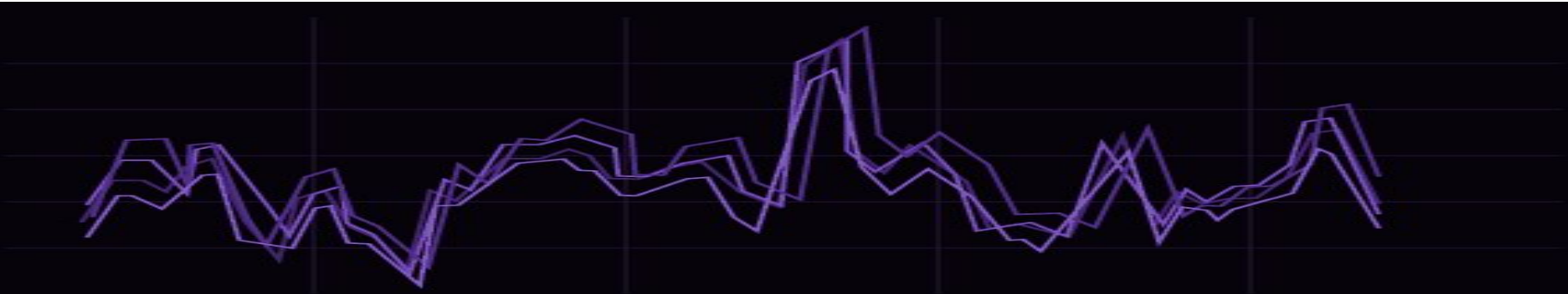




## **Time Series Analysis & its application in the real world**





## Data Mining (CSE 475)

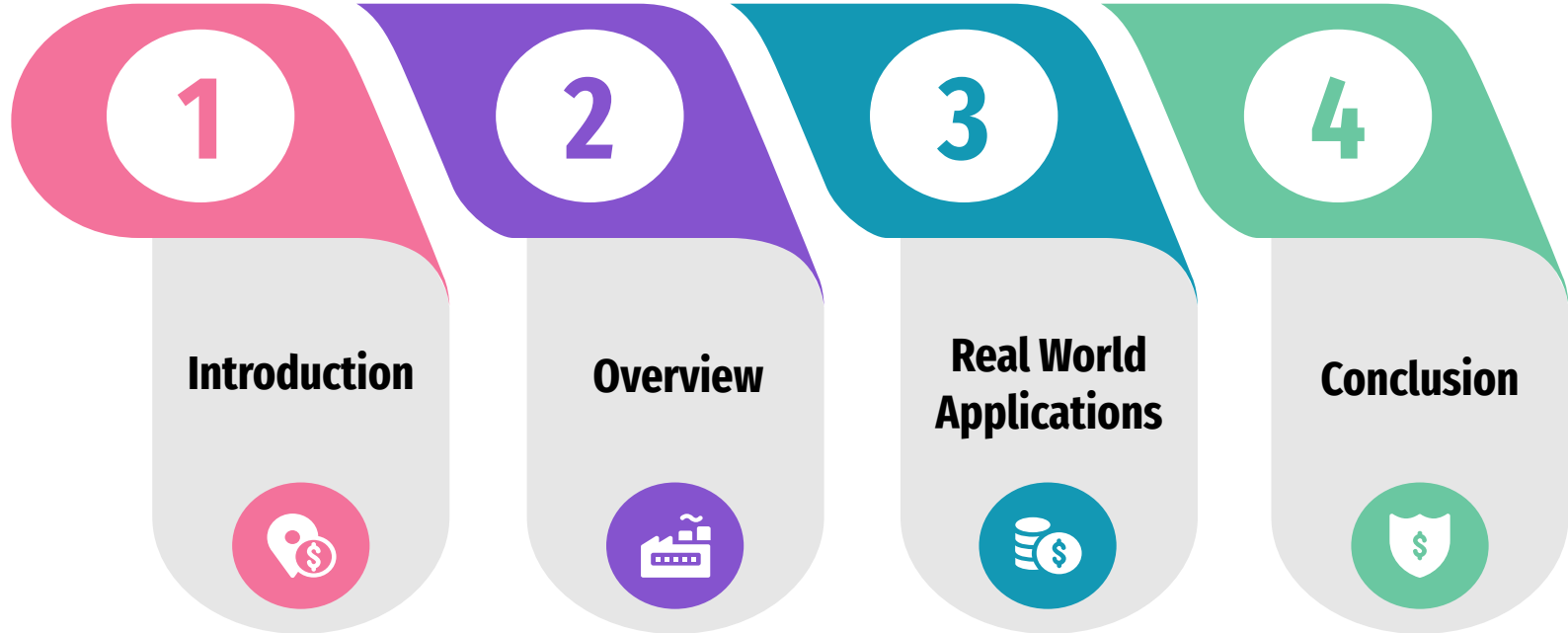
