





- MEASURING THE PULSE OF PROSPERITY: AN INDEX OF ECONOMIC FREEDOM ANALYSIS

Project Based Experiential Learning Program

Measuring the Pulse of Prosperity :An Index of Economic Freedom Analysis

Milestone 1: Define Problem / Problem Understanding

Activity 1: Specify the business problem

Economic freedom is the fundamental right of every human to control his or her own labor and property. In an economically free society, individuals are free to work, produce, consume, and invest in any way they please. In economically free societies, governments allow labor, capital,

and goods to move freely, and refrain from coercion or constraint of liberty beyond the extent necessary to protect and maintain liberty itself.

For much of human history, most individuals have lacked economic freedom and opportunity, condemning them to poverty and deprivation.

Today, we live in the most prosperous time in human history. Poverty, sicknesses, and ignorance are receding throughout the world, due in large part to the advance of economic freedom. In 2022, the principles of economic freedom that have fueled this monumental progress are once again measured in the Index of Economic Freedom, an annual guide published by The Heritage Foundation, Washington's No. 1 think tank.

Activity 2: Business requirements

The business requirements for this project would likely include the creation of an index or metric that measures the level of economic freedom in a given country or region. This index would likely be based on a variety of factors such as the size and role of government, the level of regulation,

the freedom of trade and investment, and the property rights and rule of law. The index would then be used to compare the economic freedom of different countries and regions, and to identify trends and patterns over time. The final outcome of this project would be a report or publication that presents the findings of the analysis and provides recommendations for policy and economic development.

Activity 3: Literature Survey

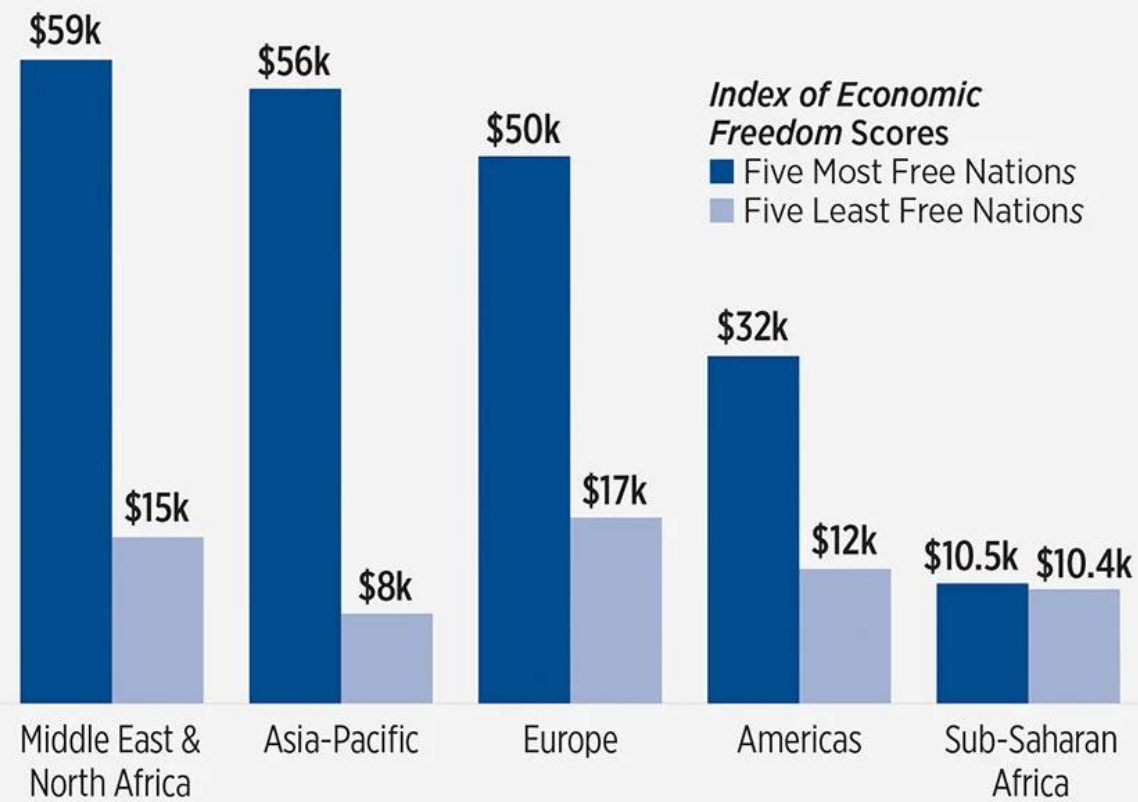
A literature survey for a project on "Measuring the Pulse of Prosperity: An Index of Economic Freedom Analysis" would involve researching and reviewing existing studies and literature on economic freedom and its impact on prosperity. This could include looking at different indexes and measurements of economic freedom, as well as studying the correlation between economic freedom and measures of prosperity such as GDP growth, income inequality, and quality of life indicators. The literature survey may also examine the ways

in which economic freedom can be promoted and sustained, as well as any potential challenges or criticisms of the concept of economic freedom. It would also be important to review any case studies or real world examples of the impact of economic freedom on prosperity




Nations With More Economic Freedom Have Stronger Economies

GDP PER CAPITA (PURCHASING POWER PARITY)

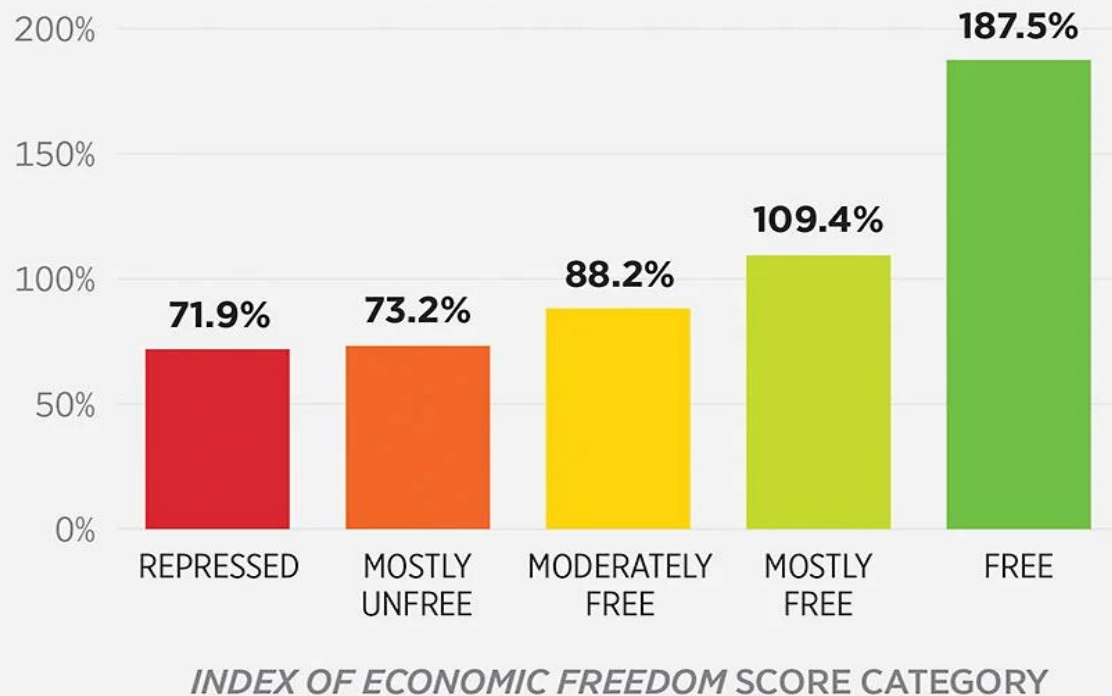


SOURCES: The Heritage Foundation's *2018 Index of Economic Freedom* and International Monetary Fund.

