Long Term Internship [DATA ANALYTICS] (Estimation and Predication of Hospitalization And Medical Care Costs)

PROJECT FLOW

- > DATA PREPARATION
- > DATA VISUALIZATION
 - > DASHBOARD
 - > STORY
 - > REPORT
 - > PERFORMANCE TESTING
 - > WEB INTEGRATION

DATA VISUALIZATIONS

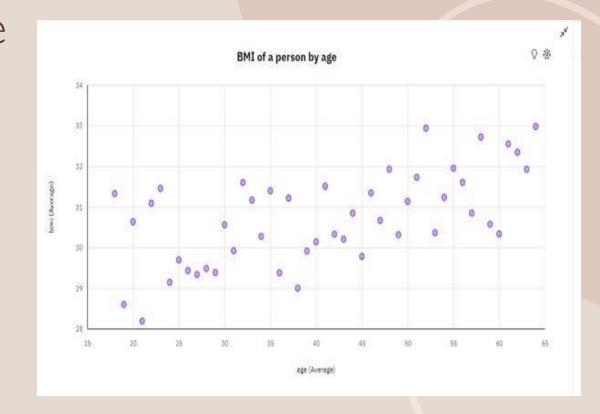
1. Average age of Male and Female

- Female exceeds male in age by 0.5859
- Sex male has the highest total charges but is ranked #2 in average age.
- Sex female has the highest average age but is ranked
- #2 in total charges



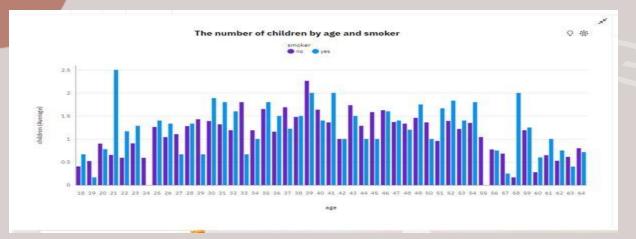
2.BMI of a Person by Age

- BMI and age have a weak positive linear association.
- The average of BMI is 30.66.
- The total number of results for age, across all ages, is almost 1500.



3. THE NUMBER OF CHILDREN BY AGE AND SMOKER

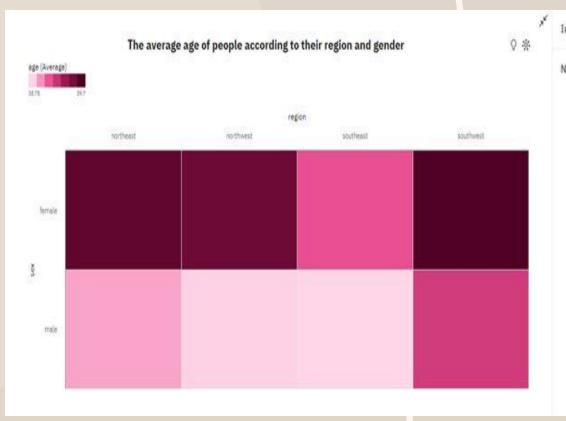
• Children is most unusual when age is 39,19, 18 And 58.



- Children is most unusual when the combinations.
- The age and smoker are 18 and no, 39 and no, 58 and no and 19 and no.

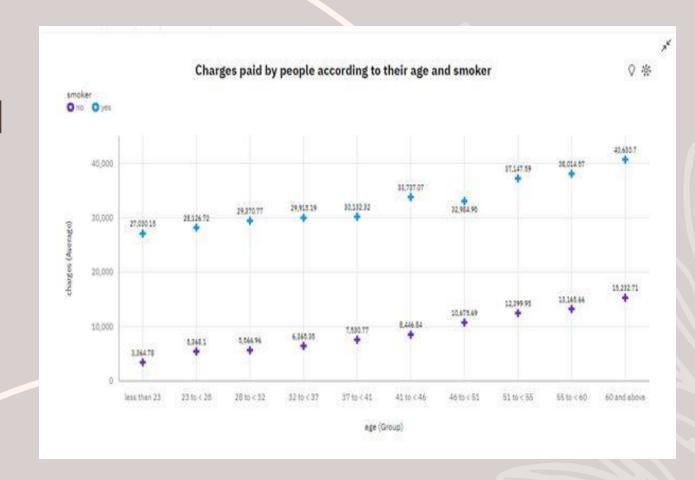
4. The average age of people according to their and gender

