

# GIS Project Requirements

\*Using the datasets “countries”, “populated places”, “roads”, “airports” & “ports”  
(Attached in the same folder)

\*Please note there will be **individual assessment** during discussion

- 1) List all data we're working with and show them on ArcMap
- 2) Create a shapefile for countries that have “military” airports + Print them in Pycharm
- 3) Create a shapefile for roads in “Asia” continent + Print their number in Pycharm
- 4) Create a shapefile for ports in countries (Italy, Spain, France)
- 5) Create a shapefile for all Arabic cities using 2 methods
  - Multiple Selections
  - If Condition
- 6) Using Search Cursor print the name, location & wikipedia for all airports which are major
- 7) Using Search Cursor create shapefiles for roads in countries based on (FID & Sovereignty) condition that region is “Africa” & population > 25 million  
Let files names be in the format of “Roads\_in\_CountryName\_CountryIncome”
- 8) Create a tool implementing requirement no. 7 (Above requirement) adding Log Messages
- 9) Create a tool to update empty ports website to any other website, adding Log Messages
- 10) Create a tool to update population of countries that their population year is < 2019, adding Log Messages + Print which countries have been updated
- 11) Print name & type of cities fields
- 12) Using Update Cursor for multiple fields, update empty or “zero” fields that are not of string datatype in cities
- 13) Print full path for a bunch of images
- 14) Print exif Tags for these images
- 15) Print GPS Tags/Info for each image indicating which is geotagged & which is not
- 16) Print latitude & longitude for each geotagged image