 [heritage.org](https://www.heritage.org)

Trade Promotes Economic Freedom

TRADE AS A PERCENTAGE OF GDP



NOTE: Trade is the sum of exports and imports of goods and services measured as a share of gross domestic product.

SOURCES: The Heritage Foundation's *2018 Index of Economic Freedom*, World Bank, and OECD.

 [heritage.org](https://www.heritage.org)

Activity 4: Social or Business Impact.

Social Impact: A high level of economic freedom is usually associated with higher standards of living, more opportunities for

individuals to improve their economic status, and greater access to goods and services.

Business Model/Impact: a high level of economic freedom would likely indicate a more favourable business environment

Milestone 2: Data Collection & Extraction from Database

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes and generate insights from the data.

Activity 1: Collect the dataset

The data is collected from the given datasheet in the project manual.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Country	Region	World Rank	Region Rank	2022 Score	Property Index	Judicial Efficiency	Government Effectiveness	Tax Burden	Govt Spending	Fiscal Health	Business Freedom	Labor Freedom	Monetary Freedom	Trade Freedom	Investment Freedom	Financial Freedom	Tariff Rate	Income Tax	Corruption
2	1 Afghanistan	Asia-Pacif	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
3	2 Albania	Europe	50	30	66.6	55.5	49.8	35.6	89.1	72.1	70.6	70.7	51.1	82	82.6	70	70	3.7	23	
4	3 Algeria	Middle Ea	167	13	45.8	27.9	29.7	30.1	67.2	57.1	38.6	50	51.5	80.1	57.4	30	30	13.8	35	
5	4 Angola	Sub-Sahar	139	29	52.6	39.8	25.3	20.6	86.6	86.4	80	37.6	53.9	61.2	70	30	40	7.5	25	
6	5 Argentina	Americas	144	27	50.1	35.1	57.9	45.1	73.3	53	16.8	55.1	51	37.9	60.6	55	60	12.2	35	
7	6 Armenia	Europe	58	34	65.3	50.4	33.1	50.8	86.9	78.9	75.5	64.9	47.2	77.5	73.6	75	70	5.7	22	
8	7 Australia	Asia-Pacif	12	4	77.7	91.7	95.2	87	62.5	51.6	52	84.6	64.2	83.2	90	80	90	2.5	45	
9	8 Austria	Europe	22	15	73.8	98.4	94.6	82.9	45.5	20.3	71.7	82.3	78.4	82.3	79.2	80	70	2.9	55	
10	9 Azerbaijan	Europe	75	37	61.6	53.6	15.9	28.6	87.7	62.7	99.1	64.6	55.9	74.5	66.6	70	60	9.2	25	
11	10 Bahamas	Americas	38	6	68.7	61.1	78.8	64.3	96.5	85.8	67.3	63.3	69.3	79.2	49	50	60	18	0	
12	11 Bahrain	Middle Ea	74	4	62	65.9	27.4	41.6	99.9	65.5	0	60.2	54.9	81.1	83	85	80	6	0	
13	12 Bangladesh	Asia-Pacif	137	29	52.7	36.3	28.1	22.2	82.6	93.2	54	55.6	36.6	70	63.8	50	40	10.6	25	
14	13 Barbados	Americas	28	4	71.3	72.6	88.2	68.7	80.6	70.8	79.7	64.7	63.4	78.6	58.4	70	60	13.3	28.5	
15	14 Belarus	Europe	135	45	53	34.5	15.5	43.7	93.3	56.7	95.3	54.5	46.8	70.2	75.6	30	20	4.7	13	
16	15 Belgium	Europe	37	24	69.6	92.5	91.2	83.6	48.2	10.1	50.3	82.8	57.4	84.3	79.2	85	70	2.9	50	
17	16 Belize	Americas	109	22	56.6	34.7	70.2	38.1	77	64.1	37.6	54	59.9	82.5	55.6	55	50	17.2	25	
18	17 Benin	Sub-Sahar	81	6	61	44.3	55.3	40.3	68.4	91.6	83.4	47.7	59.6	80.4	61.4	50	50	11.8	45	
19	18 Bhutan	Asia-Pacif	94	19	59.3	67.2	60.9	73.5	82.4	71.6	72.4	62.9	57.2	72.7	40.8	20	30	22.1	25	
20	19 Bolivia	Americas	169	30	43	14.1	28.4	28.7	86	58.8	10.9	54.7	46.2	72.8	60.8	15	40	9.6	13	

Activity 1.1: Understand the data

The documentation of the database consists of four parts:

1. the documentation of the data in the database itself
2. this user guide
3. technical note paper
4. country information sheets