- Southeast is the most frequently occurring category of region with a count of 364 items with age values (27.2% of the total).
- Overall sexes and regions, the average of age is 39.21.



5. CHARGES PAID BY PEOPLE ACCORDING TO THEIR AGE AND SMOKER

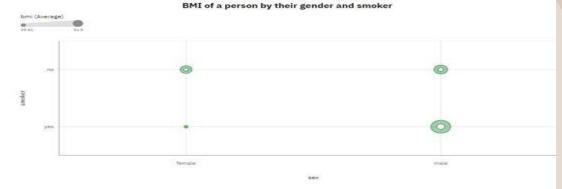
- Charges is unusually high when age(Group) is 60 and above.
- Charges is unusually high when the combination of age(Group) and smoker is 60 and above and Yes.



6.BMI of a person by their gender and smoker

• The total number of results for BMI, across all sexes is almost 1500.

BMI of a person by their gender and smoker



• The total number of results for smoker, across all sexes, is almost 1500.

7. Charges paid by people according to their gender, region and smoker

- Charges is unusually high when the combination of sex and region smoker is male and South east.
- Region smoker moderately affects charges (63%).



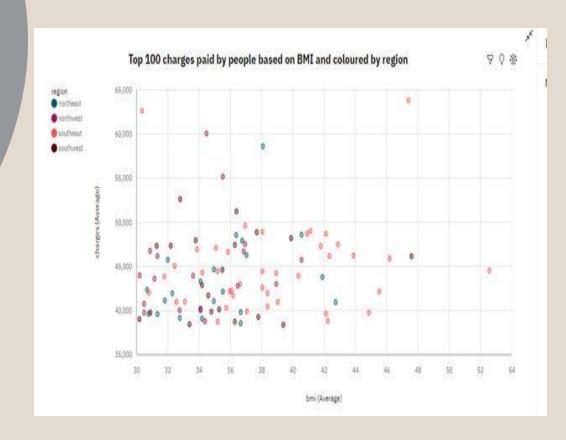
8. Average BMI of people by gender and region

- BMI is unusually high in southeast.
- Southeast is the most frequently occurring category of region with a count of 364 items with BMI value(27.2% of the total)



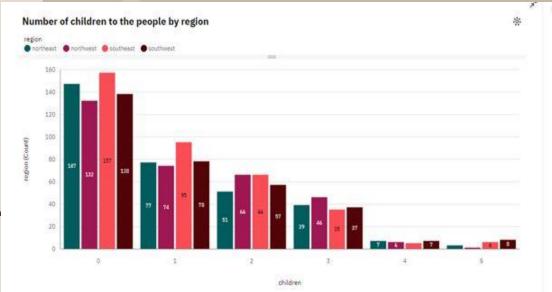
9.Top 100 Charges paid by people based on BMI and coloured by region

- SOUTHEAST IS THE MOST FREQUENTLY OCCURRING CATEGORY OF REGION WITH A COUNT OF 41 ITEMS WITH CHARGES VALUES(41% OF THE TOTAL).
- THE AVERAGE VALUES OF CHARGES RANGE FROM 0, OCCURRING IN SOUTHEAST, TO 99 IN SOUTHWEST



10. Number of children to the people by region

- Southeast is the most frequently occurring category of the region with a count of 364 items with region values (27.2% of the total).
- The total number of results for region, across all children, is almost 1500.



