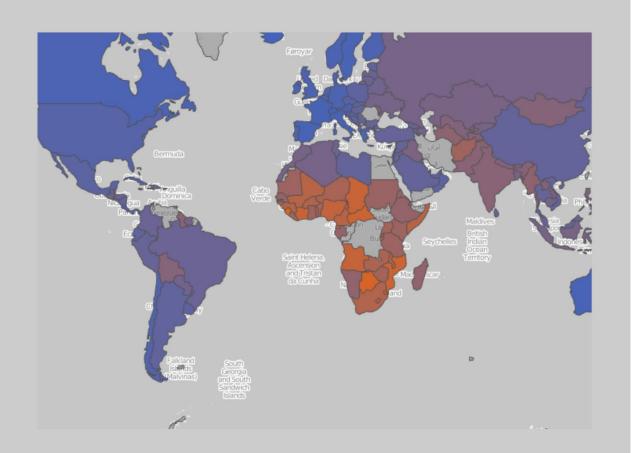
## Displaying Maps



## By the end of these videos you will be able to

- Customize maps
- Read and parse data files
- Organize data in appropriate objects
- Describe and use the List data type
- Describe and use the Map data type



```
LifeExpectancyWorldBank.csv
Series Name, Series Code, Country Name, Country Code, 2013 [YR2013], Title, TestCol, TestCol
"Life expectancy at birth, total (years)",SP.DYN.LE00.IN,Afghanistan,AFG,60.9314146341464
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Albania, ALB, 77.537243902439
"Life expectancy at birth, total (years)", SP. DYN, LE00, IN, Algeria, DZA, 71,0096585365854
"Life expectancy at birth, total (years)", SP. DYN. LE00. IN, American Samoa, ASM,...
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Andorra, ADO,...
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Angola, AG0,51.8661707317073
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Antigua and Barbuda, ATG, 75.8292926829268
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Argentina, ARG, 76.1872926829268
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Armenia, ARM, 74.540756097561
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Aruba, ABW, 75.3321707317073
"Life expectancy at birth. total (vears)".SP.DYN.LE00.IN.Australia.AUS.82.1975609756098
"Life expectancy at birth, total (years)", SP. DYN. LE00. IN, Austria, AUT, 80.890243902439
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Azerbaijan, AZE, 70.6931463414634
"Life expectancy at birth, total (years)", SP. DYN. LE00. IN, "Bahamas, The", BHS, 75.0725609756098
"Life expectancy at birth, total (years)".SP.DYN.LE00.IN.Bahrain.BHR.76.6698780487805
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Bangladesh, BGD, 70.6933902439024
"Life expectancy at birth, total (years)", SP. DYN. LE00. IN, Barbados, BRB, 75.2964146341463
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Belarus, BLR.72.4707317073171
"Life expectancy at birth, total (years)", SP. DYN. LE00. IN, Belgium, BEL, 80.3853658536585
"Life expectancy at birth, total (years)", SP. DYN. LE00.IN, Belize, BLZ, 73.9048780487805
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Benin, BEN, 59.2875609756098
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Bermuda, BMU, 80, 5724390243902
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Bhutan, BTN, 68.3023170731707
"Life expectancy at birth, total (years)", SP. DYN. LE00. IN, Bolivia, BOL, 67.2173658536585
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Bosnia and Herzegovina, BIH, 76.2799024390244
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Botswana, BWA, 47.4056097560976
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Brazil, BRA, 73.8859512195122
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Brunei Darussalam, BRN, 78.5664390243903
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Bulgaria, BGR, 74.4658536585366
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Burkina Faso, BFA, 56.2750243902439
"Life expectancy at birth, total (years)".SP.DYN.LE00.IN.Burundi.BDI.54.0971951219512
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Cabo Verde, CPV, 74.8706829268293
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Cambodia, KHM, 71.7475609756098
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Cameroon, CMR, 55.0418048780488
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Canada, CAN, 81.4011219512195
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Cayman Islands, CYM,...
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Central African Republic, CAF, 50.1368048780488
"Life expectancy at birth, total (years)".SP.DYN.LE00.IN.Chad.TCD.51.1590731707317
"Life expectancy at birth, total (years)".SP.DYN.LE00.IN.Channel Islands.CHI.80.2595365853659
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, Chile, CHL, 79.8368048780488
"Life expectancy at birth, total (years)", SP.DYN.LE00.IN, China, CHN, 75.3530243902439
"Life expectancy at high total (years)" CD DVN LEAR TN Colombia COL 72 0700202602027
```

## LifeExpectancyWorldBank.csv

Setup map

Read data for each country

Display data for each country

```
public class LifeExpectancy extends PApplet
  UnfoldingMap map;
 public void setup() {
 public void draw() {
```



```
public class LifeExpectancy extends PApplet
  UnfoldingMap map;
  public void setup() {
    size(800, 600, OPENGL);
   n_{\text{map}} = \text{new UnfoldingMap(this, 50, 50, 700, 500, new)}
              Google.GoogleMapProvider());
   MapUtils.createDefaultEventDispatcher(this, map);
  public void draw() {
```

```
public class LifeExpectancy extends PApplet
  UnfoldingMap map;
  public void setup() {
   size(800, 600, OPENGL);
   map = new UnfoldingMap(this, 50, 50, 700, 500, new
             Google.GoogleMapProvider());
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```
public class LifeExpectancy extends PApplet
  UnfoldingMap map;
  public void setup() {
   size(800, 600, OPENGL);
   map = new UnfoldingMap(this, 50, 50, 700, 500, new
             Google.GoogleMapProvider());
   MapUtils.createDefaultEventDispatcher(this, map);
  public void draw() {
   nap.draw();
```

## public class LifeExpectancy extends PApplet {



```
), 700, 500, new ()); ner(this, map);
```