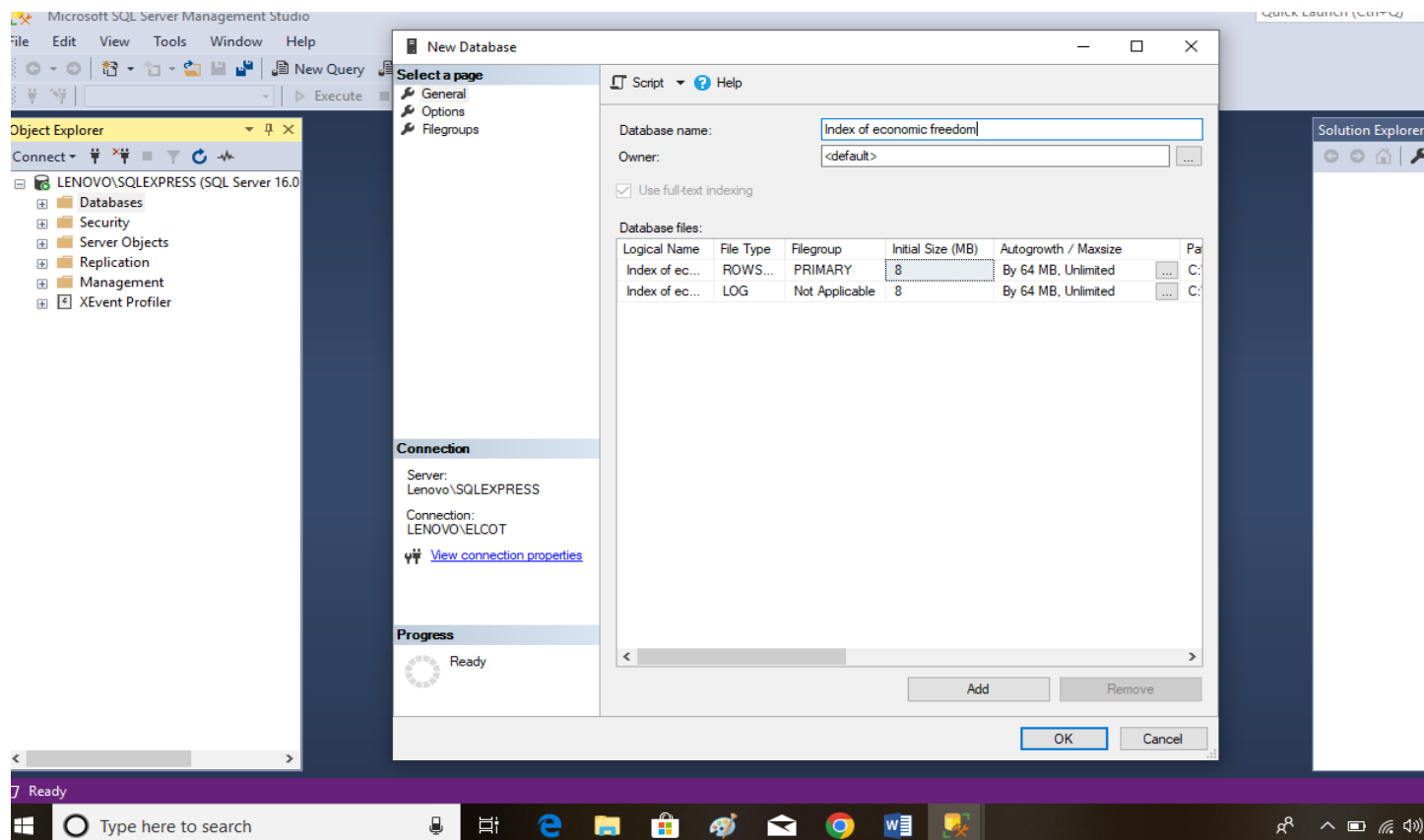
Documentation in the database itself

In the database itself, the user is informed about the coverage of the surveys underlying the observations, the income sharing unit, the unit of analysis and the equivalence scale, the income concept and the source and survey used (for details on the variable please refer to the variable list below).

The following *income/consumption/expenditure concepts* are the ones that are mainly used:

Net income/Disposable income: This label is given if the income concept more or less corresponds to the one specified by the Canberra Group. Even if this label is given, some items might be badly covered. For example, it is not always clear whether in-kind incomes are included or not. Often some in-kind incomes are covered but not home production. Sometimes non-labour incomes are asked in one question that lumps together transfers and income from property. The country-specific documentation and the quality rating give an indication if the income concept is acceptable.

Activity 2: Storing Data in DB & Perform SQL Operations



Microsoft SQL Server Management Studio

File Edit View Tools Window Help

Import Flat File 'economic freedom'

Preview Data

Object Explorer

Connect

LENOVO\SQLSERVER (SQL Server 16.0)

Databases

System Databases

Database Snapshots

index of economic freedom

Database Diagrams

Tables

Views

External Resources

Synonyms

Programmability

Query Store

Service Broker

Storage

Security

economic freedom

Security

Server Objects

Replication

Management

XEvent Profiler

Introduction

Specify Input File

Preview Data

Modify Columns

Summary

Results

Preview Data

This operation analyzed the input file structure to generate the preview below for up to the first 50 rows.

Country_id	Country_Name	Region	World_Rank	Region_Rank	_2022_S ^
1	Afghanistan	Asia-Pacific	0	0	0
2	Albania	Europe	50	30	66.6
3	Algeria	Middle East an...	167	13	45.8
4	Angola	Sub-Saharan Af...	139	29	52.6
5	Argentina	Americas	144	27	50.1
6	Armenia	Europe	58	34	65.3
7	Australia	Asia-Pacific	12	4	77.7
8	Austria	Europe	22	15	73.8
9	Azerbaijan	Europe	75	37	61.6
10	Bahamas	Americas	38	6	68.7
11	Bahrain	Middle East an...	74	4	62
12	Bangladesh	Asia-Pacific	137	29	52.7
13	Barbados	Americas	28	4	71.3
14	Belarus	Europe	135	45	53

Column names changed due to invalid characters, duplication, etc. Column names can be edited in Modify Columns page.

