ELECTORAL REDISTRICTING APPLICATION

(Version 0.1)

MANUAL BOOK

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ELECTORAL REDISTRICTING APPLICATION

(Version 0.1)

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Preface

Electoral Redistricting App is an application that can be utilized to …

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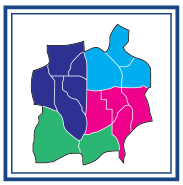
System Requirements

ELECTORAL REDISTRICTING APPLICATION



(Version 0.1)

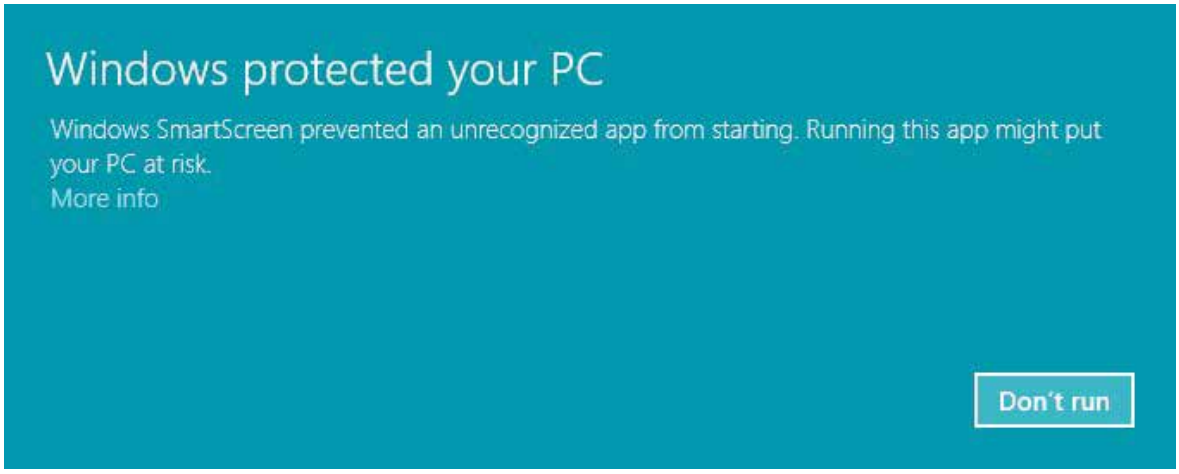
At the moment of the first version release of Electoral Redistricting App, the application is only limited to be run on Microsoft Windows 10 and Windows 11.

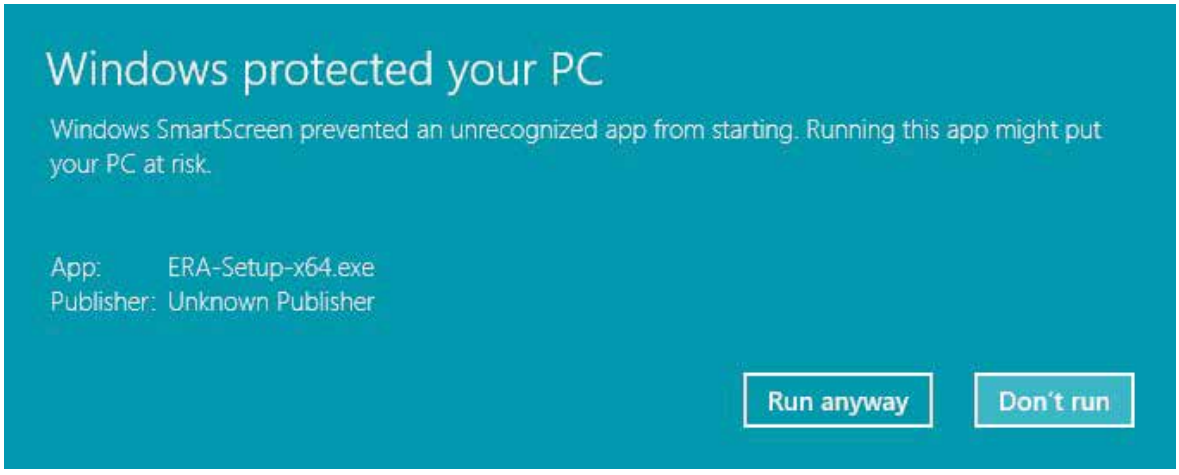
Installation

To install the Electoral Redistricting App, you can download the installer on the International IDEA's website (https://idea.int/) or PERLUDEM (https://perludem.org/) website. Once you succeed in downloading the installer, you can proceed to the installation process.

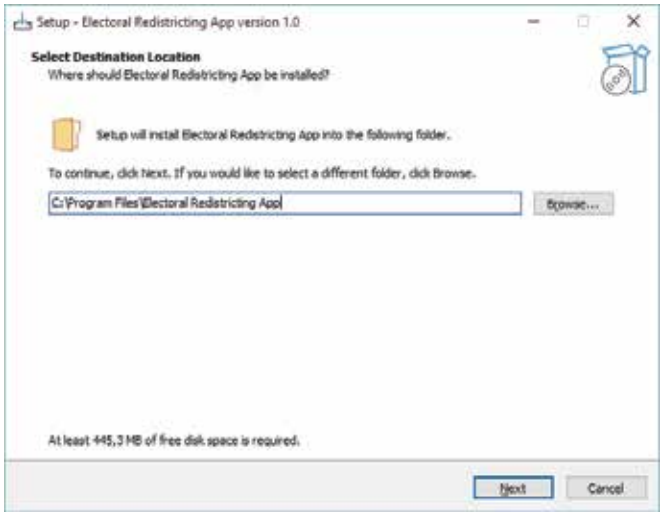
Steps of Installation

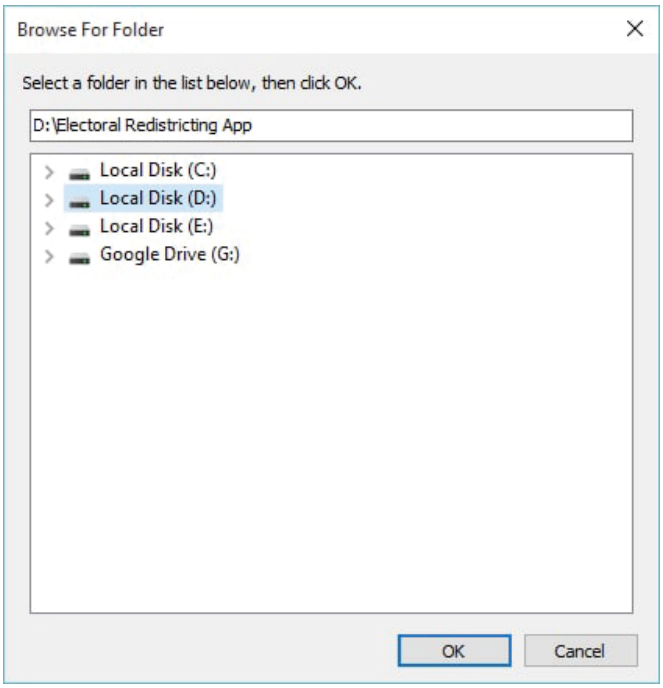
- *After you have the installer, double-click the installer and follow the instructions presented by the installation wizard.*
- *If you find that Windows SmartScreen prevents you from executing the installer, you can ignore it by clicking More info, and click the Run anyway.*



