PUSAT INFRASTRUKTUR DATA GEOSPATIAL NEGARA (MaCGDI)

Manual Pengguna
Web App Builder (Developer)

Malaysia Geospatial Online Services (MyGOS)
https://mygos.mygeoportal.gov.my/mygos

Start Web AppBuilder

1. Download the Web AppBuilder for ArcGIS (Developer Edition) ZIP file to your local drive and unzip it. You can download from the following website:
   - **https://developers.arcgis.com/web-appbuilder/.**

2. Double-click the **startup.bat file** in the unzipped folder. The batch file starts the Node.js server in the Command Prompt window and Web AppBuilder in your **default browser with http://[yourmachinename]:3344/webappbuilder**. If the browser is closed, you can reopen Web AppBuilder in the same—or a different—browser as long as Node.js is running in the Command Prompt window.

3. You need to insert URL MyGOS (**https://mygos.mygeoportal.gov.my/mygos/**) and App ID for Web AppBuilder registered in the MyGOS.

Provide an app ID for Web AppBuilder

If this is the first time you've used Web AppBuilder with the portal specified above, you may be asked to provide an app ID for Web AppBuilder to support OAuth2 authentication. For a specified portal, this process is required once. When you subsequently start Web AppBuilder, you can log in to the portal directly.

Complete the following steps to retrieve an app ID:

1. Log in to MyGOS and insert your Username and Password.

    - URL MyGOS: **https://mygos.mygeoportal.gov.my/mygos/**

2. Go to the **My Content** tab of the content page, click **Add Item**, and choose **An Application**.

3. In the **Application** dialog box, enter the following parameters.

    a. **Type** -- Select the type of application.
    b. **Purpose** -- Select Ready to Use.
    c. **API** -- Select JavaScript.
    d. **URL** -- Enter http://[yourmachinename]:3344/webappbuilder.
    e. **Title** -- Enter something that makes sense to you, such as Web AppBuilder for ArcGIS.
    f. **Tags** -- Enter something that is easy to search, such as Web AppBuilder.

4. Click **ADD ITEM.**

5. In the item details page, click **REGISTER** under App Registration section.

6. On the Register dialog box as shown below, for App Type, keep the default value. For Redirect URI, **enter http://[yourmachinename] or https://[yourmachinename]** and click Add. Be aware that URIs with HTTP and HTTPS protocols are distinguished as two different URIs. It is strongly recommended adding both of them to the URI list to avoid potential redirect issues.

   - Example:
     a. https://[yourmachinename]:3344/webappbuilder
     b. http://[yourmachinename]:3344/webappbuilder
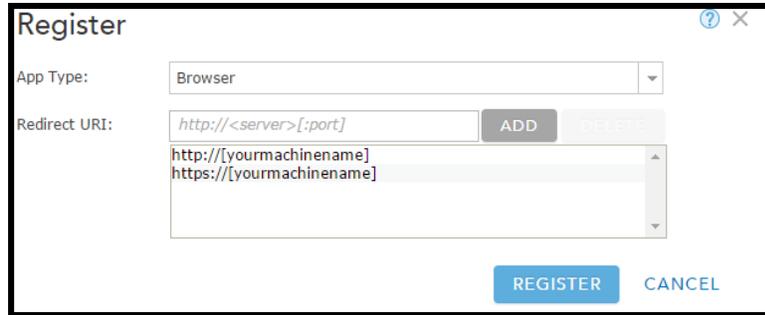
7. Click **REGISTER.**