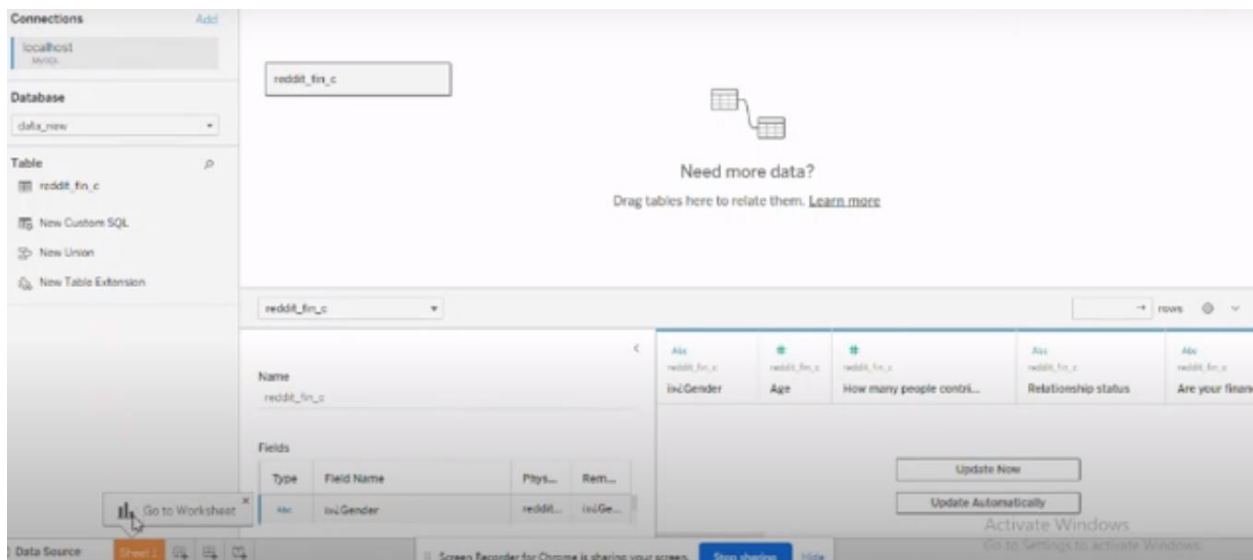
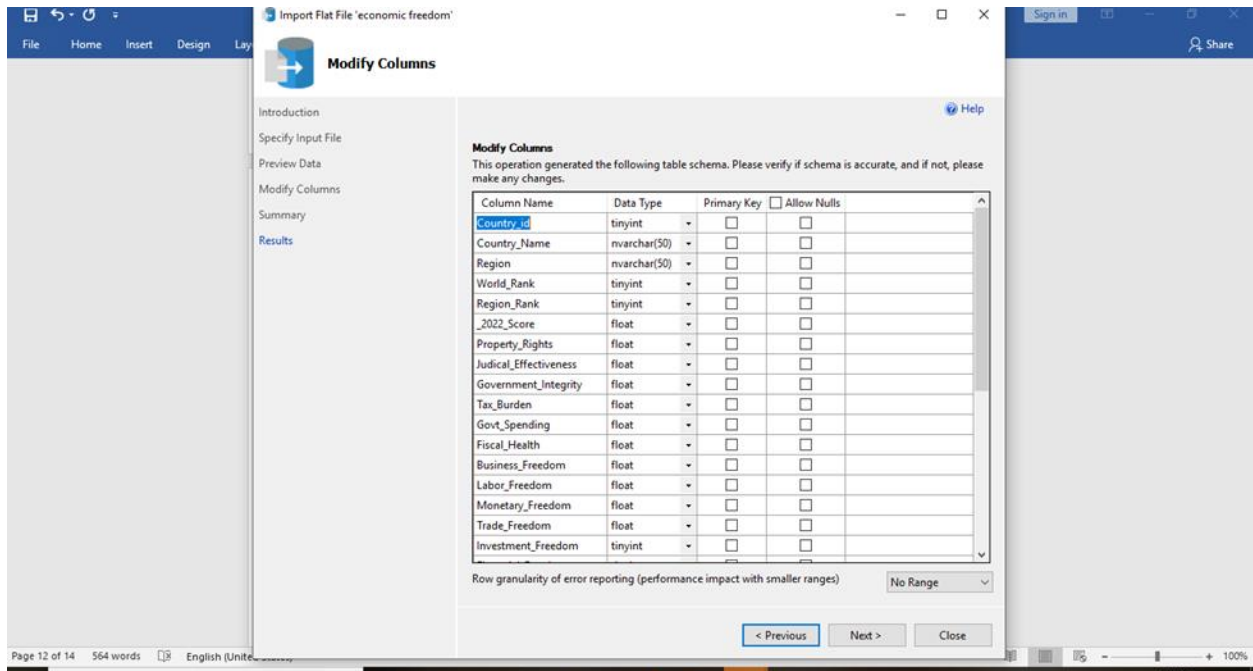
☒ Use Rich Data Type Detection - may provide a closer type fit. However, cells with anomalous values may be dropped.

< Previous Next > Cancel

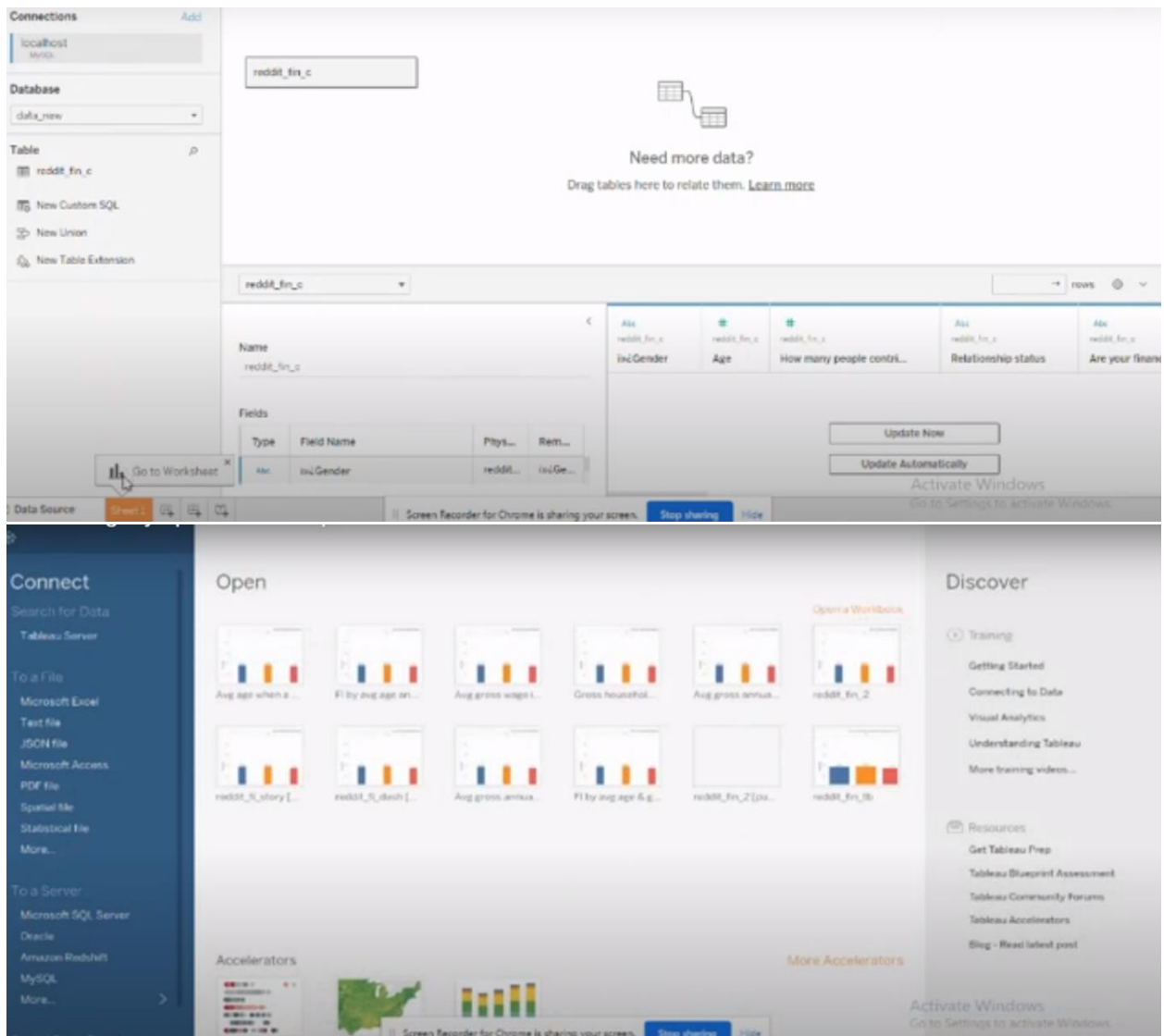
Ready

Type here to search

04:43 18-03-2023



Activity 3: Connect DB with Tableau



Milestone3:Data Preparation:

Activity1:Prepare the Data for Visualization:

Preparing the data for visualization involves cleaning the data to remove irrelevant or missing data, transforming the data into a format that can be easily visualized, exploring the data to identify patterns and trends, filtering the data to focus on specific subsets of data, preparing the data for visualization software, and ensuring the data is accurate and complete. This process helps to make the data easily understandable and ready for creating visualizations to gain insights into the performance and efficiency.

