

Term Project - Polyline Simplification Tool

Thomas H.W. Trotter

Overview

- The purpose of this program is to allow a user to simplify a polyline via a brute force method.

Long-term goal

- Eventually ... More Functionality
 - Simplify more types of feature classes
 - Simplify more than one line at “once”
 - More ErrorHandling



Classes and Interfaces Used

- IMxDocument
 - Used to refresh the screen
- IPointCollection4
 - Stores the polyline geometry as a collection of points
 - RemovePoints(index, count)
- IEditSketch2
 - Stores the geometry of the polyline



Classes & Interfaces... Continued

- ISketchOperation2
 - StartEditing(pEditor)
 - FinishSketch(pEditSketch,esrioperationtype,iPoint...)
 - IEditor
 - Keeps track of the EditState (1 = Editing Started)
 - Keeps track of selected features
 - UID
 - stores the name of the Editor so that the editor can be set to the application environment
 - IPoint
 - Stores the location of the point.
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User Guide

- Currently, only Polylines can be simplified.
 - To begin, the user starts the editor and selects a polyline feature.
 - Then, the user clicks on the UIButton for this Tool
 - A userform is then displayed.
 - Two textboxes and a command button are visible
 - enter the Nth Value in the first textbox.
 - Click the command button to simplify.
 - Close the userform to select a new polyline feature.
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Sources:

- Object Model Diagrams
- VBA Developer Help
- ESRI Knowledge Base Forums
- The Textbook