Presented to
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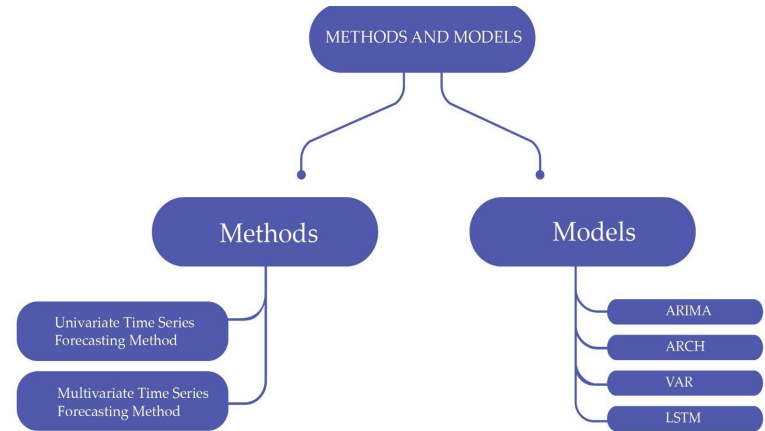
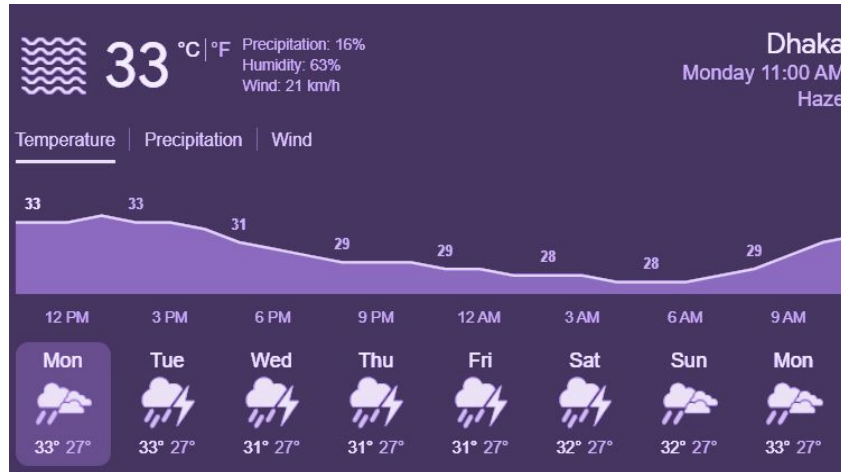
**Presented Date: 27- 06 - 2022**



