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1. # DSC520 Assignment: ASSIGNMENT 3
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# Date: 12/18/2022

4.

5. > library(ggplot2)

6. > theme\_set(theme\_minimal())

7.

8. > ## Load the `data/r4ds/heights.csv` to

9. > heights\_df <- read.csv("data/r4ds/heights.csv")

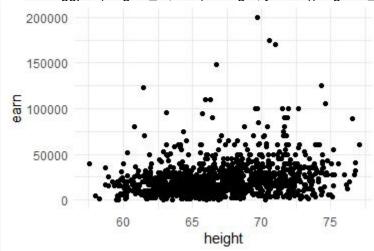
10.

11. > # https://ggplot2.tidyverse.org/reference/geom\_point.html

12. > ## Using `geom\_point()` create three scatterplots for

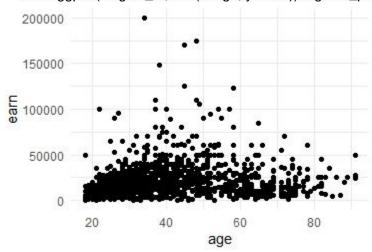
13. > ## `height` vs. `earn

14. > ggplot(heights\_df, aes(x=height, y=earn)) + geom\_point()



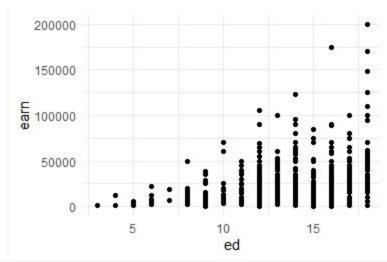
15. > ## `age` vs. `earn`

16. > ggplot(heights\_df, aes(x=age, y=earn)) + geom\_point()

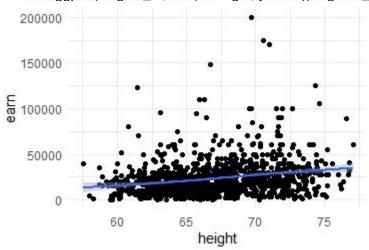


17. > ## 'ed' vs. 'earn'

18. > ggplot(heights\_df, aes(x=ed, y=earn)) + geom\_point()

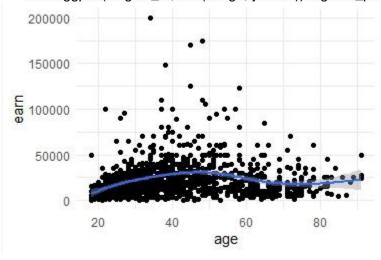


- 19. > ## Re-create the three scatterplots and add a regression trend line using
- 20. > ## the `geom\_smooth()` function 21. > ## `height` vs. `earn`
- 22. > ggplot(heights\_df, aes(x=height, y=earn)) + geom\_point() + geom\_smooth()



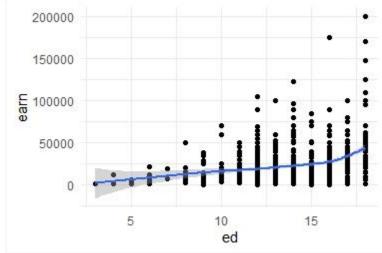
23. `> ## `age` vs. `earn`

24. > ggplot(heights\_df, aes(x=age, y=earn)) + geom\_point() + geom\_smooth()



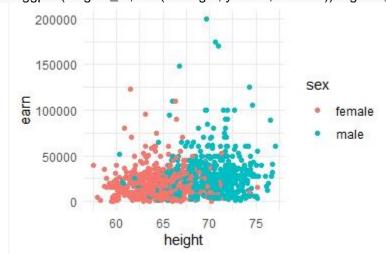
25. > ## `ed` vs. `earn

26. > ggplot(heights\_df, aes(x=ed, y=earn)) + geom\_point() + geom\_smooth()

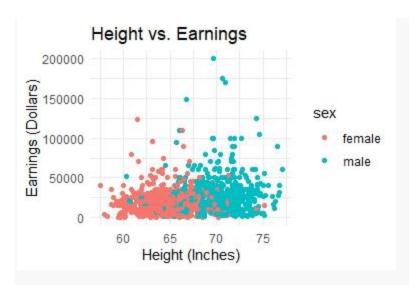


27. > ## Create a scatterplot of `height`` vs. `earn`. Use `sex` as the `col` (color) attribute

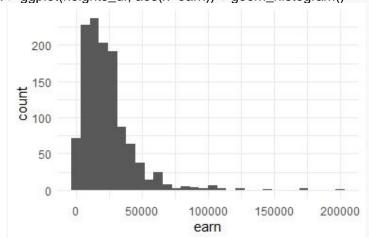
28. > ggplot(heights\_df, aes(x=height, y=earn, col=sex)) + geom\_point()



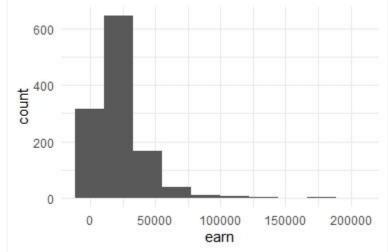
- 29. > ## Using `ggtitle()`, `xlab()`, and `ylab()` to add a title, x label, and y label to the previous plot
- 30. > ## Title: Height vs. Earnings
- 31. > ## X label: Height (Inches)
- 32. > ## Y Label: Earnings (Dollars)
- 33. > ggplot(heights\_df, aes(x=height, y=earn, col=sex)) + geom\_point() + ggtitle("Height vs. Earnings") + xlab("Height (Inches)") + ylab("Earnings (Dollars)")



- 34. > # https://ggplot2.tidyverse.org/reference/geom\_histogram.html
- 35. > ## Create a histogram of the `earn` variable using `geom\_histogram()`
- 36. > ggplot(heights\_df, aes(x=earn)) + geom\_histogram()



- 37. > ## Create a histogram of the `earn` variable using `geom\_histogram()`
- 38. > ## Use 10 bins
- 39. > ggplot(heights\_df, aes(x=earn)) + geom\_histogram(bins = 10)



- 40. > # https://ggplot2.tidyverse.org/reference/geom\_density.html 41. > ## Create a kernel density plot of `earn` using `geom\_density()` 42. > ggplot(heights\_df, aes(x=earn)) + geom\_density()

