


Exercise 3: Create a web app

 How can I print an exercise to PDF format?

Software requirements

- ArcGIS Online
- ArcGIS Pro 3.2
- ArcGIS 3D Analyst extension

Introduction

With ArcGIS Instant Apps, you can build web applications, using little to no code, that allow audiences to engage with your maps, scenes, and data in a focused and intuitive way.

The general workflow for creating an Instant App is as follows:

1. Create a map or scene.
2. Select a template based on how you want your audience to engage with the map.
3. Configure the template.
4. Share your app either with a specific audience or with everyone.

Scenario

Imagine the following scenario: As a GIS analyst for the city of Miami Beach, you have created and analyzed a 3D model of Miami Beach to identify buildings that would be affected by sea level rise through the year 2090. You have shared your analysis as a web scene to ArcGIS Online and would now like to create a web app using ArcGIS Instant Apps. This web app would make it easy for Miami Beach decision makers and community members to engage with the analysis results and see the effects over time of sea level rise.

Note: The exercises in this course include View Result links. Click these links to confirm that your results match what is expected.

Estimated completion time in minutes: 25

Expand all steps ▼

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- Step 1: Sign in to ArcGIS Online

To create a web app, you must first select a map or scene that has already been shared to ArcGIS Online. You will use ArcGIS Online to create an app from the web scene of your Miami Beach 3D model.

In this step, you will sign in to ArcGIS Online using your course ArcGIS account.

- a In a web browser, go to www.arcgis.com.



*Step 1a***: Sign in to ArcGIS Online.*

- b Click Sign In.
- c Under ArcGIS Login, copy and paste or type your course ArcGIS account username (ends in _CLIM) and password.
- d Click Sign In.
- e At the top of the site, click Content.

The contents available in ArcGIS Online are referred to as "items." By clicking the Content tab, you are directed to the My Content page, where all the items that you create in ArcGIS Online or that you share to ArcGIS Online are stored. Each item has an associated item page with information, options, and settings.

You have signed in to ArcGIS Online using your course ArcGIS account and can now access the web scene that you shared in a previous exercise.

- **Step 2: View item details**

Each item in ArcGIS Online has an item page. A best practice for creating and sharing items to ArcGIS Online is to fill out the item page with detailed information about the item. Doing so ensures that users can better find the item, trust that the item is reliable, and use the item properly.

In this step, you will complete the item page for your web scene.

- a On the My Content page, click your web scene, City of Miami Beach Sea Level Rise_<your first and last name>.

Some of the item page sections are already filled out, such as the summary, because you added that information when you shared the web scene from ArcGIS Pro. You will continue to fill out the remaining information.

The Description section is intended to provide more in-depth information about the item. The Terms Of Use section is intended to provide information on how the item may be used. Both sections allow you to attach links, insert images, and format the text.

- b For Description, click Edit and, in the box, type **A 3D scene of buildings in Miami Beach that are affected by sea level rise and the year of inundation that the building may be affected. This analysis was completed in ArcGIS Pro.**
- c Click Save.
- d For Terms Of Use, click Edit and type **This web scene was created for training purposes only.**
- e Click Save.
- f For Credits, click Edit and type **City of Miami Beach for GIS for Climate Action MOOC.**
- g Click Save.

You have filled out the item page for your web scene. This step is an important part of your project because you intend to share the web scene with decision makers and community members. These item details serve as metadata and allow decision makers and community members to vet the data source to ensure that it is an authoritative source of information.

For more information on configuring the item page, see ArcGIS Online Help: Configure item details and settings.

- Step 3: Create a web app



After sharing your web scene to ArcGIS Online and completing the item details, you are ready to create an app. ArcGIS Instant Apps provides a collection of templates that each have a specific purpose, such as comparing layers, getting directions, or finding nearby features. You want to create a web app that will make it easy for decision makers and community members to engage with your analysis results and see the future effects of sea level rise on Miami Beach.

In this step, you will use Instant Apps to create a web app from your web scene.

- a On the item page, click Create Web App and choose Instant Apps.

A new web browser tab opens to a gallery of the available templates. A Suggestions workflow allows you to answer questions to filter the templates and identify the best one for your project.

