* Carlo Lipizzi: Hello, Hello, everybody!

1:55

* Carlo Lipizzi: What are you? All This is the very last class

2:00

* Scott Guetens: doing well.

2:07

* Carlo Lipizzi: So let's wait another few minutes. So a few sessions. It's

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* Carlo Lipizzi: 628, so let's start the home time at 6. 30,

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* Carlo Lipizzi: so in theory you have a 5 min. But considering that the number is kind of a a limited.

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* Carlo Lipizzi: If you want to take more time for your presentation, you can definitely do that. The more time doesn't mean an hour, but can be 15 min instead of 5 min. So it's definitely up to you.

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* Carlo Lipizzi: We have a I don't know exactly how many of you did that

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* Carlo Lipizzi: easy teams, but I have a

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* Carlo Lipizzi: one team that presented last week, and that it's raised by the way and let's see

3:03

* Carlo Lipizzi: what is going to be today.

3:14

* Carlo Lipizzi: So just to have a a a quick start. Yeah. Yeah. Yeah, Good. Good. I just had a question. If I was in a group. Do we all need to submit the report

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* Dean Manomat: individually or just one person.

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* Carlo Lipizzi: Yeah, I mean, you know, if you can submit that the same exact report, if you have a a presentation or the submit that and the python that.

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* Dean Manomat: Okay. I thought it was just one, so I didn't submit it on Sunday, but I can submit it after.

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* Dean Manomat: Thank you.

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* Scott Guetens: Sorry, Professor, Another question did. Were we supposed to submit the presentation as well along with the the report and the code

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* Carlo Lipizzi: you don't have to.

4:00

* Carlo Lipizzi: It's generally what people do. But I mean, you don't have to.

4:03

* Scott Guetens: Okay, thanks.

4:08

* Carlo Lipizzi: I was. I was wondering if I could volunteer to go first by chance.

4:09

* Scott Guetens: Yeah, okay, that's fine. I can. I can.

4:22

* Scott Guetens: I can go if everyone's ready.

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* Carlo Lipizzi: Oh, okay, go ahead.

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* Carlo Lipizzi: That's what they've been? Asked Leona. Yeah.

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* Scott Guetens: Who Who is that?

4:38

* Leona Chia: Yeah, you and me? We're in the same team man.

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* Scott Guetens: What this is, Scott.

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* Scott Guetens: Oh, I thought it was being talking. I'm sorry. That's okay. I was like, Wait what I don't remember. Work with you. Okay, that makes sense.

4:47

* Scott Guetens: All right.

4:58

* Scott Guetens: Is everyone able to see my screen?

5:01

* Carlo Lipizzi: Yep.

5:04

* Scott Guetens: Let me put this up.

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* Scott Guetens: and can everyone see the Powerpoint?

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* Carlo Lipizzi: Yep.

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* Scott Guetens: All right. So i'm gonna go ahead and get started. So

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* Scott Guetens: I

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* Scott Guetens: did my final project on the publicly available Federal aviation administration's digital obstacle file.

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* Scott Guetens: and I ran a data analysis on it with my Python script that I wrote. So the digital obstacle file is a a do f dot d at file that the faa puts out every 56 days, and it gets updated with obstacle data, and when I say obstacle. I'll, I'll explain what that means as I go forward.

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* Scott Guetens: so

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* Scott Guetens: the contents of my my project. My report here is that the first slide will be the project goals and the introduction to the data obstacle file.

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* Scott Guetens: I'll go into a little bit about my methodology for data analysis.

6:09

* Scott Guetens: I'll show you some of my results that I came from that I came upon using my script, and then some conclusions that I came to in this project.

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* Scott Guetens: So the goals of my project. My goal was to improve the safety of the airspace for air traffic control systems and pilots. By analyzing this

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* Scott Guetens: data digital obstacle for obstacle file that the Faa puts out to kind of get some ideas about where these obstacles are are primarily located, some of the more common obstacles, and then the less common obstacles

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* Scott Guetens: what the highest obstacles! And when I say Hi, I mean height above ground level, so they they say agl, which is above ground level, and that height

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* Scott Guetens: I I I wanted to see, like, what are some of the highest obstacles that they record data on. I thought it was pretty interesting, given what's been on the news the last couple of months, what actually was the highest. But we'll get to that, and then I also wanted to see if there was a way I could build an interactive map

7:06

* Scott Guetens: of all these obstacles. The conclusion I came to was was not really but i'll I'll get to that as well.

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* Scott Guetens: So I just also want to mention I I. So I analyzed this data set to ab same these insights and and to reach this goal.

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* Scott Guetens: all right. So some of the methodologies I used in my program for data analysis.

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* Scott Guetens: So some ways I manipulated the data. This data set consist of over 550,000 data points. So it was a lot of data to sort through. So some of the methodologies I use for grouping, categorizing and sorting the data. I calculated some summary statistics.

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* Scott Guetens: I created some visualizations.