8. On the item details page, copy the app ID under **App Registration**.
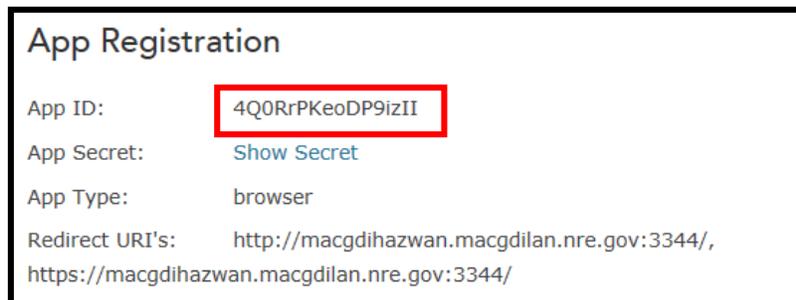
9. In the browser, paste the app ID into the text box of Web AppBuilder, and click **Continue**.
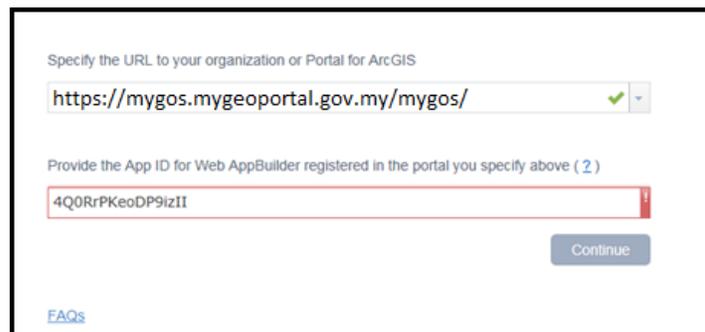
Build your first app with Web App Builder (Developer)

To build a basic app with Web AppBuilder, complete the following steps:

1. Log in to your Portal MyGOS account.
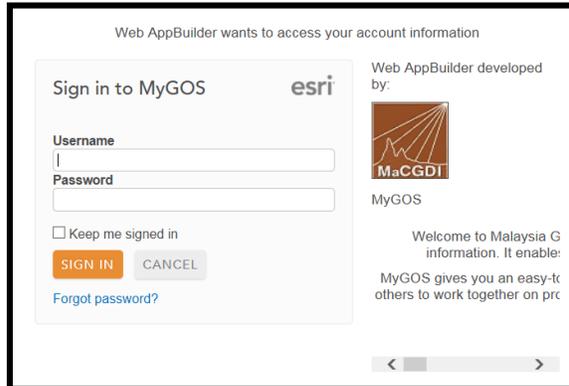
2. On the Web AppBuilder home page, click **Create New**.

3. Choose **Default (2D)** and click **Next**, then provide the **app name** and **description**, and click **OK**.

Theme

1. Choose the **Theme, Style** and **Layout**.

Select a theme—Choose from one of the following themes.

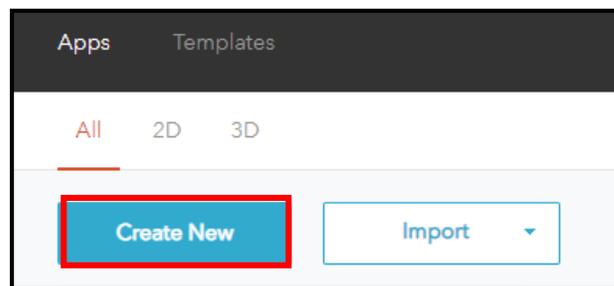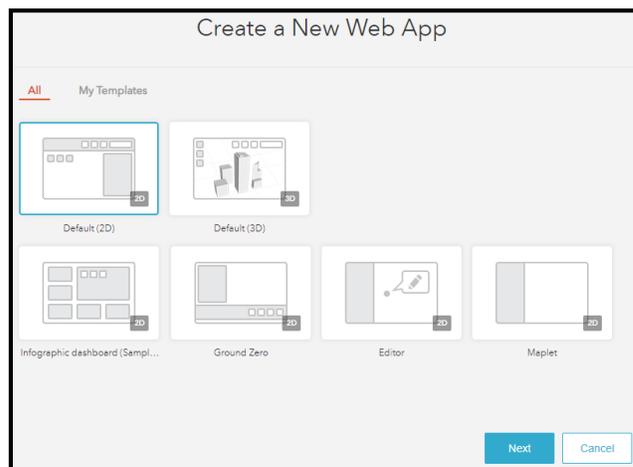a. **Billboard**—This theme has the most layouts of all the themes and does not include a widget controller. All the widgets in the theme are the on-screen widgets. It is designed for the app with simple tasks.

