

Introduction to Data Analytics & Visualization Using Python

Session 2



What is Data Analytics



The techniques to analyse the data to enhance productivity & business output

“ Data analysis is defined as a process of cleaning, transforming, and modeling data to discover useful information for business decision-making. The purpose of Data Analysis is to extract useful information from data and taking the decision based upon the data analysis.”

Data Analytics Process



Collect the Data
from various
Database



Analyse the
Data



Generate
Report

Data Analyst Skills



Statistics



Data Cleaning



Exploratory Data
Analysis



Data Visualization



Machine Learning





Visualization

Visualization is the technique for creating images, diagrams, or animations to communicate a message.

Visualization through visual imagery has been an effective way to communicate both abstract and concrete ideas since the dawn of humanity.



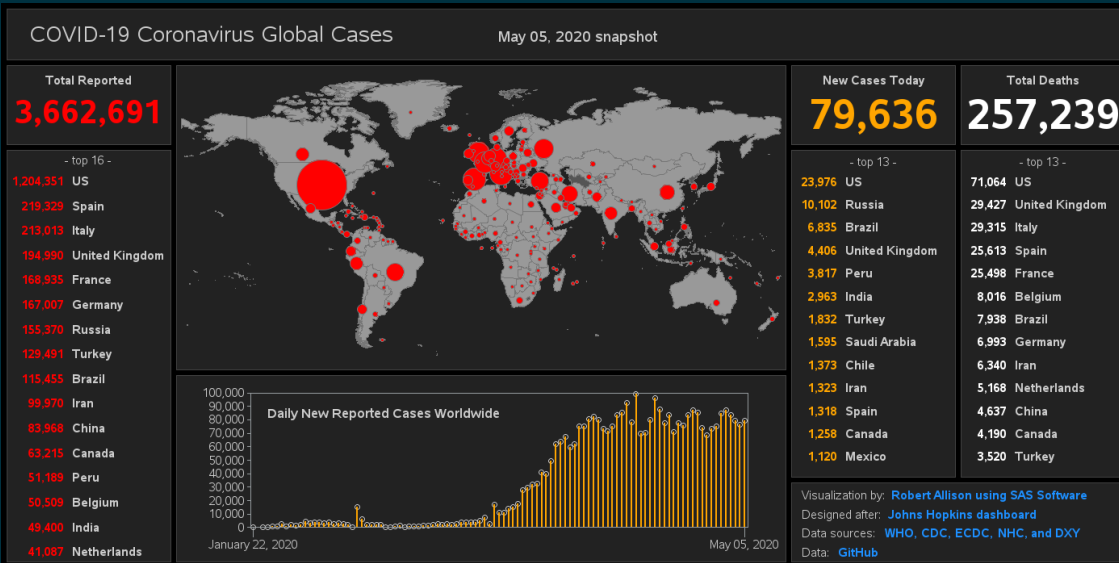
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Dashboard

A **dashboard** is a type of graphical user interface which often provides at-a-glance views of key performance indicators (KPIs) relevant to a particular objective or business process. In other usage, "dashboard" is another name for "progress report" or "report."



- For example, a manufacturing dashboard may show numbers related to productivity such as number of parts manufactured, or number of failed quality inspections per hour.
- Similarly, a human resources dashboard may show numbers related to staff recruitment, retention and composition, for example number of open positions, or average days or cost per recruitment.



Infographics

Infographics (a clipped compound of "information" and "graphics") are graphic visual representations of information, data, or knowledge intended to present information quickly and clearly. They can improve cognition by utilizing graphics to enhance the human visual system's ability to see patterns and trends.



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Questions??