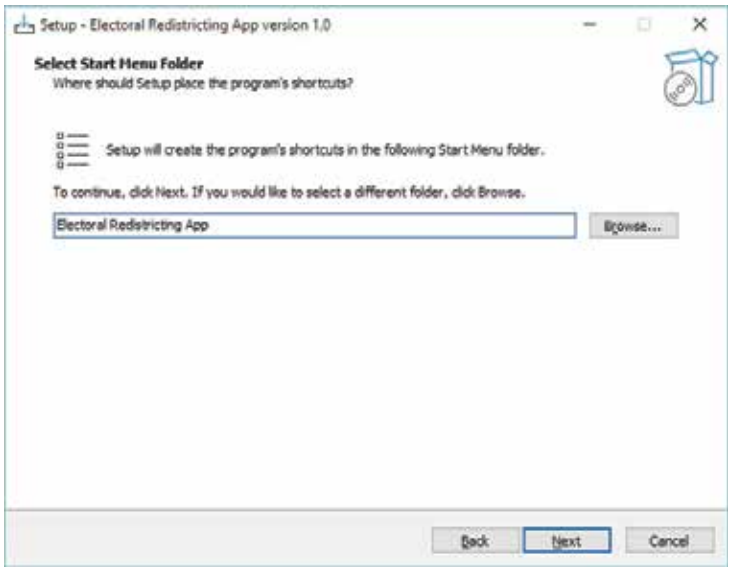


- *In the Select Destination Location section, it's strongly recommended to install the Electoral Redistricting App in the location other than the Drive C. For example, you can install the application in Drive D.*

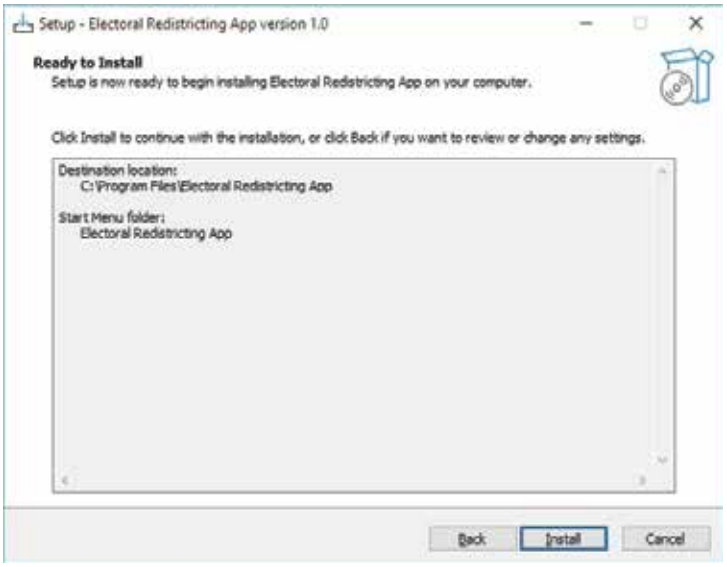




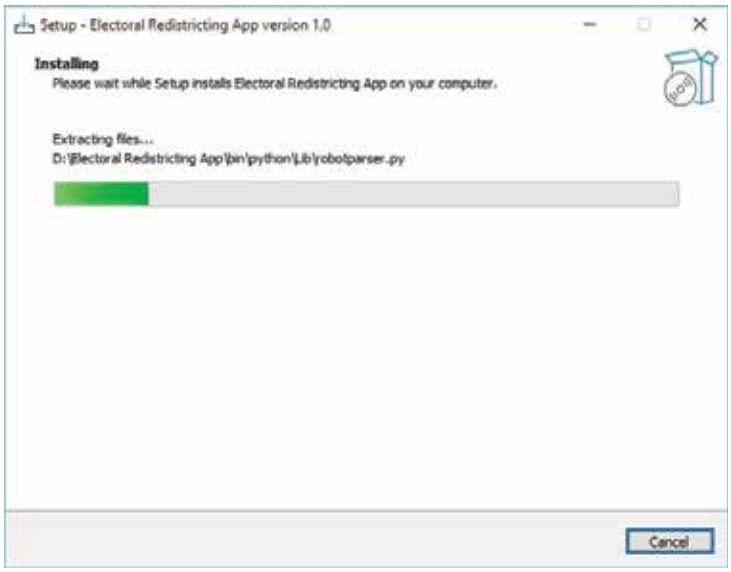
- *In the Select Start Menu Folder section, you can customize the label of the Electoral Redistricting App.*



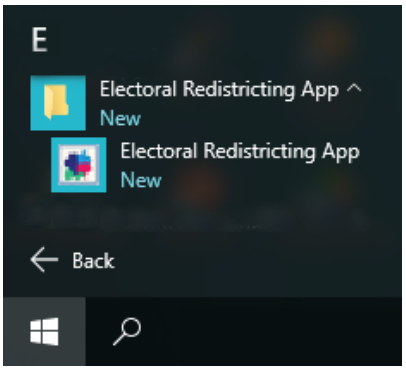
- *Next, you can proceed to install by clicking the Install*



- *After the installation process is completed, click the Finish button, and you are ready to activate the Electoral Redistricting App.*

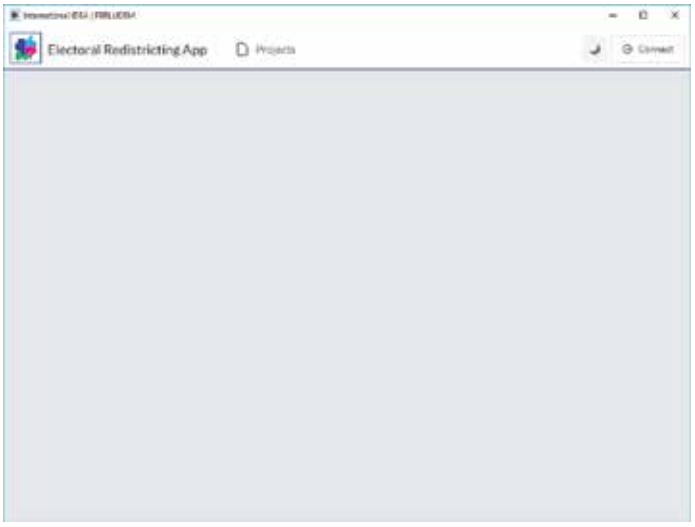


- *To activate the Electoral Redistricting App for the first time, you can search the application in the start menu under the E-section menus.*

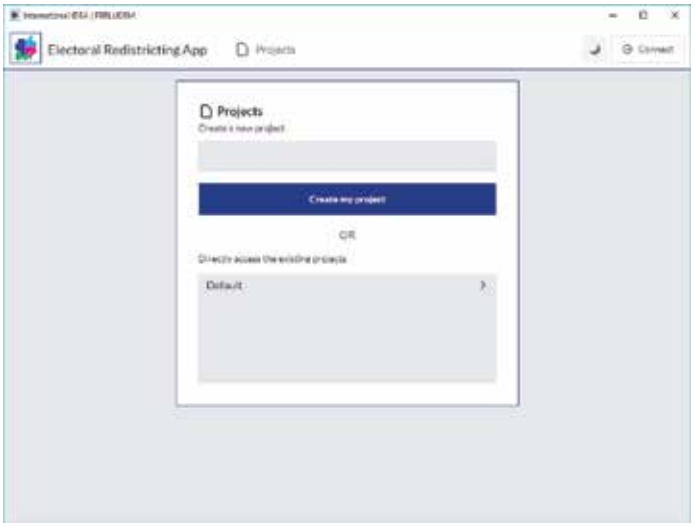


If you find the situation like the following screenshot, where the Windows Firewall has blocked some features of the Electoral Redistricting App,

You can allow the Electoral Redistricting App to communicate on both private networks and public networks where your computer may be connected.



