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function [region,state,lat,lon,fuel,nassociated]= filterdata(raw)
%FILTERDATA
% [region,state,lat,lon,fuels,nassociated]= filterdata(raw);
% will put out region selected, state name, latitude, longitude, fuels
% chosen, and numbers associated with region and fuel chosen

% by En Yen Justin Chu Section 06

% Extract Fuel Choices
fuelpossible = raw(2,7:17);

% Remove Unuse
raw(1:2,:) = [];

% Select Region
regionpossible = unique(raw(:,6));%make them unique, so we present only 1 instance of
each

%offer the region choice to the user in a list dialog box, let user only select ONE
option
selectedregion = listdlg('ListString',regionpossible, 'PromptString','Select a Region',
'SelectionMode','single');
region = regionpossible{selectedregion};%extract actual string located at that position

trueFalse_RowsRegion = strcmp( raw(:,6) , region ) ; %0's 1's : where is that string
located in column1?

%extract those "true rows" from the txt and num data/or delete the false ones from
% the original txt and num (whichever option you prefer. If you delete,
% you may have to rename some of my variables below.)
state = raw(trueFalse_RowsRegion,1);
lat = cell2mat(raw(trueFalse_RowsRegion,4));
lon = cell2mat(raw(trueFalse_RowsRegion,5));

% Delete Column 1-6
raw(:,1:6) = [];

% Chose Fuel
selectedfuelIndex = listdlg('ListString',fuelpossible, 'PromptString','Select a Fuel');
fuel = fuelpossible{selectedfuelIndex};%extract actual string located at that position

% Numbers Associated
nassociated = cell2mat(raw(trueFalse_RowsRegion,selectedfuelIndex));

%% Call Function
%[~,~,raw] = xlsread('2009_RenewableEnergy_v02');
%[region,state,lat,lon,fuels,nassociated]= filterdata(raw);

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