11. Charges paid by the people by region

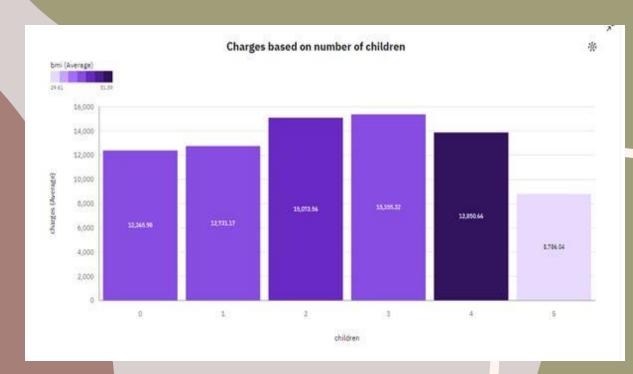
• Charges is unusually high when the combinations of region and smoker are southeast and yes, southwest and yes.

• Smoker moderately affects charges (62%)



12. Charges based on number of children

- Across all children the average of charges is over thirteen thousand.
- The overall number of results for BMI is almost 1500.



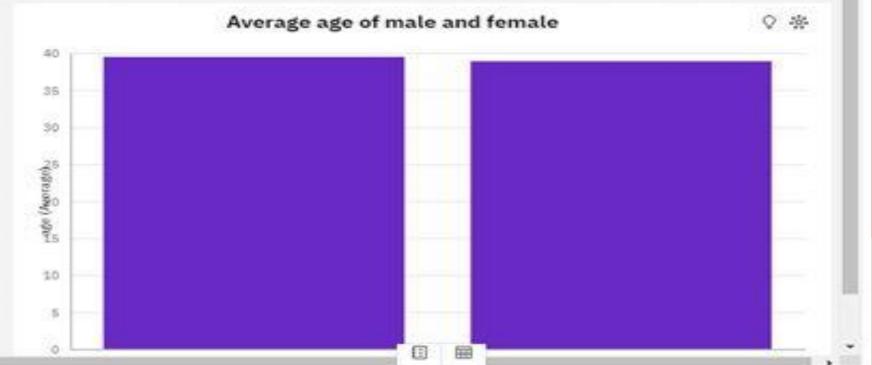


Medical Care Costs Story



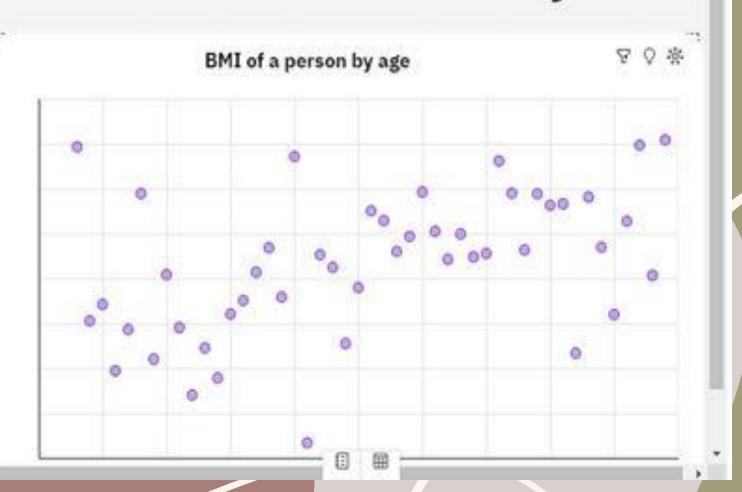
Medical Care Costs Story

- This graph mainly represents the average age of male and female and as we female average is higher.
- The average age of females is higher despite having a little bit less number of females in the over all dataset.