After you allow the Electoral Redistricting App to communicate on any available networks, close and restart the Electoral Redistricting App, so you will see the following:

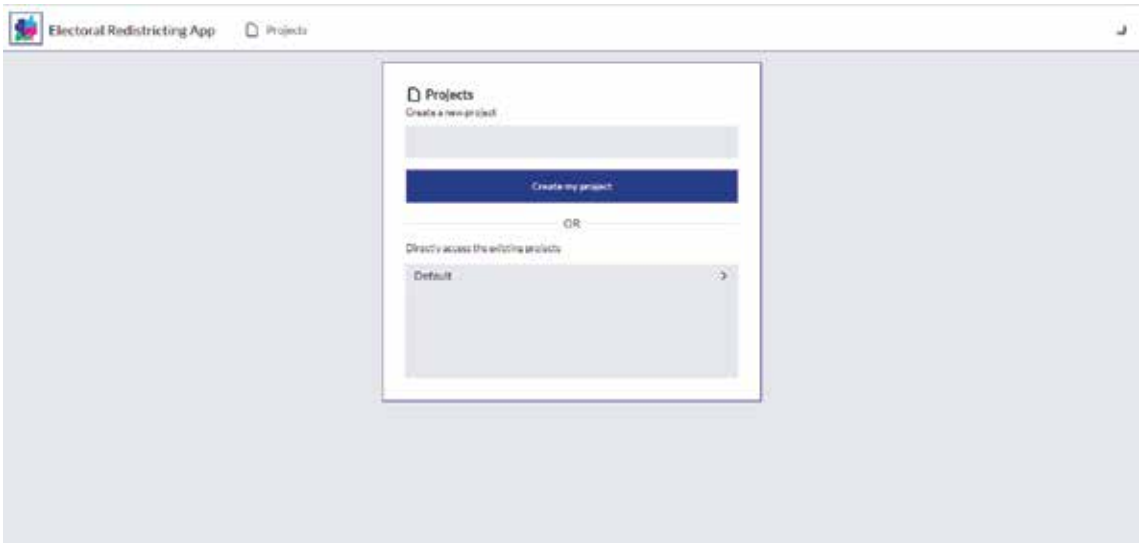


Data Preparation

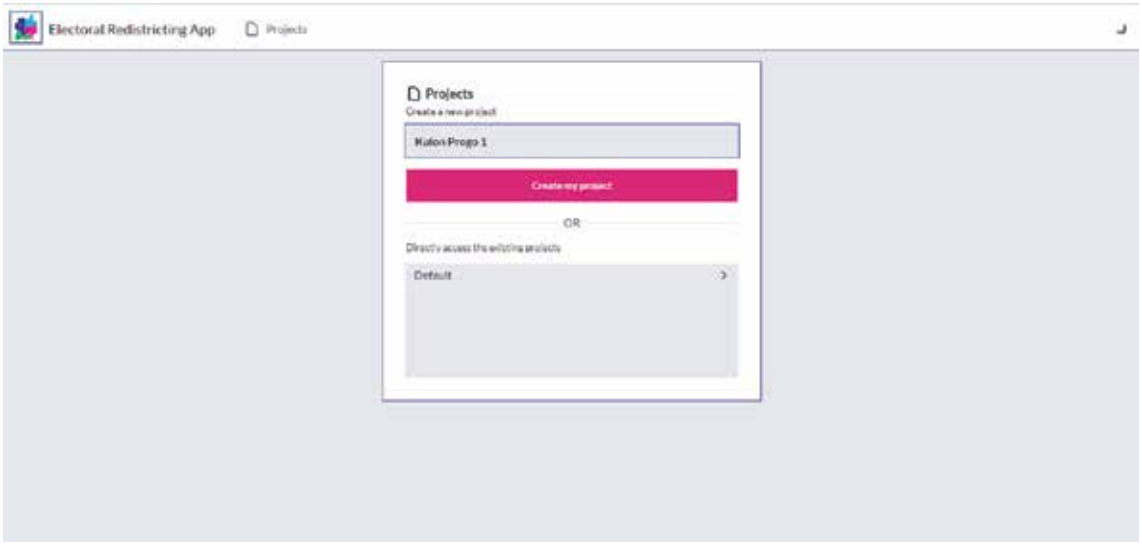
Creating New Project

To start using the Electoral Redistricting App, you have to create a project first. You can do it by clicking the ***Project*** *menu on top navigation of the application.*

Projects dialog box



*After the **Projects** dialog appears, type your project name and click **Create my project** button to save your project name.*



Your project will appear in the project list below, and you are ready to access your newly created project.

Prepare and Upload the Shapefile
To fulfill the workflow required by the Electoral Redistricting App, you must provide a set of shapefile, which technically:

- *Consisted of *.shp, *.shx, *.dbf, and *.prj files, and all of these files are compressed in a *.zip file.*

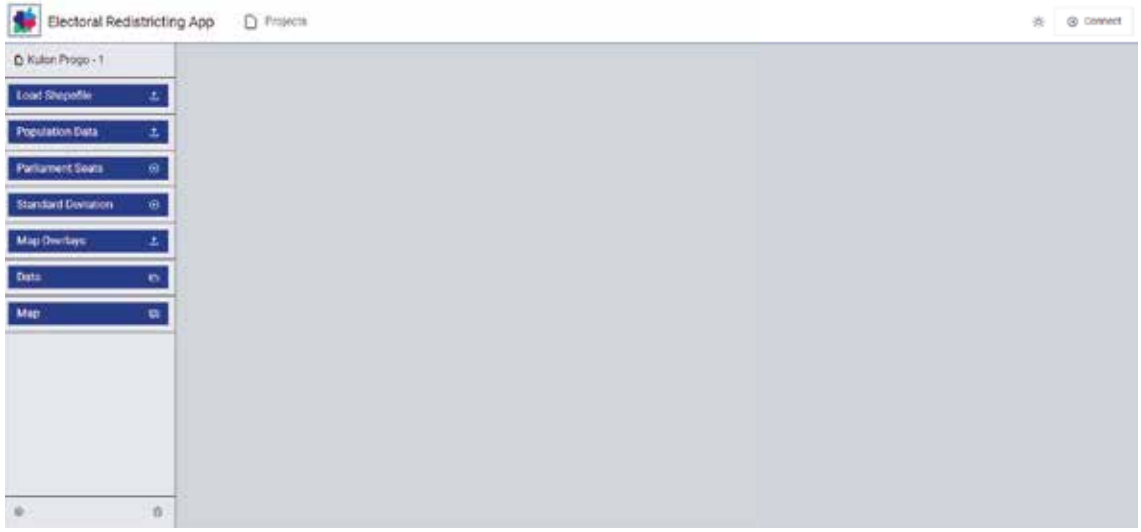
- *The shapefile's CRS (Coordinate Reference System) must be in WGS84 EPSG:4326 or EPSG:3857.*

- *One of shapefile's attributes is the area name. This attribute is mandatory.*

*- The shapefile can also have a specific attribute which contains the population data of each area, but this attribute (data) is optional, and you can provide the population data later, in a separated *.csv file.*

*When you are ready with your compressed *.zip file, click the Load Shapefile button on the left side, so the Step 1 - Upload Shapefile dialog appears like the following screenshot:*

