



Drive Time Analysis Widget

Summary

Develop a custom widget for the Esri Web AppBuilder that takes three drive times and a map click point as parameters and returns polygons on the map displaying these three drive times. The widget should access the user's portal for performing the geoprocessing of the drive times (NOTE: This will consume credits and may require a login).

Further design notes can be found in the design diagrams attached with this challenge.

Scoring Guidelines

- Application Ascetics (this is a front-end position after all)
- Knowledge of [separation of concerns](#) as it relates to web application development.
 - Separation of HTML, CSS, and JavaScript
- Consistent use of a [design pattern](#)
- Correct use of techniques for asynchronous programming
- Correct use of graphics layers for handling results
- A strong understanding of geoprocessing services
- A strong understanding of a graphics and their relationship to a graphics layer for displaying results.
- Use of DOJO Dijits in place of native HTML buttons, numeric steppers, etc..
 - [Additional Information](#) (Dojo API)
 - [Further Information](#) (Dojo Dijit Button)
 - [Further Information](#) (Dojo Dijit NumericSpinner)
 - [Further Information](#) (ESRI API)

Deliverable

- A zip file of the custom widget including well commented code.

Bonus / Stretch Goals

- The widget options such as the defaults color of polygons, widget title, etc... are configurable using the Web AppBuilder configuration screen and not just through the config.json.
- UI has an additional "advanced" screen for the end-user to set their own colors of the resulting polygons in addition to the UI outline in the provided design.