Weather Data Analysis of Szeged

Objective:

To predict the influence of environment on the changing temperature in Szeged, Hungary.

Introduction:

This project aims to predict the influence of various environmental factors such as humidity, wind, pressure, visibility, clouds, precipitation and so on that imposes a serious effect on temperature in the given location.

Analysis:

1st Quarter (January to March):

- 1. Average temperature for the 1st quarter is around 5° C.
- 2. From our analysis, we can infer that the (Min,Max) during January is $(-11^{\circ}, +14^{\circ}\text{C})$, (Min,Max) during February is $(-2^{\circ}, +18^{\circ}\text{C})$ and (Min,Max) during March is $(-1^{\circ}, +22^{\circ}\text{C})$
- 3. According to our analysis, it is not suggested to visit Szeged during January.
- 4. The favorable time to travel in Szeged is between 10am to 5pm.

2nd Quarter (April to June):

- 1. The average temperature during the month of April is 12°C, may is 17°C and June is 22°C
- 2. The Average temperature during 2nd quarter is around 17° C.
- 3. From our analysis, we have observed that the humidity decreases during the time period of 10am to 5pm during this quarter. So, it is suggested to the tourists/citizens of Szeged to regularly apply the skin moisturizing lotions to avoid there skin getting dry.
- 4. Another observation that we can notice is that, temperature is cool during the time period of 12am to 7am and later the temperature gradually increases to its peak and then by the time of dusk (7pm) the temperature gets cooler again.
- 5. The wind speed is very high during the month of June which is best suitable for sky diving and other outdoor aerial activities. The wind speed is more during the time of 6am and 7pm.
- 6. Overall weather feel would be cool.

3rd Quarter (July to September):

- 1. During the month of July minimum temperature would be 10 degree Celsius however for August and September month it would go below 10 degrees. Temperature would be less in the morning and would start increasing after 9 AM.
- 2. Visibility would be less during morning and it would start increasing as the temperature increases.
- 3. Overall, Weather would be pleasant during these months and it can be a good time in entire year to visit Szeged city.

4th Quarter (October to December):

- 1. Temperature and Time: The best time to go out and visit places during this time would be 11:00 AM and 7PM during October to December.
- 2. Pressure and Time: Pressure is usually constant throughout the day.
- 3. Temperature vs Month: The average temperature keeps decreasing form October through December.
- 4. Visibility vs Time: Visibility during this duration is low (5km) during the morning time and is prettty much clear the rest of the day.
- 5. Wind Speed vs Time: Overall there is a gentle breeze with speeds reaching a maximum of 14 km/hr but it isn't as windy as Chicago.
- 6. Winter sports is ideal during December.