Empty project appearance



Step 1 - Upload Shapefile dialog

Step 1

Uploading Shapefile

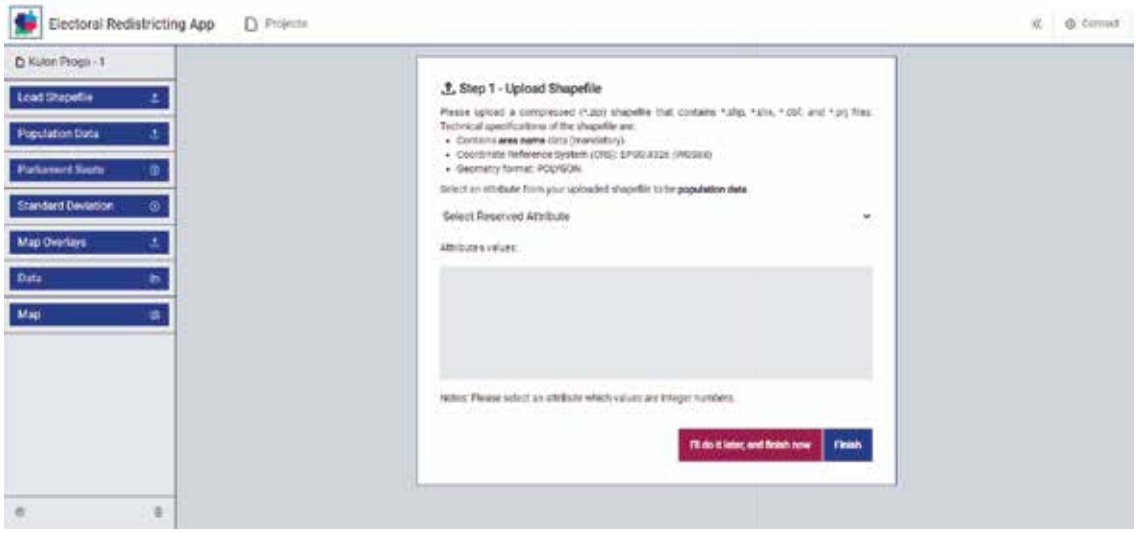
*Select your *.zip compressed file, by clicking the Choose File button, and followed by clicking the Next button.*

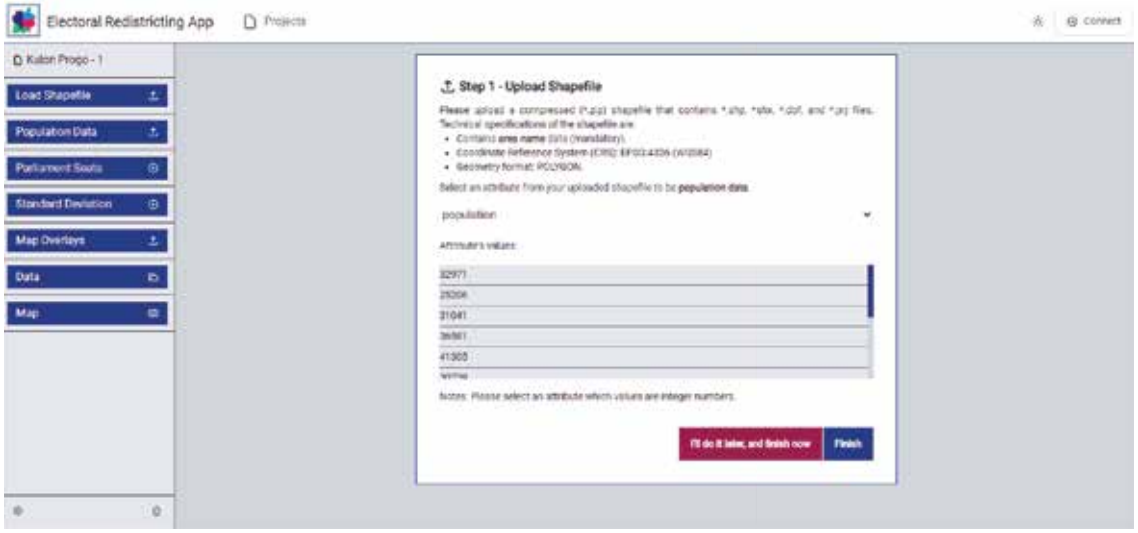
*In this step, your *.zip compressed file will be read by the application, and transformed into application-specific data format.*

Next, the dialog will show all of your shapefile attributes in a drop-down selector labeled Select Reserved Attribute. This attribute selection will be the area name of your project. In this dialog, every time you select an attribute, the data of the respective attribute will appear in Attribute's values section below the the attribute drop-down selector.

To proceed to the next step, click the Next button

*In this step, you can select the attribute to be the population data of each area. However, this is an optional step. If you select an attribute that consists of the population data and then you click the Finish button, your basic data structure is adequate enough to proceed to the next step. If you either click the Finish or I'll do it later and finish now button without selecting an attribute, the application will still proceed, but without the population data for each area. Later, you have to upload the population data in a separated *.csv file.*



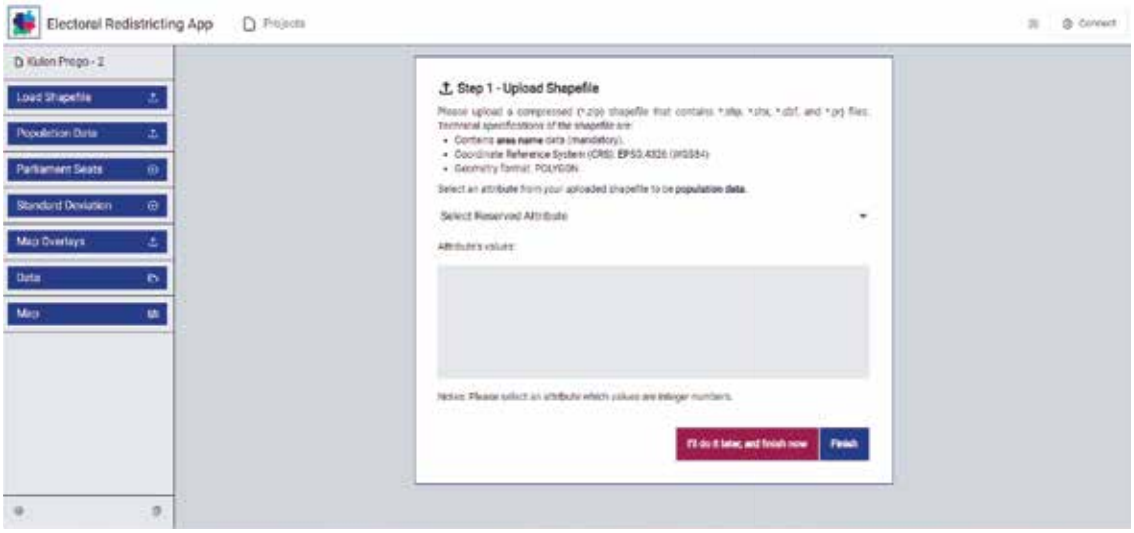


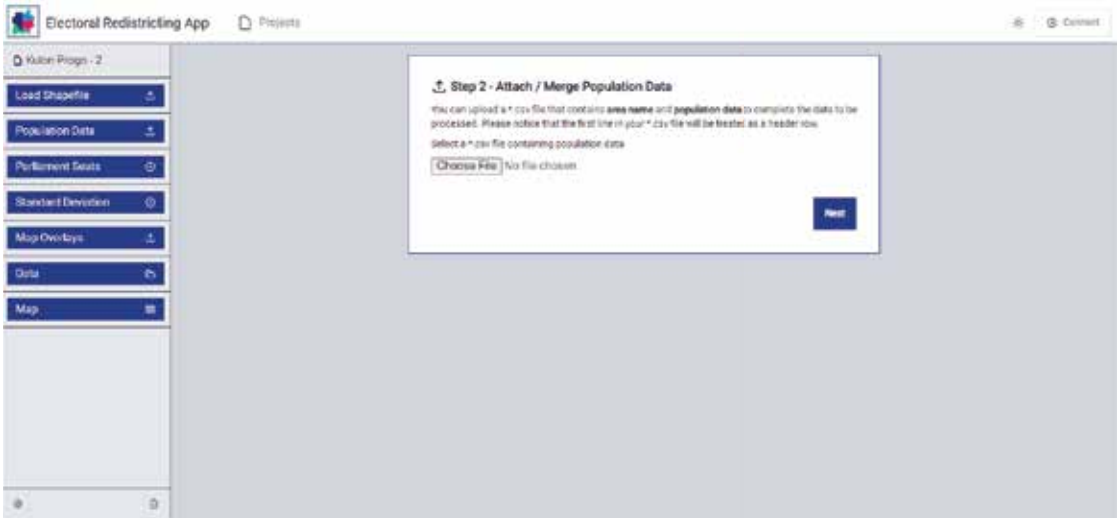
Electoral Redistricting App
Projects
Kalon Progo - 1
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Electoral Redistricting Toolbox
Area
Quota
Seat Allocation
Set Electoral District Colour
Save Electoral District
Cancel / Reset
Purge Data
Kokap
Pengasih
Temon
Wates
Panjatan
Lendah
Sentolo