To review a detailed description of each template, you will switch from Gallery view to the Details view.

- b** On the right side of the screen, click the Details View button .
- c** For the Exhibit template, click Preview.
- d** Click the Next Slide  button to move through the bookmarks.
- e** Close the template.

The Exhibit template would allow bookmarks in your scene or map to be used to navigate important views and locations. Although the Exhibit template is a good choice, you will select the 3D Viewer template because it contains functionality specific to 3D scenes.

For more information on Instant Apps templates, see ArcGIS Instant Apps Help: Choose an app template.

- f** For the 3D Viewer template, click Choose.
- g** Click Create App.

You have selected a template that will create a web app that supports your goal of making analysis results engaging for decision makers and community members.

- **Step 4: Configure a web app**

Instant Apps provides an app configuration window that includes an interactive preview of the app and a configuration panel where you adjust and customize the app's settings. To configure your app, you can use either the Express setup mode or the Full setup mode. The Express setup mode presents the minimum set of essential choices that you must consider to quickly configure an app. The Full setup mode gives you more control over the template's options. You may also switch between setup modes if needed.

In this step, you will configure your web app using the Express setup mode.

- a** In the Express guide, click Next to read the configurable options, and then click Done.
- b** Click Step 1. Scene.

You already selected the City of Miami Beach Sea Level Rise scene, so no changes are required.

- c** Click Next.
- d** To the right of Header, click the button to turn on the header.
- e** To the right of Legend, click to button to turn on the legend.

Step 2 | Express

Header (i) ☒

Text alternative for the map (i)

Edit

Legend (i) ☒

Enable hover pop-up (i) ☐

Fixed pop-up location (i) ☐

*Step 4e***: Configure a web app.*

Turning on the header and the legend adds more details to the scene and will help app viewers understand what the scene is showing and what the colors represent.

- f Click Next.
- g To the right of Sharing, click the More Information button (i).



What does the Sharing option allow?

- Answer

Sharing allows users to share the app to social media.

- h Turn on the Display Preset Slides, Sharing, and Search options.

Step 3 | Express

Display preset slides (i) ☒

Shortcuts menu (i) ☐

Layer list (i) ☐

Sharing (i) ☒

Search (i) ☒

Search open at start ☐

Search configuration (i)

The default is the top source or select
All sources

(i) ☐

*Step 4h***: Configure a web app.*

Turning on these settings enables the bookmarks from your scene to be used as slides. App viewers will be able to click each slide to see a different view of the scene. The Search option will allow app viewers to search for a specific location using ArcGIS World Geocoding Service. If your organization had its own geocoding source, you could add it as the search source.

- i Click Next.

Step 4 in the Express setup mode provides options for customizing the theme and layout of your app. For example, you can apply a dark background by changing the mode from light to dark. You can also choose a preset theme, like Ocean, or add a theme that has been customized for your organization. In addition, you can manage the position of the widgets, or tools, on your app by clicking and dragging them.

- j Click the Select A Preset Theme down arrow and choose Ocean.

You have configured your 3D Viewer app using the Express setup mode.

- **Step 5: Publish a web app**

With your web app configured, you are now ready to publish and share it. The draft version of your app is visible only to you until you publish it and select the sharing level. You may publish the web app from the Instant Apps configuration window.

In this step, you will share your app with decision makers and community members.

- a At the bottom of Step 4, click Publish.
- b Click Confirm.

You have published your app, but it is currently shared only with you, as the owner of the app. You will change the sharing level so that everyone can view the app.

- c Click Change Share Settings.
- d Under Set Sharing Level, select Everyone (Public).
- e Click Save.

You have changed the sharing level of your app to Everyone so that decision makers and community members have access.

There are many ways to showcase your published and shared app: share the app link, add it to a social media post, or embed it in a website. You will copy and paste your app link to a new browser window to see how it will look to decision makers and community members.

- f In the Share dialog box, click Copy Link.
- g Open a new web browser tab and paste the link.
- h Explore your web app.

Using ArcGIS Instant Apps, you created a web app to help decision makers and community members engage with your analysis results and see the effects of sea level rise over time on Miami Beach.

- i Close all open web browser tabs.