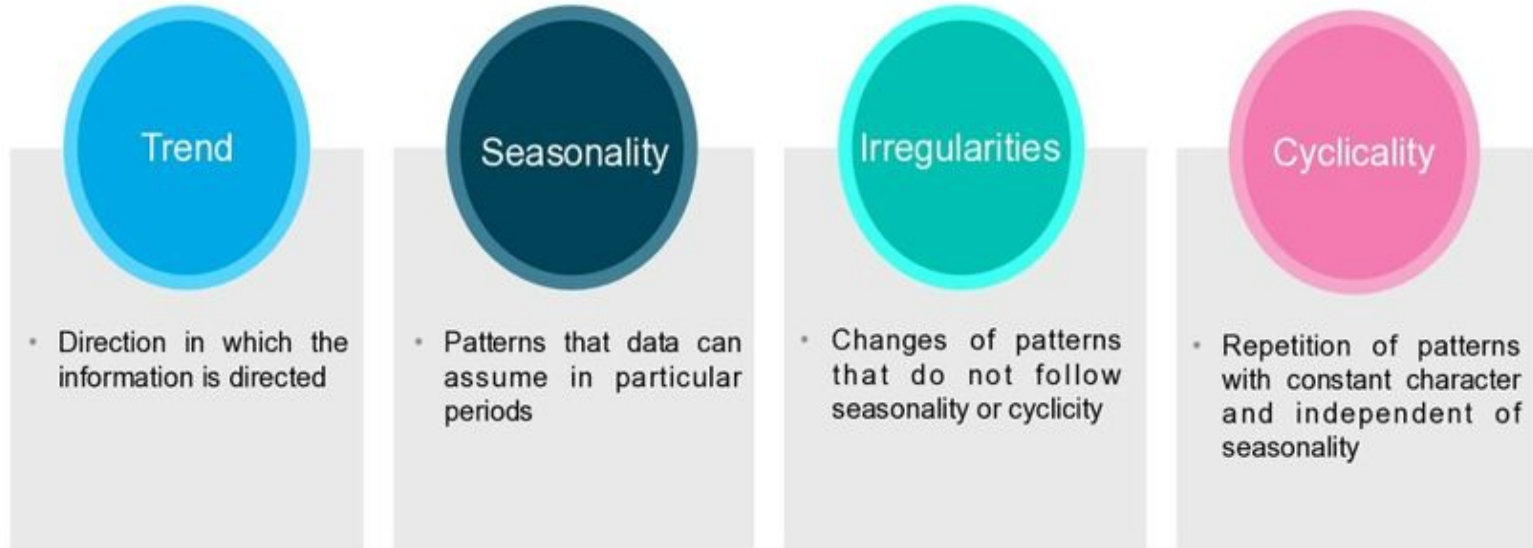
# Contents



# Introduction



# Components of Time Series Analysis



# Real World Applications



# Medical



**Heart rate monitoring (EKG)**



**Brain monitoring (EEG)**



# Weather Forecasting



Weather Forecasting is done based on certain Weather parameters like maximum temperature, minimum temperature, extent of rainfall, cloud conditions, wind streams and their directions, projected using images taken by the meteorological satellites. Data Mining helps in identifying or assesses future trends.

# Business Development



Time series forecasting helps businesses to make informed business decisions, as the process analyzes past data patterns it can be useful in forecasting future possibilities and its impact on revenue lines strategies, sales improvement measures, and optimizing marketing campaigns.

# Retail Sales



Retail stores often use time series analysis to analyze how their total sales are trending over time. It's mostly used useful for analyzing monthly, seasonal, and yearly trends in sales, accurate prediction of the sales, inventory, and staff.

# Subscribers



Time series analysis is often used by online publications to analyze trends in the total number of subscribers from one year to the next. Through this, we can identify whether or not growth in the number of subscribers is increasing, decreasing, or hitting a plateau.

# More Applications



# Conclusion

Time series analysis helps organizations understand the underlying causes of trends or systemic patterns over time. Though it has number of weaknesses, including problems with generalization from a single study, difficulty in obtaining appropriate measures, and problems with accurately identifying the correct model to represent the data.

# References

- [Statology.org - Time Series Analysis in Real Life](#)
- [Slideplayer - Time Series Analysis](#)
- [Analyticssteps.com - 5 Applications of Time Series Analysis](#)
- [Tableau.com - Time Series Analysis: Definition, Types, Techniques, and When It's Used](#)

**Thank You!**