Milestone 4:

Data Visualization:

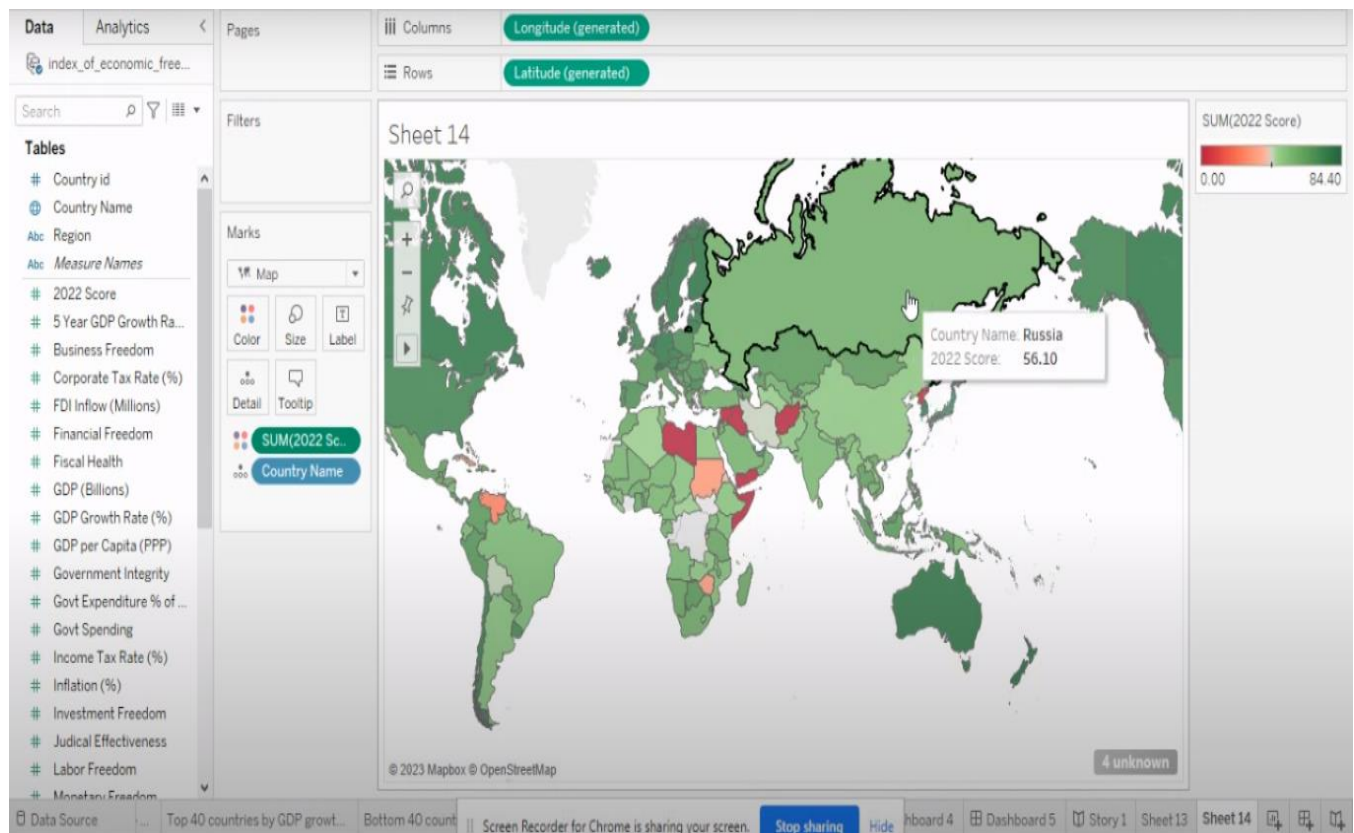
Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs, and maps, data visualizations can help people quickly identify patterns, trends, and outliers in the data.

Activity1:No Unique Visualizations:

The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyse the index of economic freedom include bar charts, line charts, heat maps, scatter plots, pie charts, Maps etc. These visualizations can be used to compare performance, track changes over time, show distribution, and relationships between variables,

Activity 1.1:To Understand 2022 Economic freedom of score:





Milestone5:Dashboard

A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data, and are typically designed for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs, and tables.