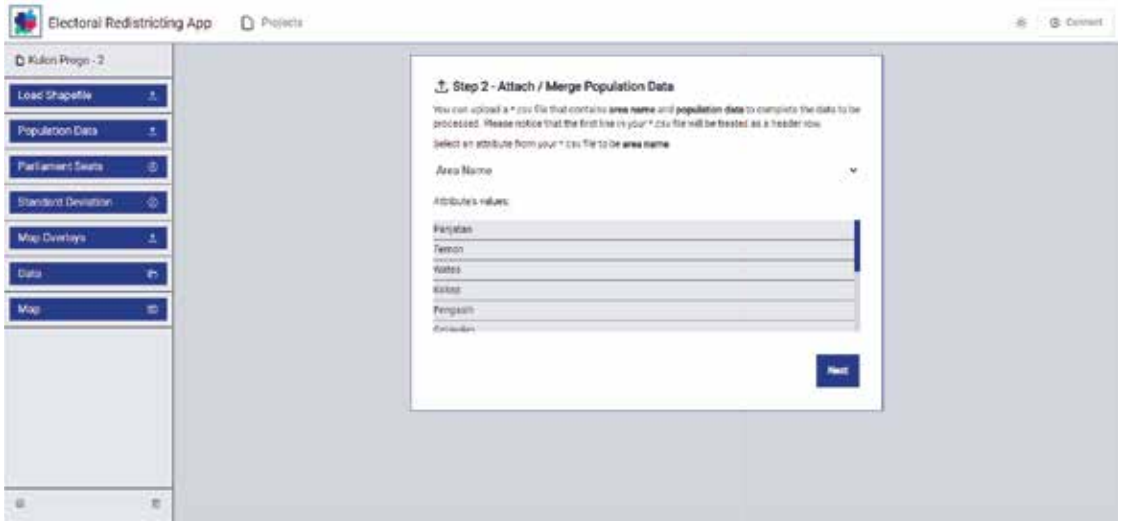
Step 2

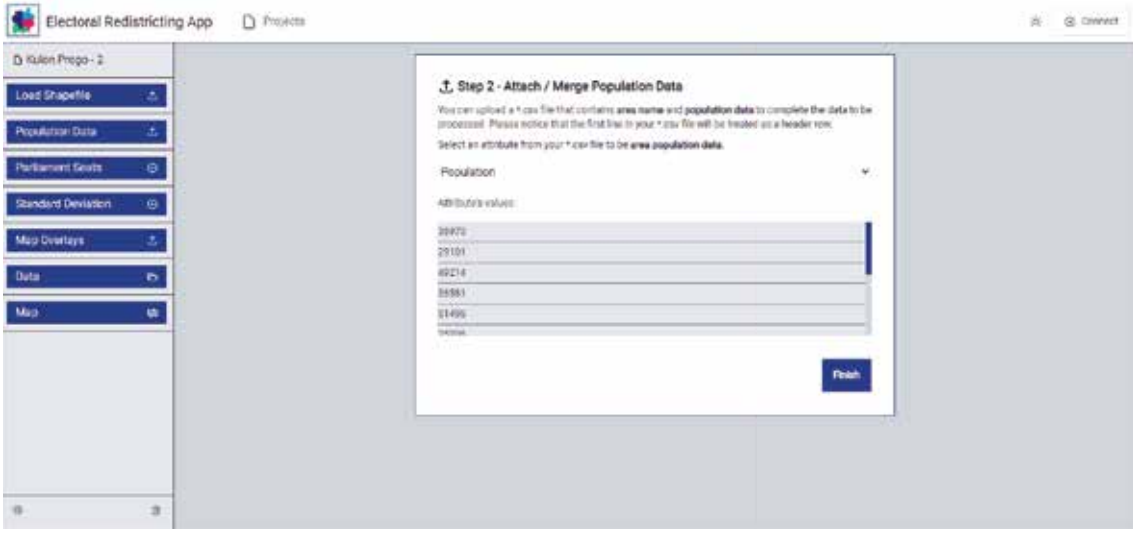
Uploading Population Data

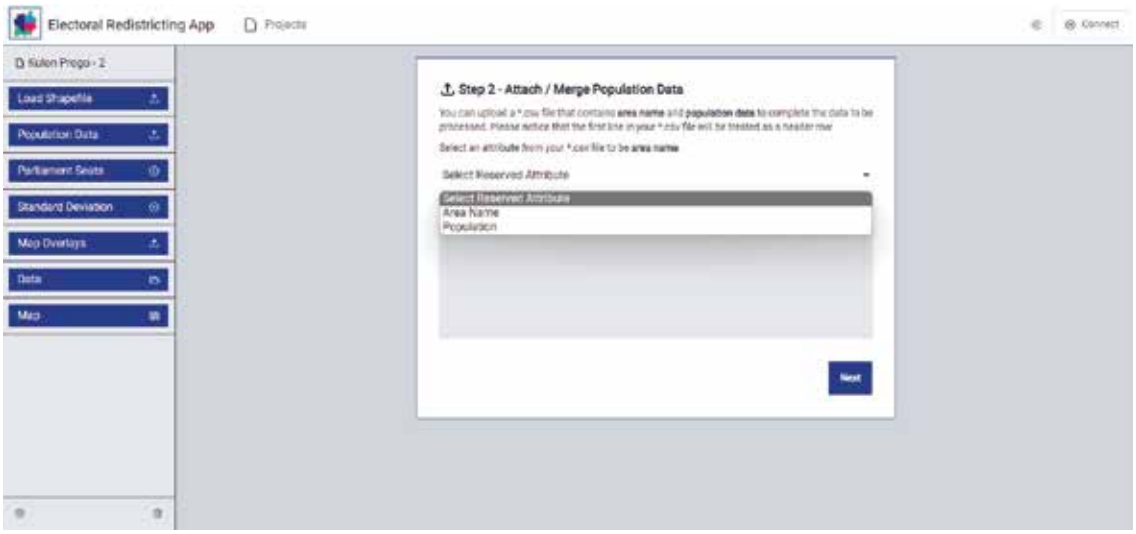
If there's no pupulation data in the shapefile



