public access.
- Copy and paste the link in Moodle.