b. **Box**—Focuses on the widgets in the widget controller. By default, all the on-screen widgets are turned off. There are no placeholders. It is designed for the app that requires a clean look on the map.

c. **Dart**—The widgets in the widget controller display like placeholder widgets. You can have multiple widgets open and move them around. By default, all the on-screen widgets are turned off. There are no placeholders.

d. **Foldable**—The first theme created by Web AppBuilder. It supports all the widget types and can be used for the app with complicated tasks.

e. **Jewelry Box**—Evolved from the Foldable theme with a focused widget on the left of the app. It is designed for the app with a workflow task.

f. **Launchpad**—Designed for users who like Apple Mac style. It lets you open multiple widgets, and move, resize, and minimize them.

g. **Tab**—Like the Foldable theme, it supports all the widget types and can be used for the app with complicated tasks.
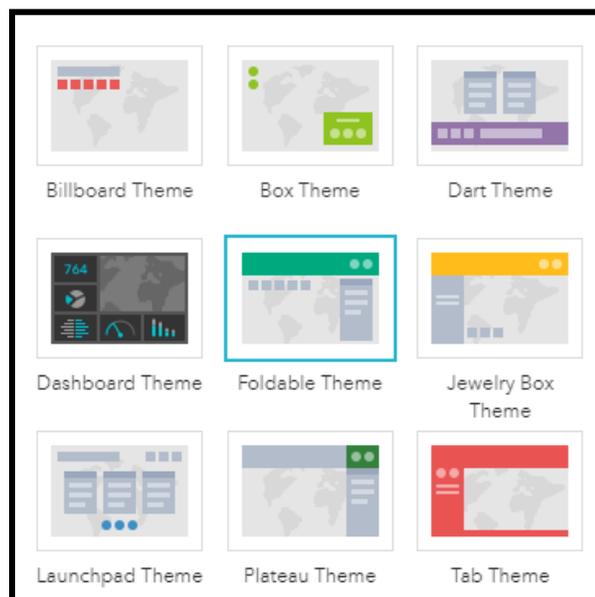
- **Select a style**—The available styles vary depending on which theme is selected. Most themes have eight colors to choose from, except for the Launchpad theme.
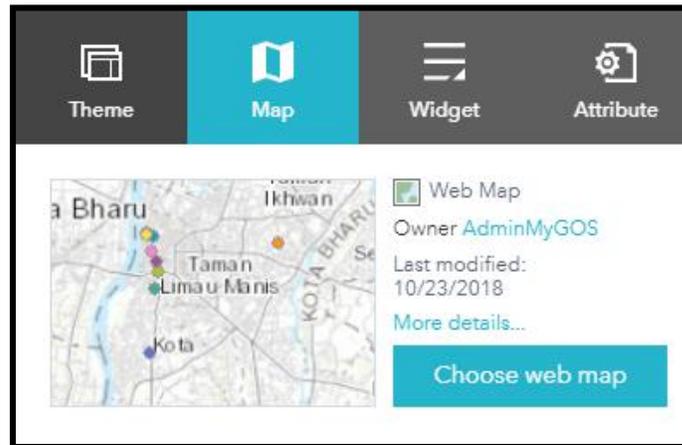

- **Select a layout**—The available layouts vary depending on which theme is selected. A layout represents a preset placement of user interface items. There are two styles of layout. One is for desktop and another is for mobile. When either the height or width of a screen display is less than 600 pixels, mobile layout applies.

MAP

1.   Click **Map** and **choose web map** you want used.

Use the Map tab to select a web map for your application. In particular, the following functions are supported on the map tab:

a. Change map—Click **Choose Web Map** to open the window to select the web map from the portal. Web maps shown on the **Choose Web Map** window are categorized by how they are shared. The **My Content** filter is selected by default in the portal. Besides the specified portal, ArcGIS Online is also an option for the Public web maps. Click **My Content, My Organization, My Group**, or **Public** tabs to filter the web maps to that category. In addition, it provides sorting on the maps based on categories of the most recent, most viewed, highest rated, title and owner.
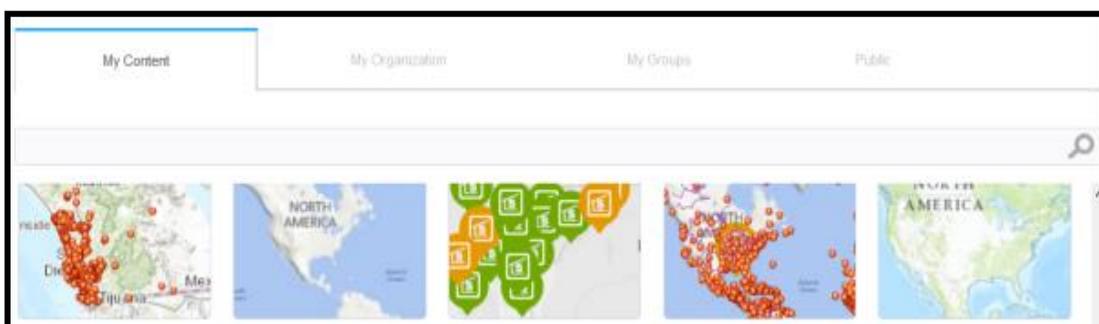
b. Set the initial map extent for the application—Zoom in or out to the applicable map extent, and click **Use Current Map View** or click Use **Web Map's Default Extent**.

c. Customize map visible scales — Click **Customize** to open the **Customize Visible Scales** window which lists all the existing scales from the map. You can delete the existing scales or add new scales to limit or extend the scale levels which the map can zoom to.

d. View details of the selected web map—Click **More Details** link to open the item details page for the map.

Widget

1. The **Widget** tab allows you to configure the functionalities of an application. The initial set of widgets may vary from theme to theme, as each theme has its own preconfigured set of widgets. Following are the widgets from the Foldable theme.
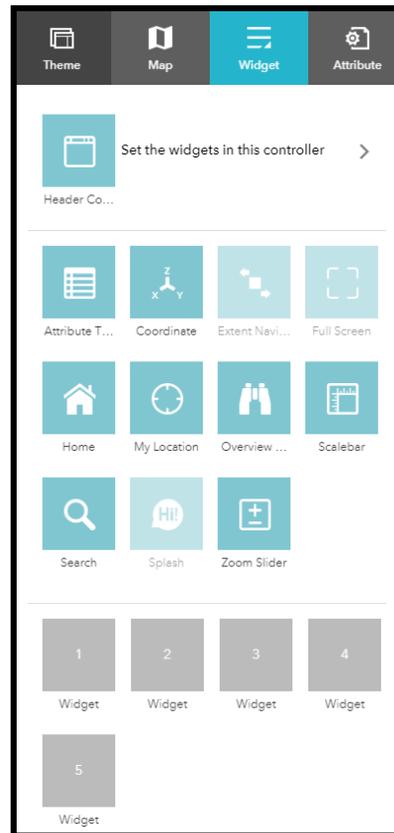

  ❖ To configure a widget, click the **Configure this widget** button to open the widget configuration window.

2. Click **Set the widgets in this controller** to open the page for in-panel widgets. Click **+** to open the widget collection that allows you to select and add widgets to the application.
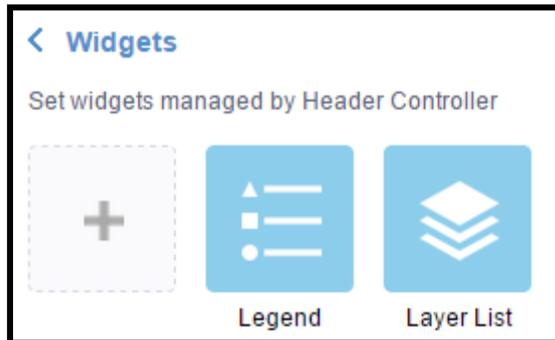

