Building Routing Applications with ArcGIS Online

Max Zeng
Shubhada Kshirsagar
Slides from this demo theater

http://esriurl.com/uc19brago
Agenda

• Directions and routing services

• Creating web apps with ArcGIS
  - Configurable application templates
  - Web AppBuilder for ArcGIS
Directions and Routing Services
Perform analyses on street networks

- Route
- Closest Facility
- Service Area
- Traffic
- Origin Destination Cost Matrix
- Location-Allocation
- Vehicle Routing Problem
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Common to all Services

• Work globally

• Use high quality street data
  - Predictive and real time traffic where available
  - Support for vehicle weight, width and height restrictions
  - Can use preferred truck routes or avoid toll roads

• Driving, Walking, Trucking, or your own travel modes
Services are also available with ArcGIS Enterprise

- All the Directions and Routing services are also available with ArcGIS Enterprise
  - Requires ArcGIS Enterprise 10.4 or later
  - Do not work globally but restricted to the extent of your street data
  - No support for live traffic

- Use Publish routing services tool included with ArcGIS Enterprise 10.6 or later to publish all the routing services

- Publish routing services tool is available as a separate download for previous versions of ArcGIS Enterprise
Creating web apps with ArcGIS
Creating web apps with ArcGIS
Configure, customize, or build apps from scratch

- Story maps
- Configurable app templates
- Web AppBuilder for ArcGIS
- Operations Dashboard for ArcGIS

No programming

Web AppBuilder custom widgets and themes

Programming effort

Build apps using ArcGIS API for JavaScript
What is a web map?
Foundation for all your apps

- Interactive display of geographic information
- Stores references to web services and data, display and behavior settings
- Supports
  - Smart mapping
  - Configure pop-ups
  - Analysis
- Create in Map Viewer, available with ArcGIS Online and ArcGIS Enterprise
- Can be leveraged by all other Esri Apps
Configurable app templates
Quickly transform your web map into a focused app
Demo: Store Locator

Create a store locator app using configurable app template

Shubhada Kshirsagar
Demo: Store Locator -- Takeaways

- Directions app template can be used to provide travel directions from user specified location to the features in your map
- Use a web map with your destination features to get started
- Configure popups and symbology in your web map
- Share the app publicly using Subscriber Content settings
Web AppBuilder
Build powerful GIS apps that run on any device
Web AppBuilder widgets
Choose the widgets you need in your app

- Pick the widgets for your workflow
- Directions and routing services are available with the following widgets
  - Analysis
  - Directions
  - Geoprocessing
Web AppBuilder Analysis widgets
Analysis tools that consume routing services

• Routing based analysis tools
  - Create Drive Time Area
  - Find Nearest
  - Connect Origins to Destinations
  - Plan Routes
  - Choose Best Facilities
Web AppBuilder custom widgets
Build your own widgets

• Build widgets for your own workflows using Web AppBuilder Developer Edition
• Combine existing widgets to create new widgets
• Requires programming in HTML5 / CSS / JavaScript
• Apps containing custom widgets have to be hosted on your own web server
Create an app for Health Inspection using Plan Routes analysis widget and Directions widget in Web AppBuilder

Shubhada Kshirsagar
Demo: Health Inspection -- Takeaways

• Web AppBuilder allows building apps with lots of capabilities

• Analysis widget contains multiple tools

• Add Data widget allows you to add content from local files

• Share routes with your workforce using route layers and Navigator for ArcGIS

• Barriers in Plan Routes widget and Directions widget
Please Share Your Feedback in the App

- Download the Esri Events app and find your event.
- Select the session you attended.
- Scroll down to “Survey”.
- Log in to access the survey.
- Complete the survey and select “Submit”.

Sample session:
- ArcGIS Data Reviewer: An Introduction
- SDCC: Room 105

Survey:
- Share your thoughts.
- We need your feedback to improve our events. Log in to take surveys and share your feedback on the event, presenters, and sessions.

Assessment:
- Technical Workshops: Poor
- Well Organized/Clear Presentation: Poor
- Public Speaking Skills: Poor

Understanding why quality plays a key role in every organization that uses GIS data. Learn how to use ArcGIS Data Reviewer to improve data quality and reduce costs associated with poor quality. This session will focus on using ArcGIS Data Reviewer for...
Questions?

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