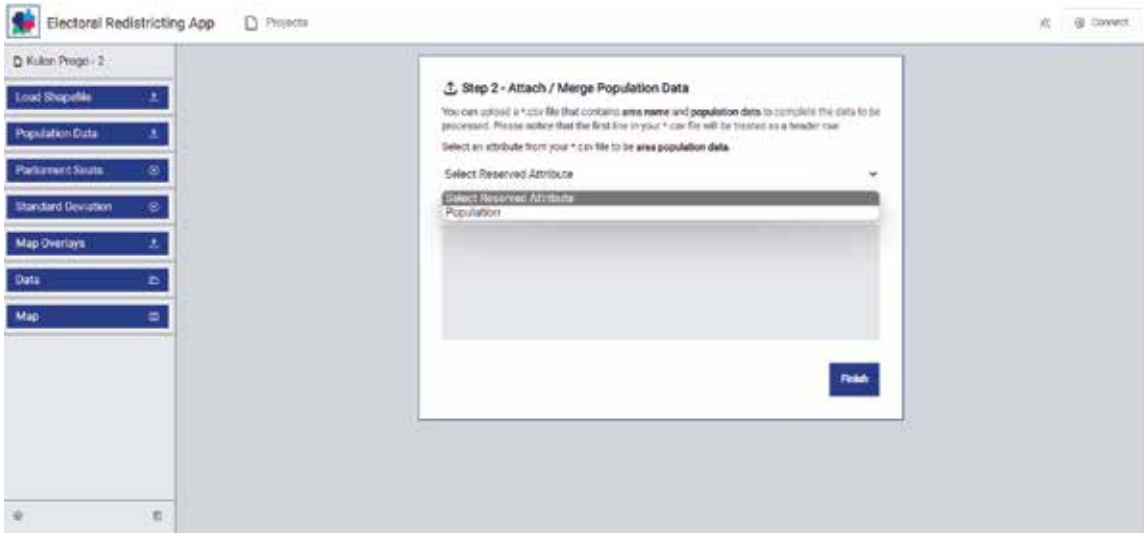



Electoral Redistricting App
Projects
Kulon Progo - 2
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Step 2 - Attach / Merge Population Data
Area Name
Attributes values:
Next


Electoral Redistricting App
Projects
Kulon Progo - 2
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Step 2 - Attach / Merge Population Data
Select an attribute from your * csv file to be area population data.
Population
Finish

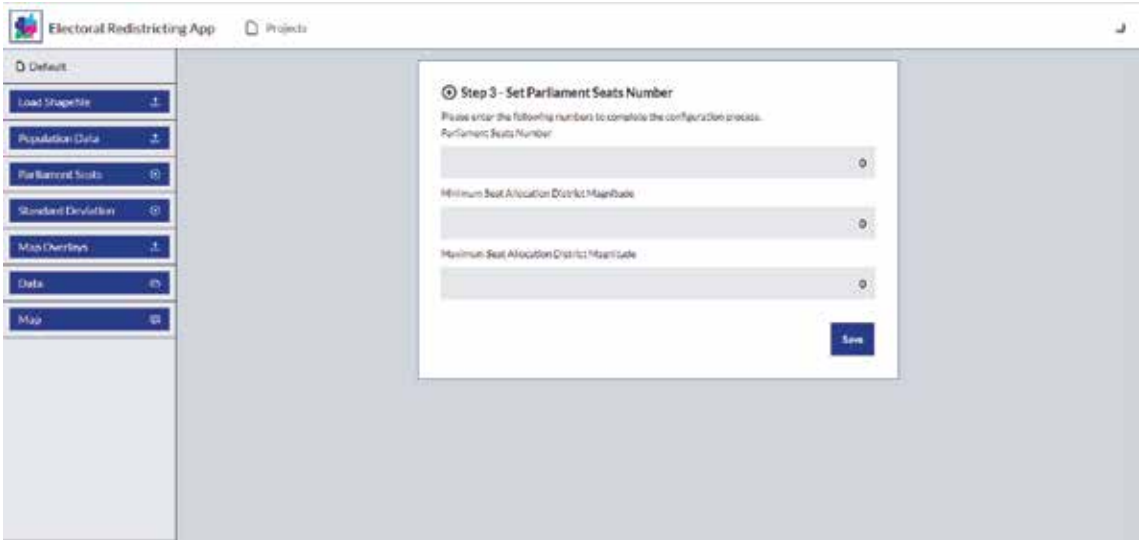

Electoral Redistricting App
Projects
Connect
Kulon Progo - 2
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Step 2 - Attach / Merge Population Data
Select Reserved Attribute
Area Name
Population
Next

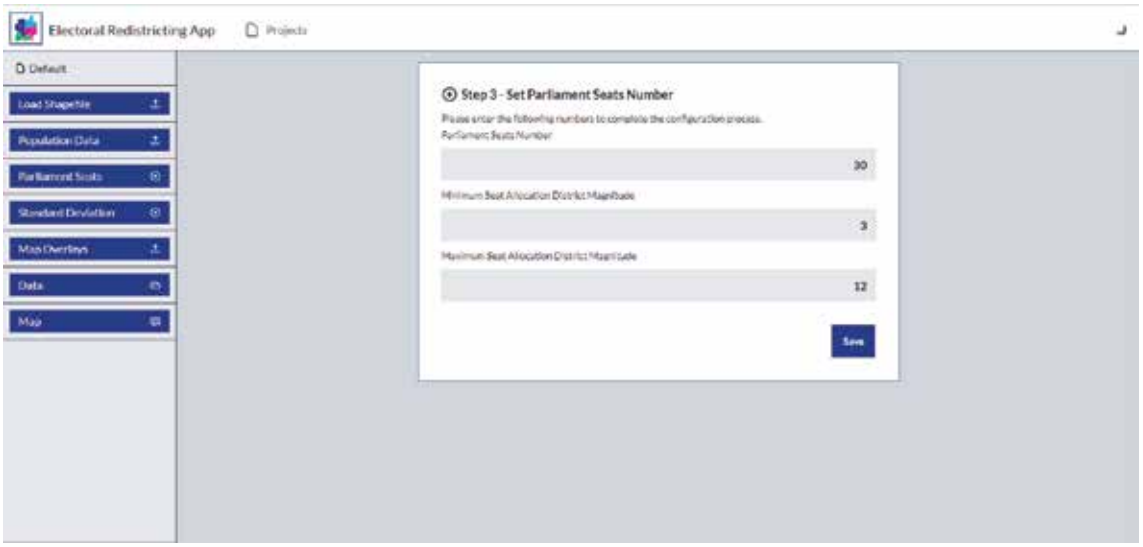
Electoral Redistricting App
Projects
Connect
Kulon Progo - 2
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Step 2 - Attach / Merge Population Data
Select Reserved Attribute
Area Name
Population
Next


Electoral Redistricting App
Projects
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Step 2 - Attach / Merge Population Data
Select Reserved Attribute
Select Reserved Attribute
Population
Finish