3. In the **Choose Widget window**, search for the widget or select one or more widgets. If you have custom widgets, they also appear in the widget collection. The selected widgets are highlighted in the blue boxes.
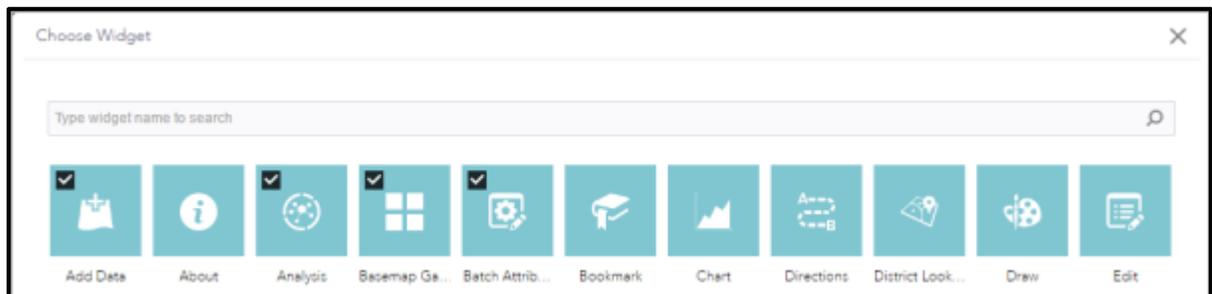

4. To reorder the widgets in the controller, click a widget and drag it to the location you prefer, wherever the **red line** appears.

5.   You can also group in-panel widgets by dragging one or more widgets into
      another widget. The grouped widget shows as a folder icon on the controller
      widget. To ungroup the widget, drag each widget out of the group.
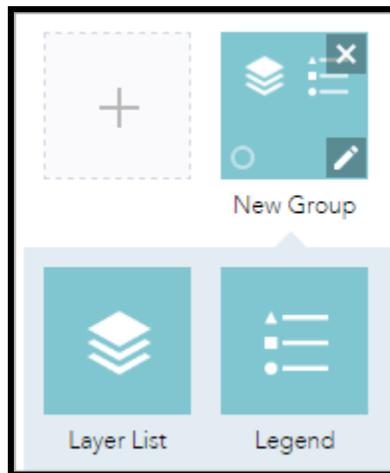
6.   The placeholder is labelled by a number. Click it to open the widget collection
      window. Only one widget can be selected for a placeholder. Widgets added in the
      placeholders can be dragged onto the map. They also can be resized by
   dragging the lower right corner of the panel.
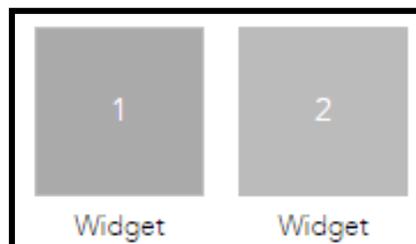
7.   When the widget configuration completes, click **Save**.

8.   The widget added from the widgets collection can be set to open automatically
      when apps start. To do so, click the dot on the widget to change it to dark green.
      A maximum of two widgets can open automatically: one is on the controller and
   another in the placeholder.
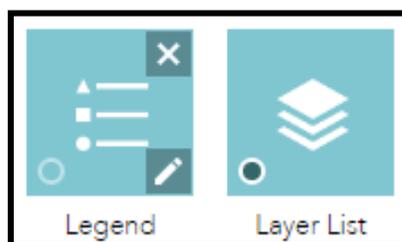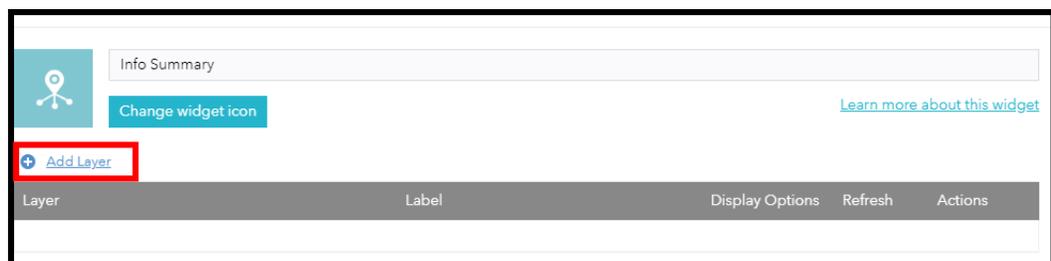
Configure the Info Summary widget

Widget Info Summary — Provides a count of features contained in the current map extent for each layer specified.
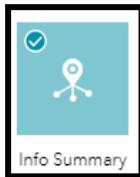
1. Hover over the widget and click the **Configure this widget** button ✏️ to open the configuration properties dialog box.