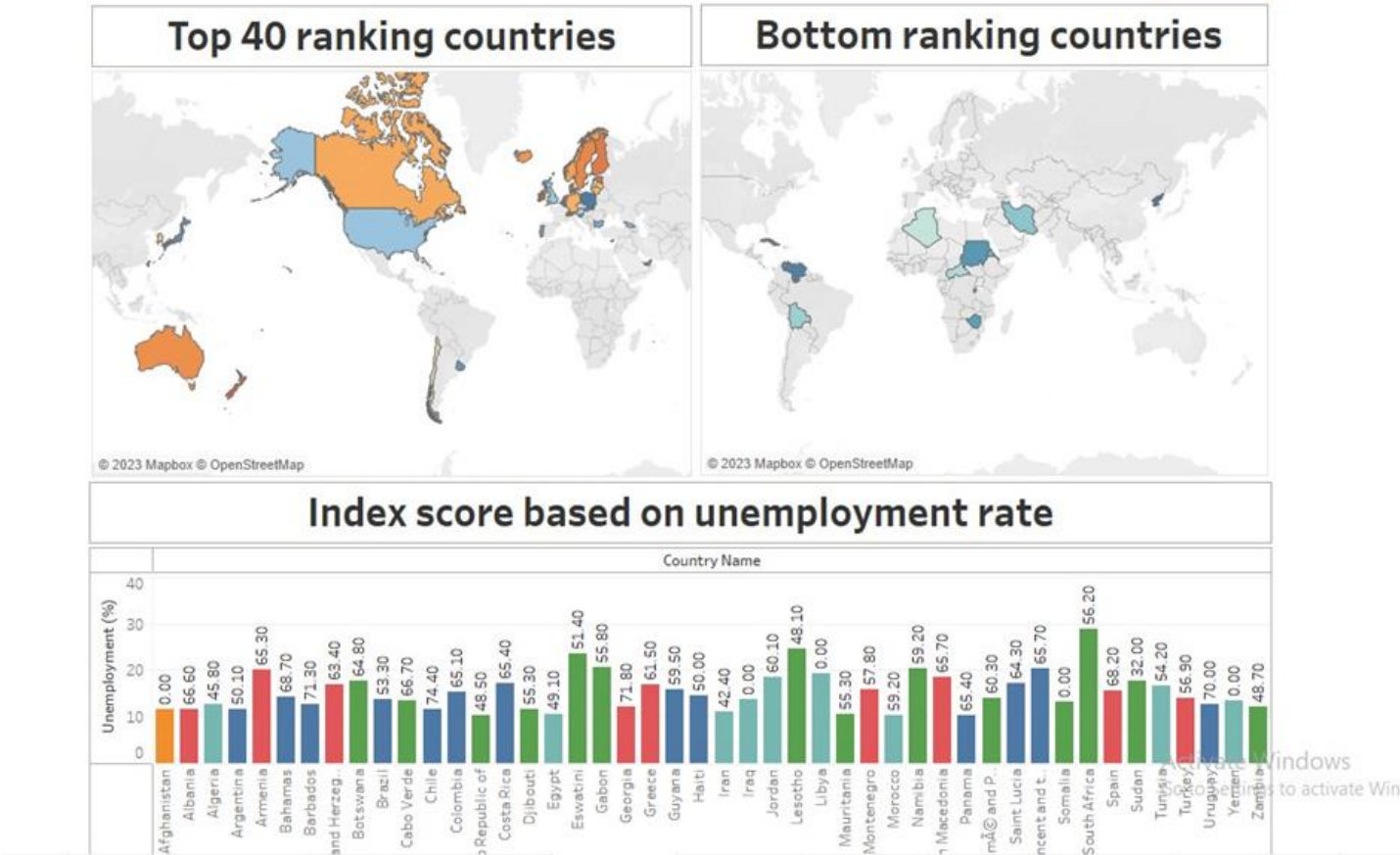
Activity :1- Responsive and Design of Dashboard

The responsiveness and design of a dashboard for analysing the index of economic freedom is crucial to ensure that the information is easily understandable and actionable. Key considerations for designing a responsive and effective dashboard include

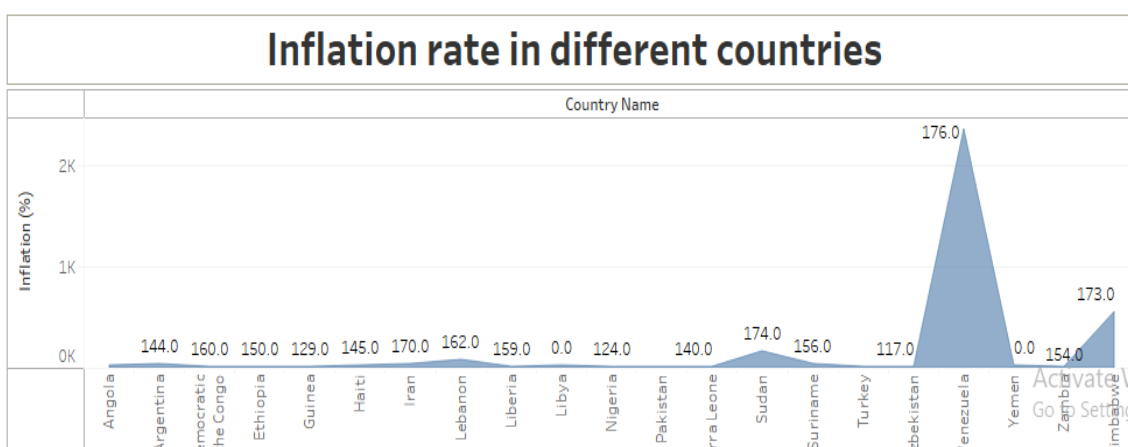
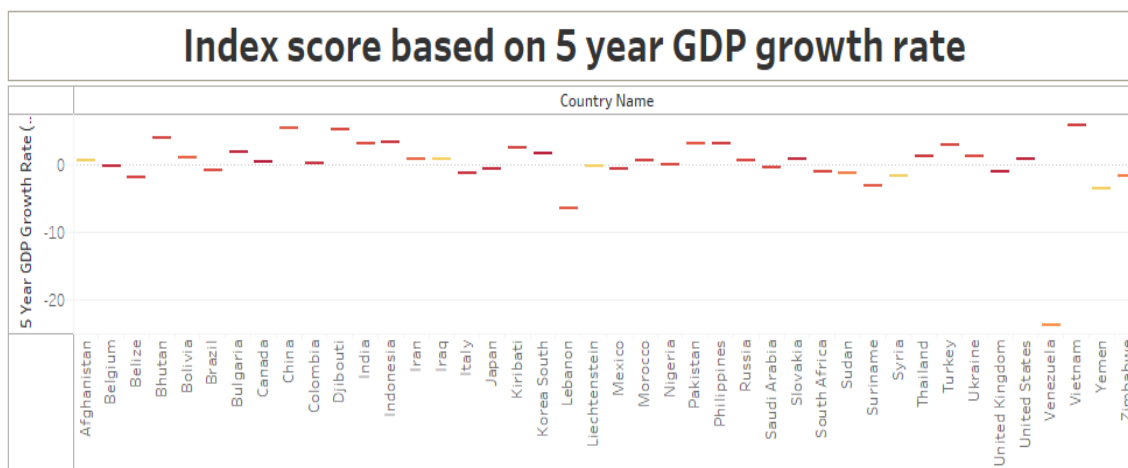
user-centered design, clear and concise information, interactivity, data-driven approach, accessibility, customization, and security. The goal is to create a dashboard that is user-friendly, interactive, and data-driven, providing actionable insights

Once you have created views on different sheets in Tableau, you can pull them into a dashboard.

i



Next



Milestone 6:Story:

A data story is a way of presenting data and analysis in a narrative format, with the goal

of making the information more engaging and easier to understand. A data story typically includes a clear introduction that sets the stage and explains the context for the data, a body that presents the data and analysis in a logical and systematic way, and a conclusion that summarizes the key findings and highlights their implications. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos.

Activity:1 No of Scenes of story

The number of scenes in a storyboard for a data visualization analysis of the index of economic freedom will depend on the complexity of the analysis and the specific insights that are trying to be conveyed. A storyboard is a visual representation of the data analysis process and it breaks down the analysis into a series of steps or scenes

Milestone7:Performance Testing:

Activity1:Amount of Data Rendered to DB

he amount of data that is rendered to a database depends on the size of the dataset and the capacity of the database to store and retrieve data.

Open the MySQL Workbench, go to the database then click to expand the tables,select the table and click on (i) button to get the information related to table such as column count,table rows etc.