Step 3

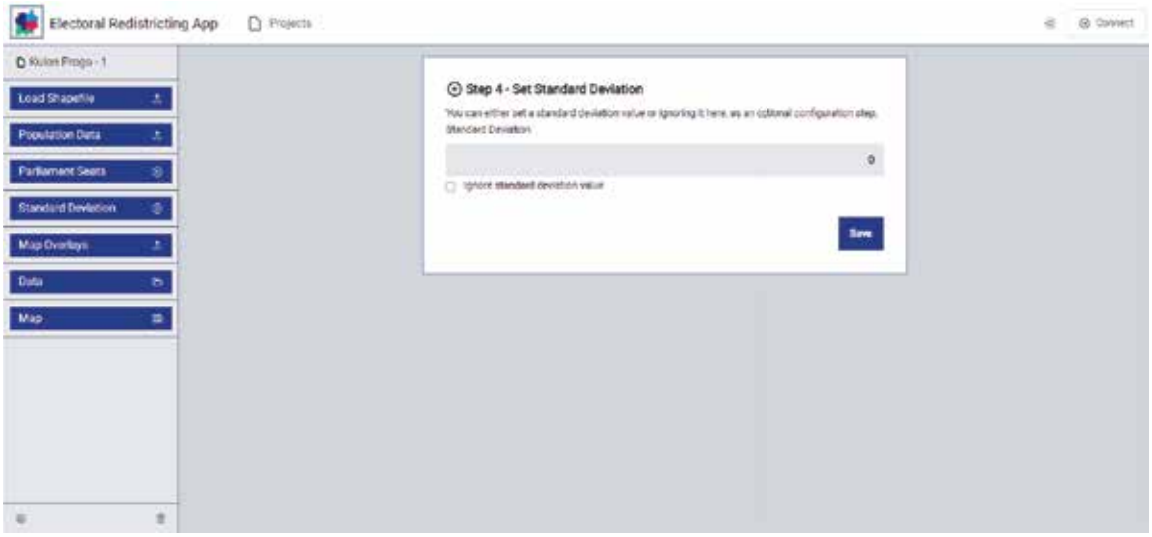
Setting Parliament Seats Number

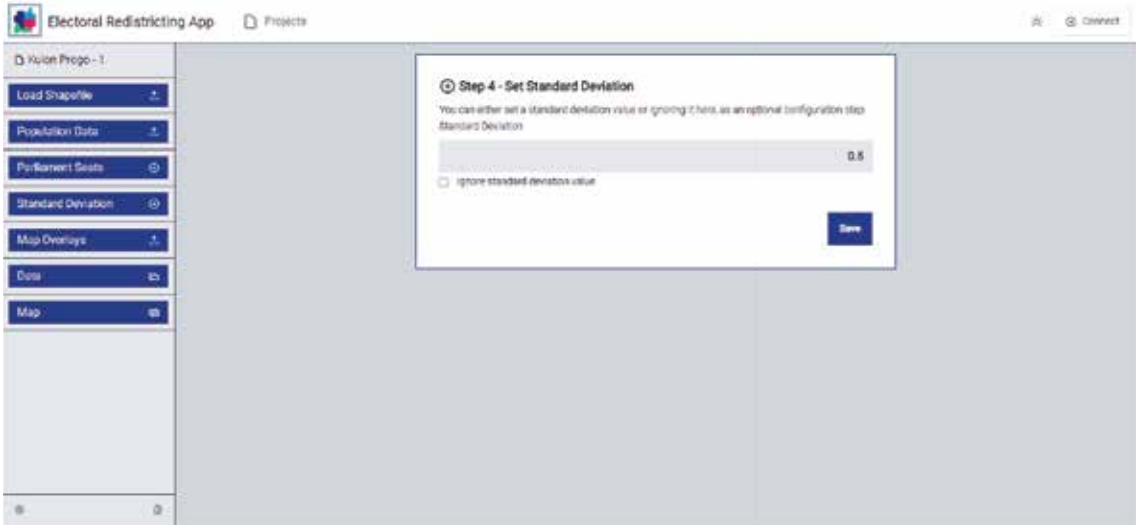


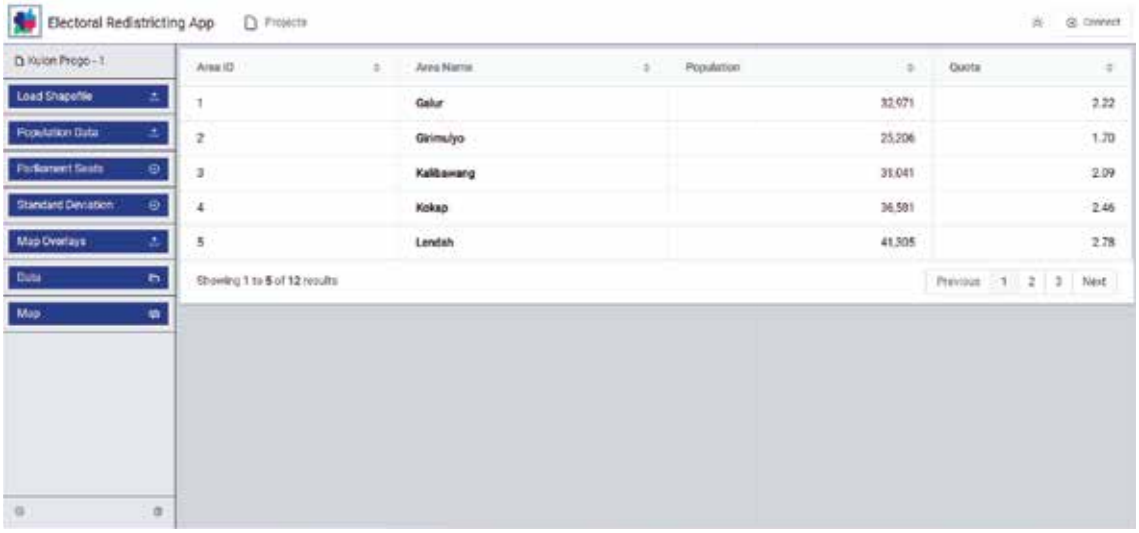


Step 4

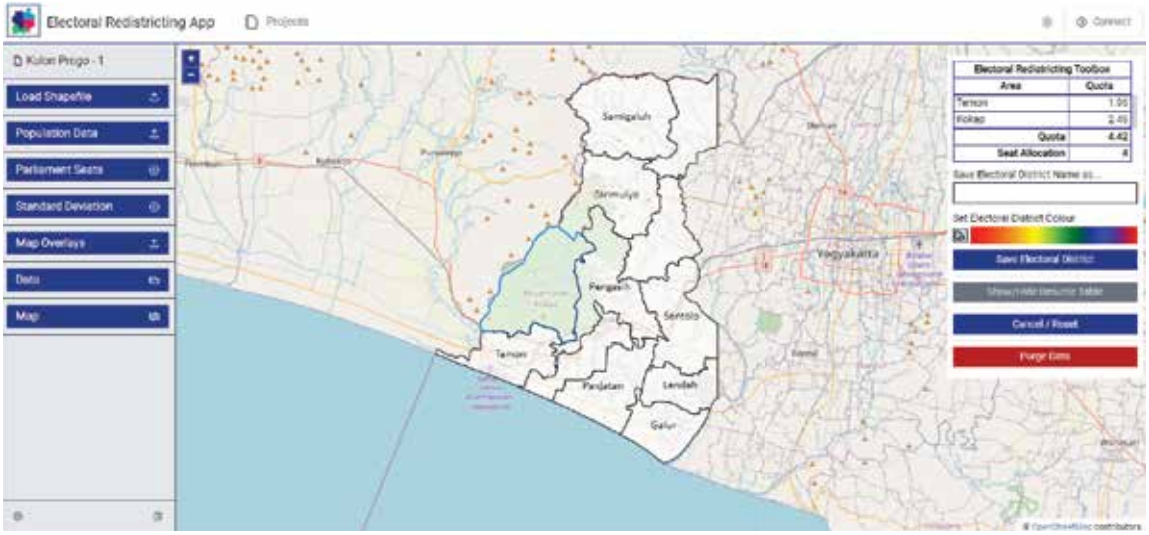
Setting the Standard Deviation



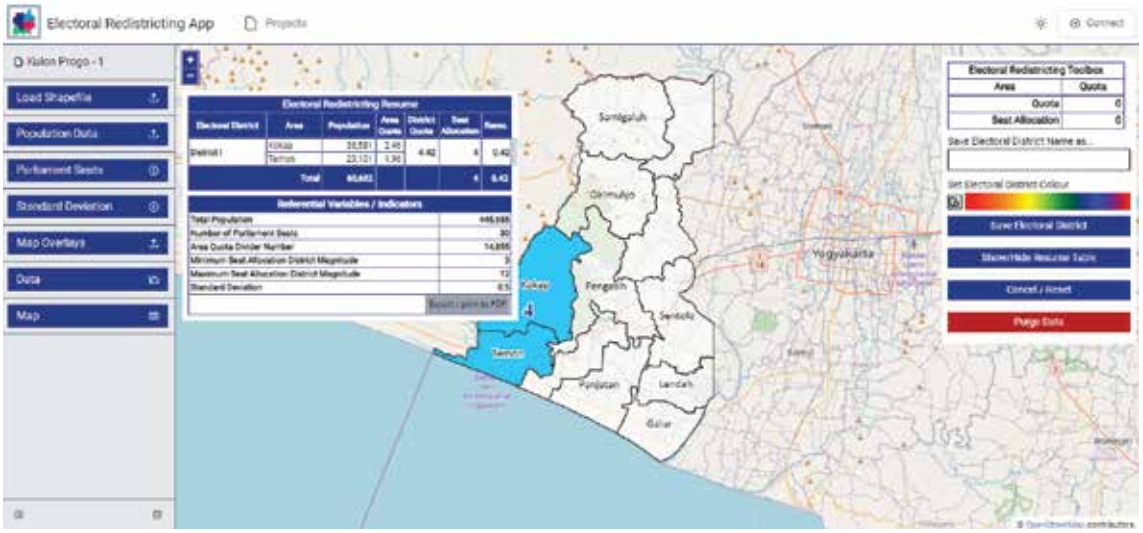


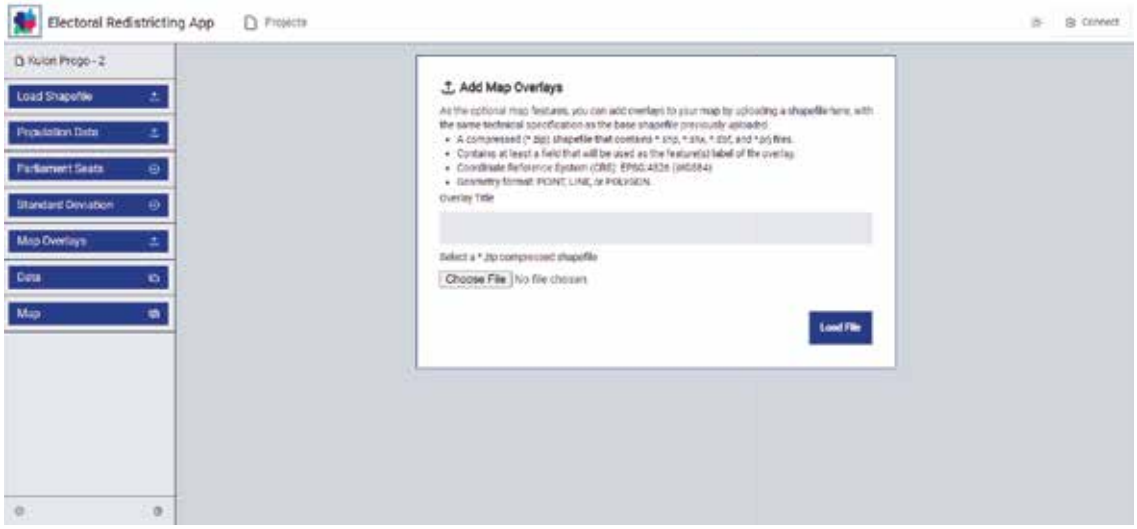

Electoral Redistricting App
Projects
Connect
Kulon Progo - 1
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Area ID
Area Name
Population
Quota
1 Galur 32,071 2.22
2 Girimulyo 25,206 1.70
3 Kalibawang 31,041 2.09
4 Kokap 36,581 2.46
5 Lendah 41,305 2.78
Showing 1 to 5 of 12 results
Previous 1 2 3 Next

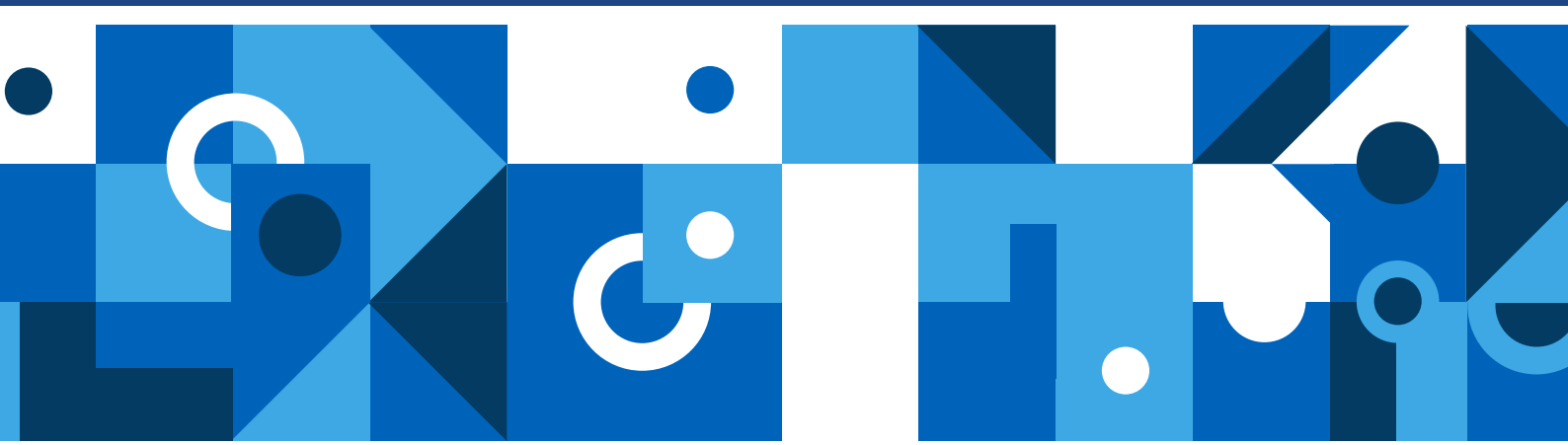
Electoral Redistricting App
Projects
Connect
Kulon Progo - 1
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Area Data
Select Area
Electoral Redistricting Toolbox
Area
Quota
Seat Allocation
Save Electoral District Name as...
Set Electoral District Colour
Save Electoral District
Clear / Reset
Purge Data
Yogyakarta
Sentolo
Pengasih
Lendah
Galur

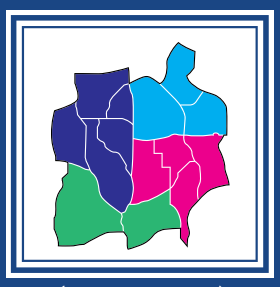

Electoral Redistricting App
Projects
Connect
Kulon Progo - 1
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Electoral Redistricting Toolbox
Area
Quota
Temon
1.00
Kokap
2.45
