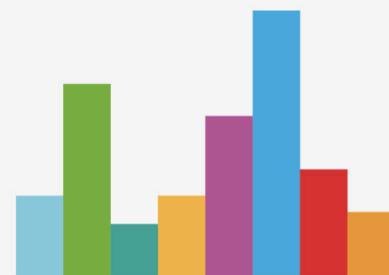


*Website: Social Trendometer*

# TEAM AADHYA

## FINAL PRESENTATION

### THEME: SOCIAL TRENDS



# APPROACH

DATA COLLECTION  
USING WEB SCRAPING

- PYTHON PROGRAMMING
- SOCIAL MEDIA STATS



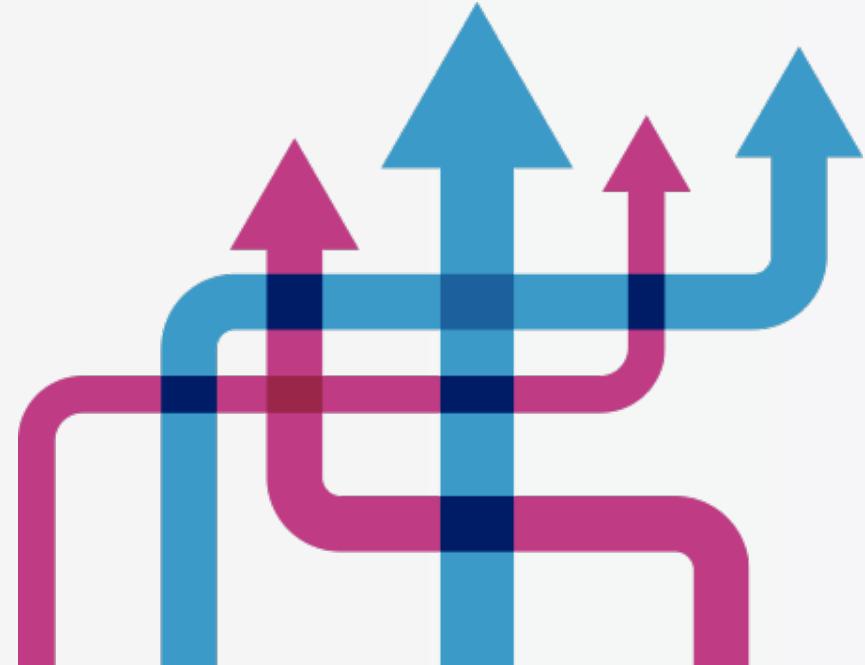
MERGE DATA SETS AND  
GENERATE DICTIONARY  
OF SOCIAL MEDIA,  
COUNTRIES AND USERS

- PYTHON PROGRAMMING
- DATA PREPARATION



BUILD WEBSITE AND  
MAP THE VALUES ON  
SEARCH TO MAP THAT  
SHOWS BAR GRAPH

- WEB STACK – HTML, CSS & JS
- HERE MAPS API



Website source : <https://gs.statcounter.com/social-media-stats/all/>

# DATA PREPARATION – IMPLEMENTATION (I)

*Overview of data sets collected for social media data*

*Framing a data set for cities, latitudes and longitudes*

*Extracting data from datasets*

*Merging data to form dictionary or key value pairs*

Date	Facebook	YouTube	Pinterest	Twitter
2019-05	94.52	2.55	1.18	1.25
2019-06	94.12	2.75	1.46	1.22
2019-07	94.54	2.43	1.32	1.32
2019-08	94.99	2.32	1.12	1.21
2019-09	96.04	1.98	0.98	0.77

Austria	48.208174,16.373819
Bangladesh	23.810332,90.412518
Belgium	50.85034,4.35171
Brazil	-15.794229,-47.882166
Bulgaria	42.697708,23.321868
Cambodia	11.544873,104.892167
Canada	45.42153,-75.697193
Chile	-33.44889,-70.669265

```
# writing an iterator to extract the latest trend  
# of each social media data from list of csv files  
for i in range(len(df)):  
    df1 = pd.read_csv("Social_Trends_Country_Wise/{}.csv"  
                      .format(List[i]))  
  
    # transposing the rows and columns  
    df2 = pd.DataFrame.transpose(df1)  
  
    # dropping the unnecessary columns and rows  
    df3 = df2.drop([1,2,3,4,5,6,7,8,9,10,11,12],axis=1)  
    df4 = df3.drop('Date',axis = 0)
```