2. Optionally click the **Change widget icon** button and replace it with an image of your own.A file explorer window appears, allowing you to select a local image file to use as the widget icon.
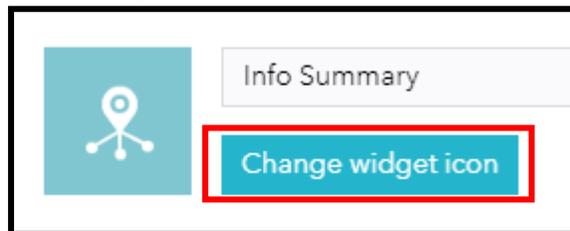

3. Click **Add Layer**.

Each added layer specifies a feature layer in the map to be counted and displayed by the widget. The following layer types are supported with the Info Summary widget:

    a. Feature service
    b. Feature collection
    c. Simple map service
    d. Comma-separated values (CSV) file (.csv)
    e. Keyhole Markup Language (KML) file (.kml and .kmz)
    f. GeoRSS web feed (URL)

4. Optionally add a label for each layer.

5. Click the edit button [✏️] under the **Display Options** header to update the symbology options and panel display options.


a. Use the **Symbol** tab to change the map symbology, enable clustering for point layers, or update the panel symbology (the symbols displayed in the widget panel).
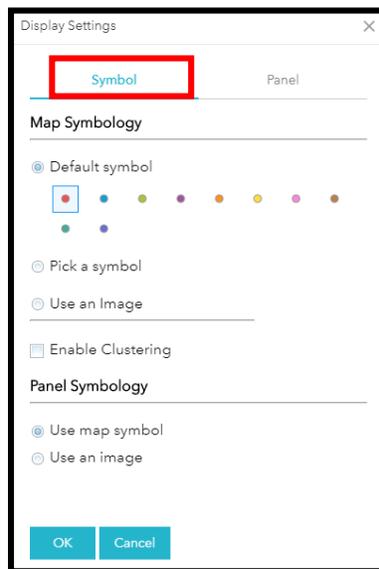

b. Use the **Panel** tab to manage how the list of feature information displays in the widget panel. Select a field and label under **Layer Options** to display a list of features using the selected attribute.
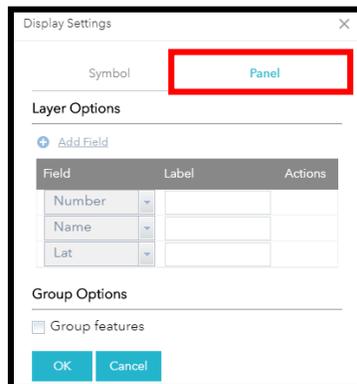
c. Optionally check the **Group Features** check box under **Group Options** to group features in the list by a specified field or by the renderer used in the map.
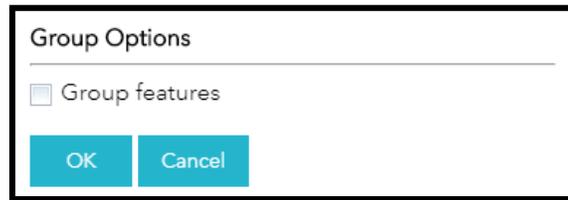
6. Under **Actions**, change the order of layers or delete a layer.
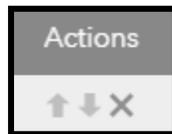

7. Optionally select **Display Feature Counts** to display a count of features for each layer in the widget panel.
The count displays the number of features for the selected layer.
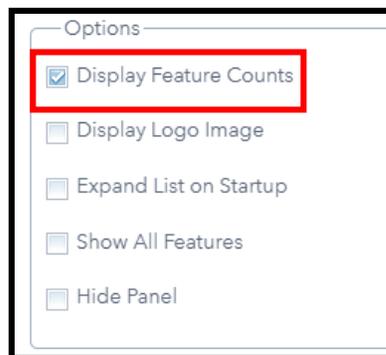
8. Optionally select **Display Logo Image** to add text or an image to the widget header.
   a. Click the **Upload Image** button to add an image of your own.
      A file explorer window appears, allowing you to select a local image file.
   b. Specify text in the **Main Panel Text** text box to display below the logo image, for example, Last Updated.