Local instance MySQL80

File Edit View Query Databases

SQL SQL SQL SQL SQL SQL SQL

Navigator

SCHEMAS

Filter objects

data_new

eco_f_index

Tables

index_of_economic_freedom

Columns

Country_id

Country Name

Region

World Rank

Region Rank

2022 Score

Property Rights

Judicial Effectiveness

Government Integrity

Tax Burden

Govt Spending

Fiscal Health

Administration Schemas

unp_2 population.un population data eco_f_index.index_of_economic...

Info Columns Indexes Triggers Foreign keys Partitions Grants DDL

Local instance MySQL80

eco_f_index.index_of_economic_freedom

Table Details

Engine: InnoDB

Row format: Dynamic

Column count: 32

Table rows: 183

AVG row length: 447

Data length: 80.0 KiB

Index length: 0.0 bytes

Max data length: 0.0 bytes

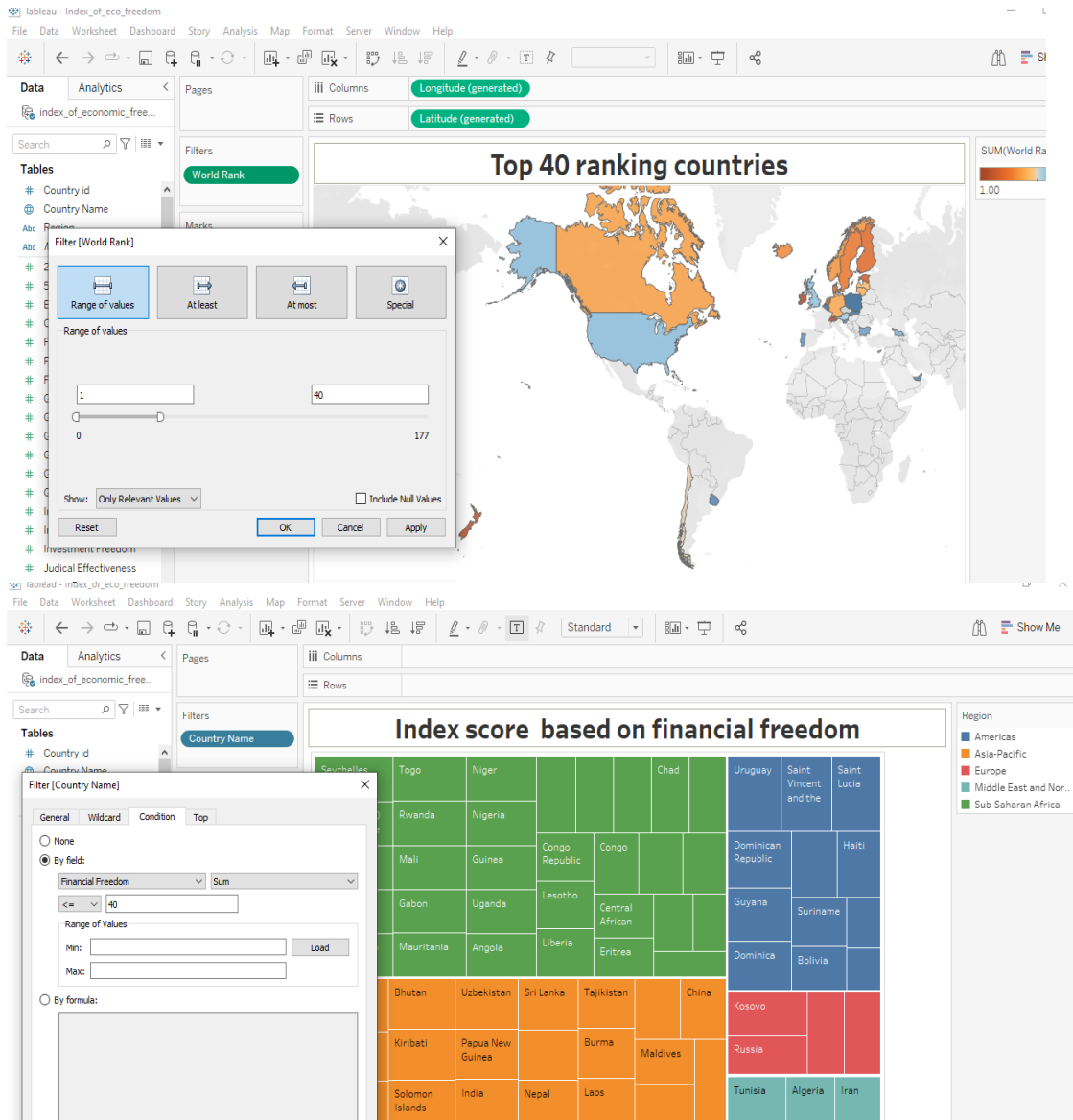
Data free: 0.0 bytes

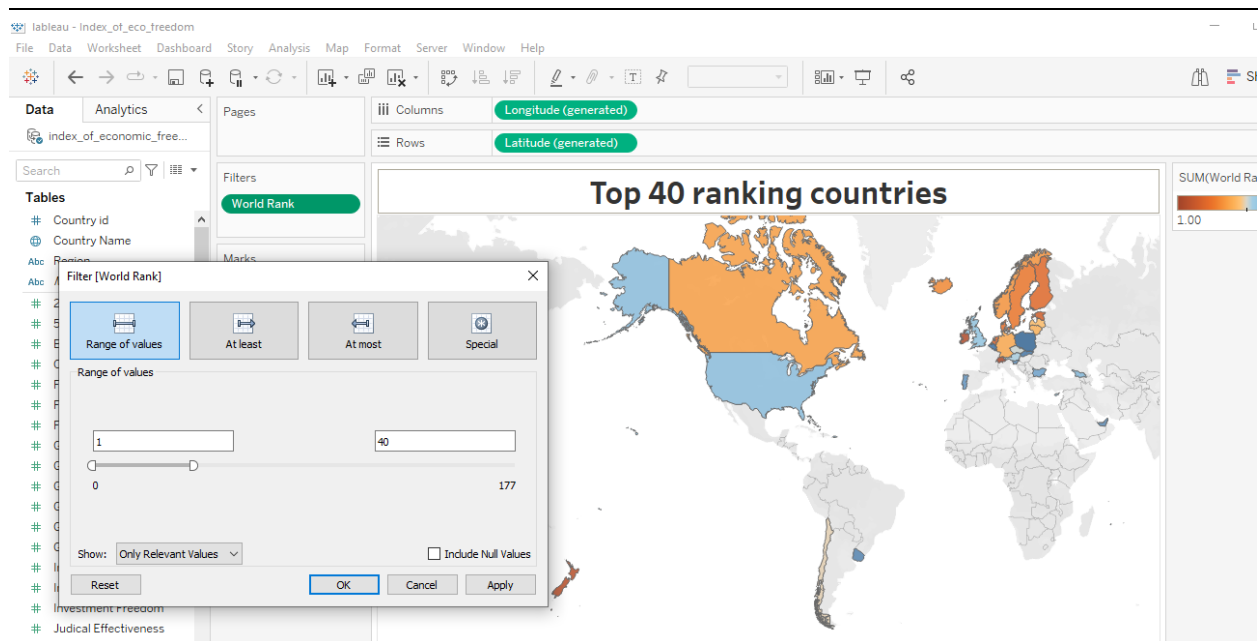
Table size (estimate): 80.0 KiB

Information on this page may be outdated. Click [Analyze Table](#) to update it.

