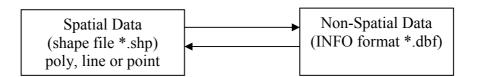
218432: Geographic Information System

Lab Session 2 Database in ARCVIEW – Visualization of Geo Data

1. Preparation

- Working directory: **D:**\ your_dir
- Copy data set \MuangPathumthani\ to your directory.

2. Database in ArcView



For example: Theme **Road**, there are 3 files in your directory road.shp, road.shx, road.dbf

Support format:

- ARC/INFO coverage (vector)
- ARC/INFO grid (raster)
- Image data (satellite or aerial photograph)
- CAD
- Tabular data (dBASE, delimited text, connect to a database server such as Oracle or Sybase)
- MapInfo Interchange format (*.MIF)

Exercise1: Recognizing format data used

In this exercise, you will practice how various kinds (ArcView shapefile, ArcInfo coverage, image, CAD) of data formats are stored in , how can they be added to your project.

- ArcView Shapefile
 - o Data set MuangPathumthani\
 - We have already practiced with ArcView shapefile last week.
 - Add theme *Road* (line) and *Landuse* (polygon) in your View. These files are stored in your disk
- Arc/Info coverage
 - o Data set MuangPathumthani

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- There are two coverages *Lu90* and *Road*.
- o Add theme *Road* and *Landuse* in your View. Which files are stored in your disk Look at the differences between Arc/Info coverage and ArcView Shapefile.
- o Open Theme table.

• Image

- Data set c:\esri\av_gis30\ avtutor\ arcview\images\
- o Open a new view in your project
- Click Add Theme. In Data Source Type drop-down list, select Image Data Source instead of select Feature Data Source. You will see spotimg.bil in the file list. Add this image
- Double-click at spotimg.bil in Tables of Content to enter in Image Legend Editor. This image is 1 Band image. Click Linear Button to see the histogram of the image. Adjust its histogram and check the effect
- Go to File menu and select Extension item, then stick in IMAGINE Image support
- Click Add Theme again, now there are two images in your file list. Select *spring.img*
- o Practice with its histogram.

CAD

- Data set c:\esri\av_gis30\arcview\avtutor\CAD\
- o Go to File menu and select Extension item, then stick in CAD Reader
- o Click Add Theme. Open *index.dwg* as line theme and *parcel.dwg* as polygon theme.

3. Visualization of GeoData

In this part, you will practice how to display your geo data, update your tabular data, chart your data, layout and print your map

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Exercise2: Creating Landuse map.

- Open the new View and change the name to Landuse
- Add Theme *Landuse.shp*
- Open Theme table. Look at the fields *Mlu_code*, *Plu_code*, and *Lucode e*
- Symbolize this theme by *Mlu_code* and *Plu_code* in turn (by Legend Editor -> Unique Value Type).
- Make layout

Exercise3: Creating Road map.

- Open the new View and change the name to Road
- Add Theme *Road.shp*
- Open Theme table. Look at the fields *Trans_typ*
- Make the Project window active. Add an existing table *t_type.dbf*
- Join the table of Road theme and *t_type.dbf* by the common field *Trans typ*
- Symbolize this theme by *Typ_nam_e*
- Select the table of Road theme. Go to **Table** menu and click **Start Editing** item
- Go to Edit menu and click Add Field.
- Define the new field

o Name: Name

o Type: string

o Width: *30*

- Type the name of road in the table (the names are selected by yourself)
- Go back to **Table** menu and click **Stop Editing** item
- Label by name of road
- Add boundary.shp
- Make layout.