Lab Session 1 ARCVIEW Introduction

"Arc View gives the power to visualize, explore, query, and analyze data geographically"

1. Preparation

- Working directory: *D:/User/Your name*
- Create your own folder inside this directory
- Data set c:\esri\av_gis30\avtutor\arcview\qstart
- Have a look at the meaning of all buttons, tools and menus

2. Exercise1: Make and print a map

- Start ArcView
- Go to File => Open project
- Select an existing project from "c:\esri\av_gis30\avtutor\arcview\qstart.apr"

What is an ArcView project?

What are its components?

- Open the **view** named *world*. Look at the Table of Contents that contains the **theme**

Examine the visibility of themes

Examine the order of themes.

Change the width of Table of Contents

View the map of World by life of expectancy or by population

Zoom in on Africa. Examine the using of some kinds of Zoom (Zoom In, Zoom out, Zoom to Full extent, Zoom to Active themes, Zoom to Selected Features, Zoom to Previous Extent)

- Label some of the countries.

Make "Life Expectancy" active

Click Label tool

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Click on any country, the label appears. Check the property of theme (item **Properties** in menu **Theme**) at **Text Label**

- Identify features on the map
 - Make a theme active
 - Click the Identify tool. What happens?
 - Make some themes active. What happens if click Identify tool?
- Printing the map

Select Layout from View menu

Select landscape template

Click OK. Now, there is a layout. The components of a layout are **title**, **graphic**, **scale bar**, **legend**, **north arrow**.

Select title by pointer tool and double-click. Enter the new title, for example Africa.

Click **Print** button.

- Save our works as a new project

Make Project window active.

From File menu, select Save Project As

- 3. Exercise2: Find the best location for a new showroom
- Start ArcView
- Open an existing **project** *c:\esri\av_gis30\avtutor\arcview\qstart.apr*
- Open the view named *United States*.
- Add an existing table into the project
 Make the project window active
 Click the Tables icon and click Add (sales.dbf)
- Open theme's attribute table
 Make the *Unites States* view active, make *US States* theme active.
 Click **Open Theme Table button**
- Join two tables

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Select *State_abbr* field in *Attributes of US States* and *State* field in *sales.dbf*. These fields are the common fields used for joining.

Make Attributes of US States table active.

Click **Join** button. Look at the information in *Attributes of US States* table now.

- Symbolize US States theme based on sales figures

Make the Unites States view active, make US States theme active.

Double-click the US States theme to display the Legend Editor

Examine some Legend Types, should consider the field.

Check the effect in our view by clicking Apply.

- Add an theme to the view

Click Add theme button

Select the Arcview shapefile *.shp, for example *uscities.shp*

Go to Legend Editor to change the symbol color for *uscites.shp* theme

- Redefine the content of the theme to represent

Click Theme Properties. Select Definition item

Build the query expression in Definition window {[Pop1990] >= 80000}

Now only the large cities that have population greater than 80000 are displayed. Change the name of theme to **Large cities** in the Theme properties

- Find the features by text

Click Find button

Type the text in the dialog, for example Atlanta.

- Find the cities within 300 miles of Atlanta

Choose Select By Theme from Theme menu

Select Are Within Distance of in the first drop-down list and Large cities in the second drop-down list.

Type 300 in selection distance.

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Click New Set button

Zoom to Selected features

- Label the cities found automatically Choose Auto-label from Theme menu

Select the label field as *City_name*

- Layout and prepare a map for Large cities
- Save Project