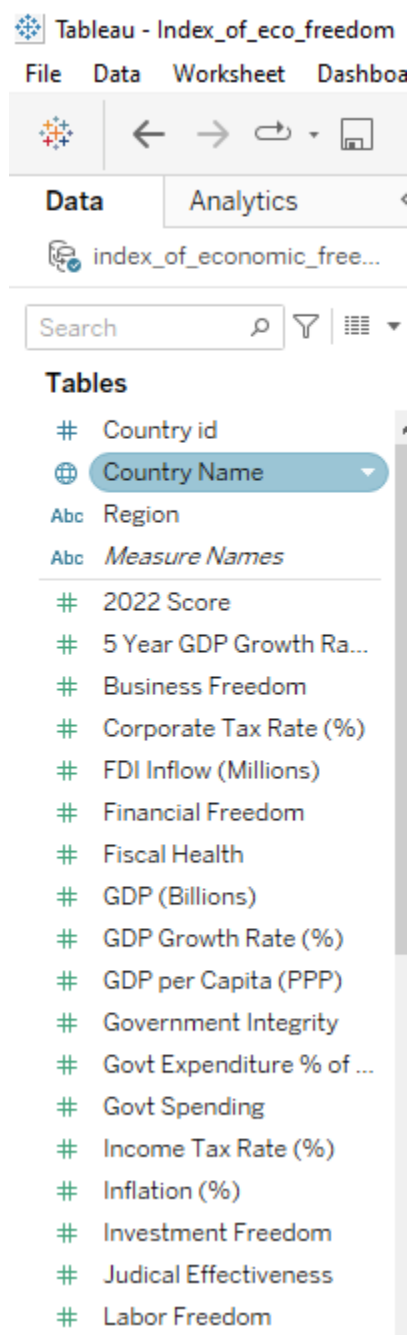
Co

Activity2:Utilization of data filters





Activity3:No of Calculation Fields



Activity4:

No Of Visualizations/ Graphs

2022 economic freedom score

-
1. 40 ranking countries
 2. Bottom ranking countries
 3. Index score based on unemployment
 4. Index score based on financial freedom
 5. Index score based on population
 6. Index score based on 5 year GDP growth rate(%)
 7. Index score based on 5 year GDP growth rate(%)
 8. Inflation rate in different countries
 9. Correlation between inflation and unemployment
 10. Correlation between GDP(PPP) & Unemployment
 11. 40 countries by GDP growth rate

Milestone8:

Web Integration:

Publishing helps us to track and monitor key performance metrics, to communicate results and progress. help a publisher stay informed, make better decisions, and communicate their performance to others.

Share via Tableau Server or Tableau Cloud



Server:



Connect

Cancel

Quick Connect

[Tableau Cloud](#)

Don't have a Tableau Server or Tableau Cloud account? Quickly create a Tableau Cloud site to share your work.


[Create Site >>](#)

+tableau++public

Email

Password

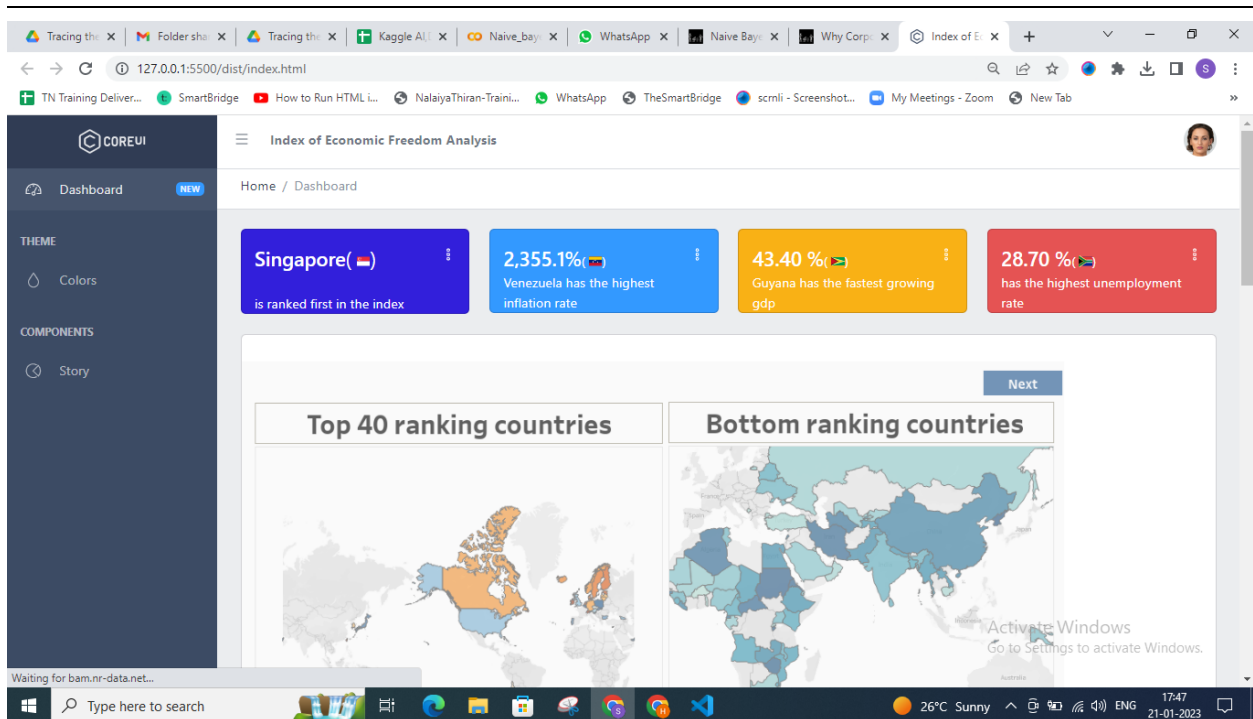
Sign In

 This site is SSL encrypted

[Forgot your password?](#)

[Don't have a profile yet?](#)

Create one now for free



Milestone9:

Project Demonstration & Documentation Below
Mentioned deliverables to be submitted along
with other deliverables

Activity1:

Record explanation video for project end to end
solution

Activity2:

Project Documentation -Step by step project
development procedure.