Quota
4.42
Seat Allocation
4
Save Electoral District Name as...
Set Electoral District Colour
Save Electoral District
Show/Hide Results Table
Cancel / Reset
Purge Data
Samigaluh
Girimulyo
Pengasih
Sentolo
Temon
Panjatan
Lendah
Galur
Yogyakarta

Electoral Redistricting App
Projects
Connect
Kulon Progo - 1
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Electoral Redistricting Toolbox
Area
Quota
Quota
4.42
Seat Allocation
4
Save Electoral District Name as...
District I
Set Electoral District Colour
Samigaluh
Girimulyo
Pengasih
Sentolo
Temon
Panjatan
Lendah
Galur
Yogyakarta


Electoral Redistricting App
Projects
Connect
Kulon Progo - 1
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Electoral Redistricting Toolbox
Area
Quota
Quota
0
Seat Allocation
0
Save Electoral District Name as...
Set Electoral District Colour
Save Electoral District
Show/Hide Results Table
Cancel / Reset
Purge Data
Somagaluh
Girimulyo
Yogyakarta
Pengasih
Sentolo
Panjatan
Lendah
Galur


Electoral Redistricting App
Projects
Connect
Kulon Progo - 2
Load Shapefile
Population Data
Parliament Seats
Standard Deviation
Map Overlays
Data
Map
Add Map Overlays
Overlay Title
Choose File
No file chosen
Load File





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