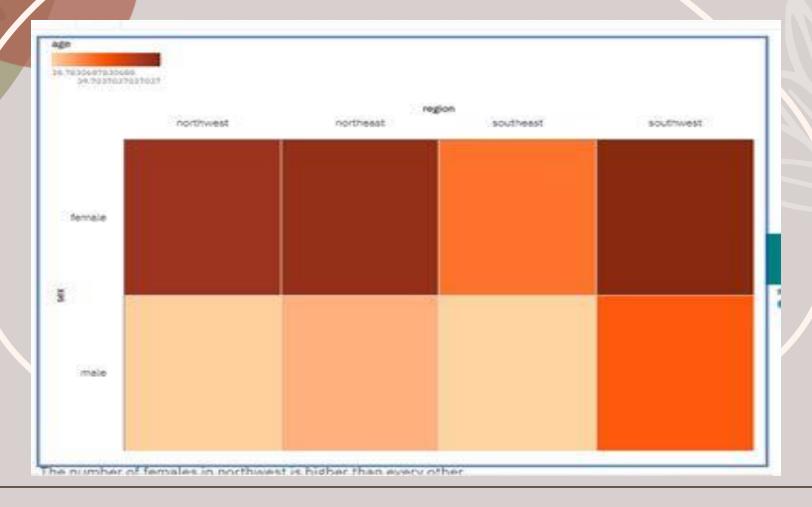
Medical Care Costs Story

- As the age is increasing the average BMI of persons is also increases. This means BMI and age are linearly proportional.
- The maximum value of BMI by is like in middle age group its little bit higher but is age increases the BMI value is getting decreased.



REPORT

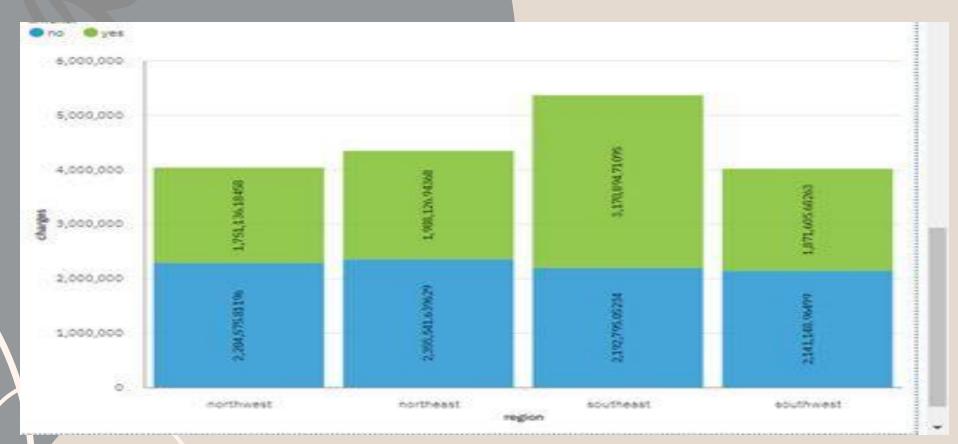
AVG AGE OF PERSON BASED ON REGION AND GENDER



Both Genders Chart based on the region



Different Charges by Peoples Genders and region





WEB INTEGRATION

http://127.0.0.1:5000/

https://drive.google.com/file/d/1cllSH8ZKmFsjcR4V

2GjoHk9bLK_0bhnr/view?usp=drivesdk

DASHBOARD LINK

https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard & amp;pathRef=.my_folders%2Fmedical_cost_Dashboard & amp;closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model0000018983124f26_00000000

Story Link

: <iframe src="https://us3.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_folders%2Fmedical_cost_story&closeWindowOnLastView=true&ui_appbar=flse&ui_navbar=false&shareMode=embedded&action=view&sceeld=model00000189879a3913_00000000&sceneTime=0" width="800" height="800" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

Report Link

https://us3.ca.analytics.ibm.com/bi/?pathRef=.my_folde rs%2FMedical_cost_Report&closeWindowOnLa stView=true&ui_appbar=false&ui_navbar=fal se&shareMode=embedded&action=edit

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THANK YOU