9. Optionally select **Expand List on Startup**. This will automatically expand the first row in the panel when the widget is opened.
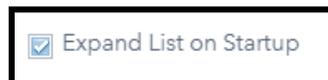
10. Optionally select **Show All Features** to show the complete list and count of features for the layer regardless of the current map extent.

11. Optionally select **Hide Panel** to enable the app to start without a visible widget panel.
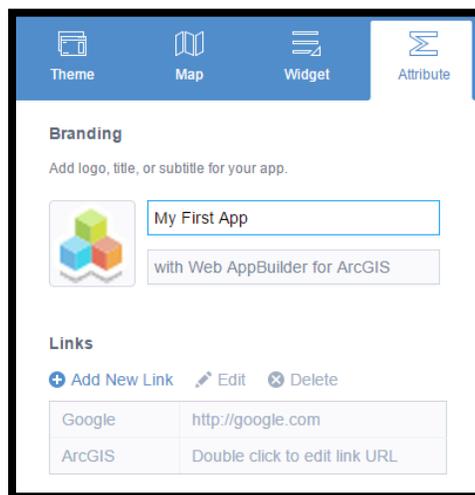
ATTRIBUTE

1. Click the **Attribute** tab and change the title, subtitle, and logo of the app.

   The following items can be added to the banner:

   a. Logo—Click the logo icon to open the file browser and select an image file. If you don't want to have a logo in the app, click X icon on the logo to remove it.

   b. Title

   c. Subtitle

   d. Hyperlinks

2. Click **Add New Link** to add a hyperlink to the banner and provide a name and valid URL for it. To edit a link, click the link, then double click the URL field. To remove a link, click the link, then click **Delete** button.
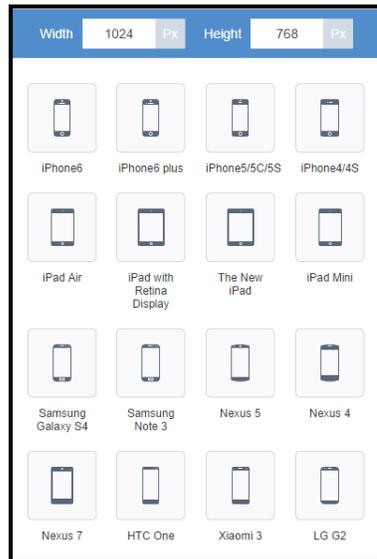
> **Caution:**
>
> Only maximum of four links are allowed to add.

3. With Developer Edition, you can configure the loading screen of your app by clicking the **Configure Loading Screen** button.
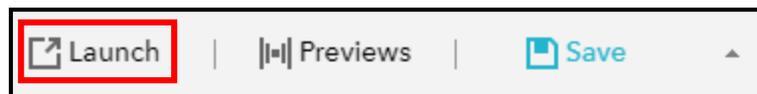
4. Click **Save** to save your changes.
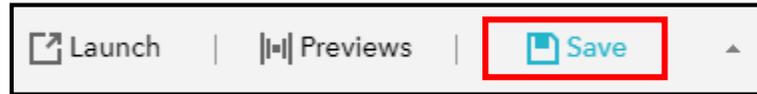
5. Click **Previews** to view the app in your devices.

6. Click **Launch** to view the app in your browser.

7. Click the **Web AppBuilder logo** or **Web AppBuilder for ArcGIS** at the upper left of your browser to return to the home page.

8. Click the **Download** button on your app to download the app for deployment.

9. Further, you can **scan QR** code to view the app on your mobile device.