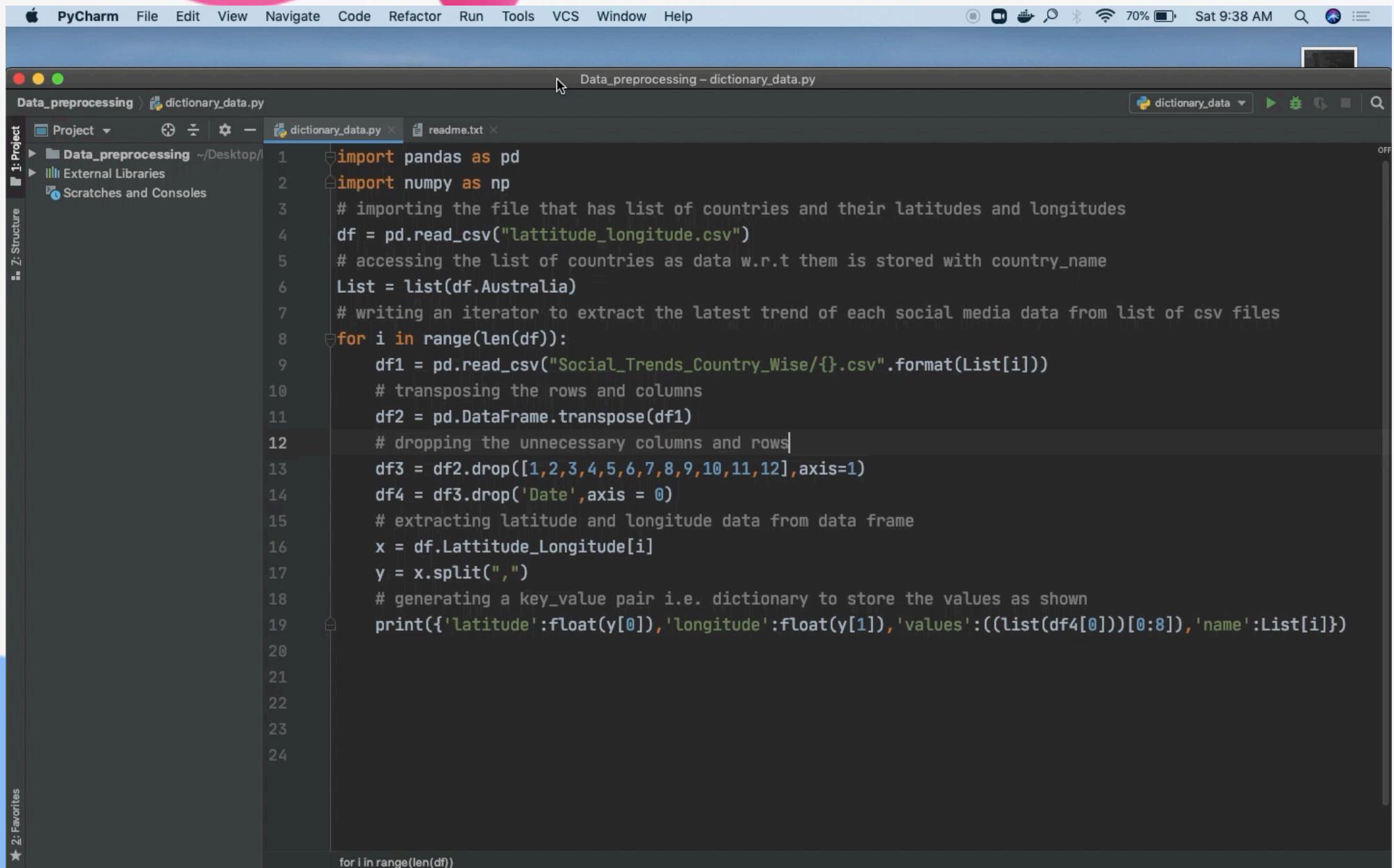
*Final dictionary key value pairs sample:* {"latitude": -33.44889, "longitude": -70.669265,  
"values": [66.45, 6.58, 3.44, 12.78, 9.92, 0.57, 0.1, 0.11], "name": "Chile"},

# TECH STACK

PYTHON  
PYCHARM IDE  
PANDAS  
NUMPY

DEMO

# DATA PREPARATION



The screenshot shows the PyCharm IDE interface with the following details:

- Project:** Data\_preprocessing
- File:** dictionary\_data.py
- Code Content:**

```
import pandas as pd
import numpy as np
# importing the file that has list of countries and their latitudes and longitudes
df = pd.read_csv("latitude_longitude.csv")
# accessing the list of countries as data w.r.t them is stored with country_name
List = list(df.Australia)
# writing an iterator to extract the latest trend of each social media data from list of csv files
for i in range(len(df)):
    df1 = pd.read_csv("Social_Trends_Country_Wise{}.csv".format(List[i]))
    # transposing the rows and columns
    df2 = df1.transpose()
    # dropping the unnecessary columns and rows
    df3 = df2.drop([1,2,3,4,5,6,7,8,9,10,11,12],axis=1)
    df4 = df3.drop('Date',axis = 0)
    # extracting latitude and longitude data from data frame
    x = df4.Latitude_Longitude[i]
    y = x.split(",")
    # generating a key_value pair i.e. dictionary to store the values as shown
    print({'latitude':float(y[0]),'longitude':float(y[1]),'values':((list(df4[0]))[0:8]),'name':List[i]})
```

# IMPLEMENTATION

# WEBSITE APPLICATION DESIGN

IMPORT THE PREPARED  
DATA INTO JS FILE



CREATE HERE MAPS  
AUTHENTICATION AND  
CALL THE API



CODE USING HTML  
AND CSS FOR WEBSITE  
UI

DEMO

```
Working Files
socialmediadata.js
index.html

Website_main
▶ css
▶ libs
▶ load-marker-data-using-ajax
▼ Social_Trendometer
  ▶ data
    socialmediadata.js
    index.html
  ▶ libs
    map-sidebar-control.html
    map-sidebar-within-map.html
```

```
1  !doctype html
2  <html>
3  <head>
4    <meta charset="utf-8"/>
5    <meta http-equiv="X-UA-Compatible" content="IE=7; IE=EmulateIE9; IE=10" />
6    <meta name="keywords" content="createMarkerBars,barChart" />
7    <title>Social Trendometer</title>
8    <!-- Set up constants such as APP ID and token -->
9    <script type="text/javascript" src="../libs/hereAppIdAndToken.js"></script>
10   <!-- Bootstrap jQuery Library -->
11   <script type="text/javascript" src="../libs/jQl.min.js"></script>

12   <!-- Asynchronously load the HERE Maps API for JavaScript -->
13   <script type="text/javascript" src="../libs/hereAsyncLoader.js"
14     id="HereMapsLoaderScript"
15     data-map-container="mapContainer"
16     data-params="maps"
17     data-callback="afterHereMapLoad"
18     data-libs="sidebar-control"
19     data-parent="demos/sidebar-component/" >
20   </script>

21
22
23   <script type="text/javascript" src="data/socialmediadata.js" /></script>
24
25   <style type="text/css">
26
27     #sidebar {
28       float:left;
29       color: #0070C0;
30       height:300px;
31       margin: 0em;
32     }
33
34     #sidebar .nm_sidebar{
35
36       list-style: none;
37       width:250px;
38       height:270px;
39       overflow:auto;
40     }
41   </style>
42 </head>
43 <body class="small-map">
44   <h1>SOCIAL TRENDS COUNTRYWISE</h1>
45   <p>Select the country to view the social trends in the region</p>
46   <p>All the stats are in percentages</p>
47   <div id="mapContainer" style="width:540px; height:334px;float:left;" class="no-expand"></div>
48   <div id="sidebar"></div>
49   <br style="clear: both;">
50   <script id="example-code" data-categories="marker" type="text/javascript">
51     //![CDATA[
52     var map,
53       infoBubbles,
54       container;
55
56     function BarChart(stops, tick) {
57       var that = this,
```

Line 1, Column 1 — 159 Lines

Live Preview was canceled for an unknown reason (detached\_Render process gone.)

## WHERE CAN WE USE THIS !!



*With the understanding of the patterns in social media used by people , one can market the new product in the right media with maximum userbase*

## FURTHER SCOPE !!

*Breaking the user base into clusters using ML algorithms based on different features for effective target marketing*

*Website: Social Trendometer*

# THANK YOU *from* TEAM AADHYA

THEME: SOCIAL TRENDS



DEMO

