

DSIF9 Project 1: Exploring Climate Data of Singapore

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Background

- Singapore's tourism has taken a hit in recent years in light of the pandemic.
- Working in the Tourism agency, I am tasked to increase our visitor count as Singapore reopens for tourism post covid.
- Since Singapore's tropical weather is largely unpredictable, tourist might not be able to determine when is the best time to visit the island to enjoy all Singapore has to offer.



Problem Statement / Objective

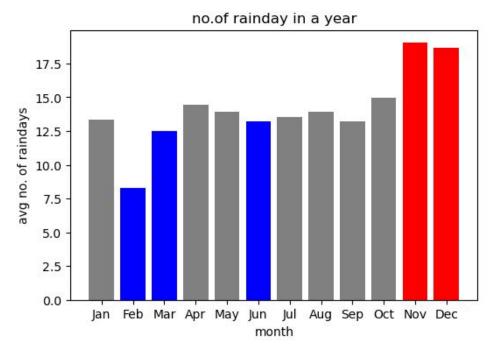
To analyze trends in Singapore's weather and number of inbound tourists in a given period to advise visitors the best time to visit Singapore.

help tour agencies plan ahead for weather appropriate activities to attract tourist to come to singapore.



Monthly No. of Rain Days

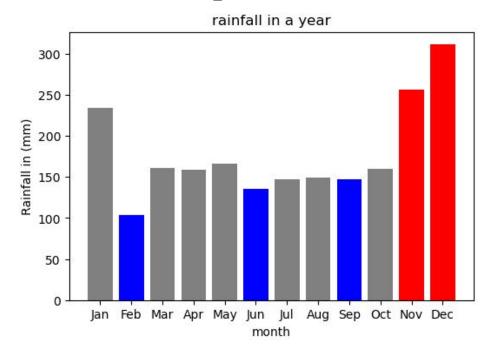
- Top 3 months with least monthly average no. of rain days over the past 40 years:
 - Feb, Mar, Jun





Monthly Total Rainfall in mm

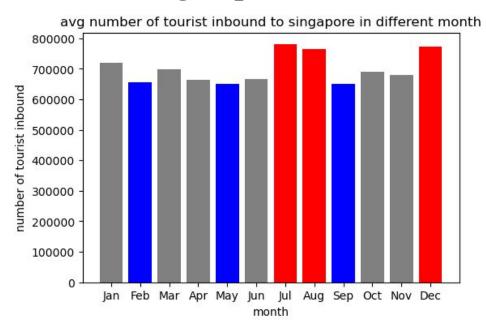
- Top 3 months with least monthly average total rainfall (mm)
 over the past 40 years:
 - Feb, Jun, Sep





Monthly No. of Tourist Inbound

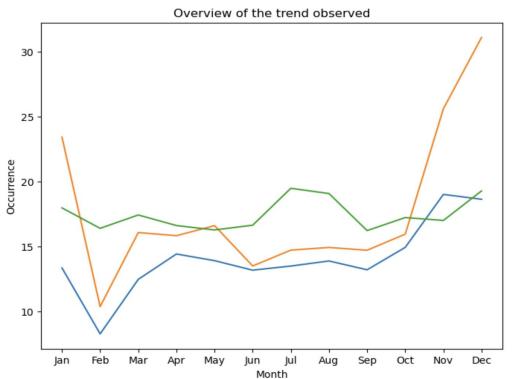
- Top 3 months with least monthly average tourist numbers* over the past 40 years:
 - Feb, May, Sep



*All visitors arriving in Singapore at point of entry, excluding arrival of Malaysia by land



Overview of The Results



- rainfall count
 avg rainfall mm/10
 tourist/40000
- The no. of rain days and total rainfall are positively correlated
- The high tourist numbers are recorded in Jul-Aug and Dec-Jan periods
- **Feb, May, Sep** lowest tourists.
- **Feb**, **Jun**, **Sep** lowest rainfall.
- **Feb, Mar, Jun** lowest rain days.

Conclusions



Recommendations

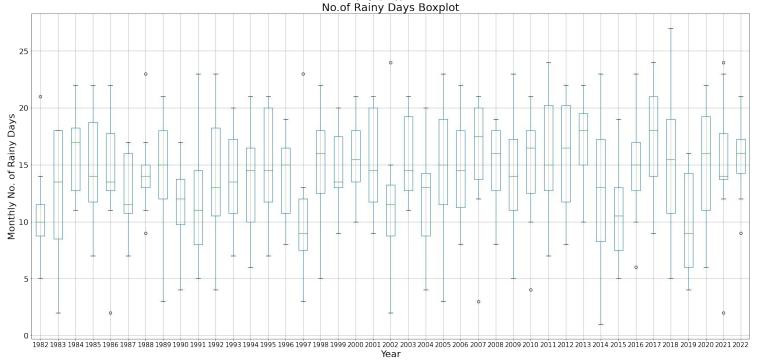
- Customised itineraries based on weather data.
- Get best deals from hotels, restaurants and tourist spots.
- Have promo packages with online activity booking platform (eg. Klook).
- Liaise with overseas travel partners with exclusive and attractive packages.







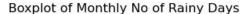
Boxplot on Rainy Days for the 40 years

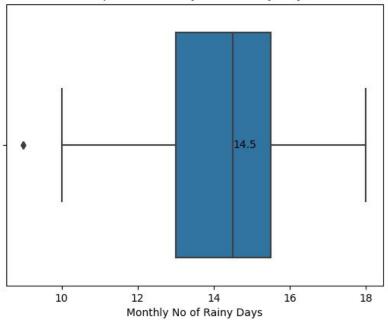


The median lies within 10 to 20 rainy days for the 40 years with
 1997 and 2019 having outlier.



Further Analysis to the Previous Slide





Take the median of each year and do the boxplot again, can get the range of the median is 10-18 days, while 1997 and 2019 have outlier 9 days