8:07

* Scott Guetens: I did some data, manipulations and processing, and I did try to do a correlation

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* Scott Guetens: analysis which didn't really come to much. You can see the result over here. I tried to do a correlation analysis between the latitude and longitude, and then the

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* Scott Guetens: the

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* Scott Guetens: above ground level. Basically how tall it is, how high the object the obstacle is. But I came to find that there was not really a correlation based upon where the obstacles located and the height of the object.

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* Scott Guetens: So

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* Scott Guetens: sorry my screen froze.

8:50

* Scott Guetens: Can you hear me cool? Okay. Sorry. So here's my first set of results that I got. So some

8:54

* Scott Guetens: things I calculated in this data were the largest item. The the tallest item above ground level was in in this data set that was recorded, which is mostly contained.

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* Scott Guetens: contains fa reported data through studies and things like that. So the the the highest item that was, there was a balloon that was recorded at 14,947 feet.

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* Scott Guetens: The lowest item was a fence was at 0 feet, but it was interesting that they're recording

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* Scott Guetens: offense. I also don't understand how it's 0 feet tall.

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* Scott Guetens: But some interesting data the average height above ground level was a 164.6 feet

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* Scott Guetens: so, and then the Median height above ground level. Of all the data was 86 feet and to the right here, you can see I made an interesting box plot of all of the different types of

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* Scott Guetens: data points, so I I took the obstacle name.

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* Scott Guetens: which was in a specific field in the data. And I yeah

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* Scott Guetens: calculated how high each one it or I, I, I use the above ground level data point to see, basically like, what is this spread the distribution of

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* Scott Guetens: of how I and how low each individual object is?

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* Scott Guetens: And you can see there's around 19 different types of objects that are reported. Some of them are pretty general terms, like one just says, Plant can't really tell exactly what type of plant that is, Hank. I'm not really sure. Make water tank.

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* Scott Guetens: but there were only 20 used. And, like I said, there were we over 50,000 or over 500,000 data points so clearly they follow some sort of a methodology or system there. But anyway, you could see how broadly spread the data is in this box plot.

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* Scott Guetens: and interestingly, and it's it's. It went so far as it it went above my

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* Scott Guetens: above my

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* Scott Guetens: graph here, but it recorded the balloon as as way higher than the you can kind of see this cluster of all of the other objects, and how high they are. So that was definitely an outlier that I struggled to deal with, and and I actually think it broke my plot a little bit.

11:08

* Scott Guetens: But let me on here.

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* Scott Guetens: So some more results I came to. So the States, with the most obstacles, are some of the bigger States, Texas, California, Florida, Illinois, and Kansas over here on the left.

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* Scott Guetens: and then you can see how many obstacles each of those locations have. I'd also like to point out that this data set also includes non some non-us data

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* Scott Guetens: which was I? I didn't really wasn't really able to calculate in here with the States, because there are 2 different fields as you can see on the bottom, right city or state, but like over here you have the country, which is Puerto Rico

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* Scott Guetens: and it those data points are calculated as well, because they, the Faa still cares about those for all surrounding United States flights.

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* Scott Guetens: And then over here you see the States with the least amount of

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* Scott Guetens: data points or of obstacles recorded. That's DC. Delaware, or Dial in Vermont and Hawaii.

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* Scott Guetens: So then I broke it down to cities, and I analyze the the cities with the most at least so you can see Junction City. It occurred a lot in this

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* Scott Guetens: in this data. I didn't know what Jackson City was, so I looked it up as I was running my report, and I realized that Junction City is just a really common name for a city. And so

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* Scott Guetens: when I built this piece of the code. I actually found a bug

13:01

* Scott Guetens: where it was not so I should have had a check for what state the city was in. But Instead, I just got all of the data points for all of the town's name, Junction City.

13:04

* Scott Guetens: and that all added up to be greater than some of the bigger areas that you can see below that are actual, just single-name cities.

13:16

* Scott Guetens: So then you have Miami, San Diego Columbus Chicago. Pretty big cities makes a lot of sense.

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* Scott Guetens: and then it is with the least. I just thought it was interesting to put a couple of them in there. There were a bunch of cities with one obstacle when I was running through it. But

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* Scott Guetens: these were just the the top ones on the list that I saw. And then in the top right? You can see some really interesting data on the most common types of obstacles that exist. So you have the by far

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* Scott Guetens: largest amount of obstacles are towers, and I the hour can mean a lot of things. And I I, in doing some research about the data set itself. I learned that the next line is also our but it's a transmission line specific tower, which is

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* Scott Guetens: like a transmission line for, like, I think, cell phone towers or something. I was reading.

14:10

* Scott Guetens: But so the top 2 are really towers, all different kinds of towers, whatever that means generally.

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* Scott Guetens: And then you have polls. I was really surprised to see windmills in there. There's a lot of windmills. I found that really interesting, because I didn't know there were still so many windmills around the country. But apparently that's something that general aviation cares a lot about. So there's 76,000 of them record in this data set

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* Scott Guetens: buildings makes a lot of sense I actually would have expected that to be like the most common.

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* Scott Guetens: But you could see there it only 58,000,

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* Scott Guetens: and then the 5 least common that they recorded. You can see that there is only one gate wind indicator, whatever that means. Only one ship. I don't understand why it only recorded one ship

14:49

* Scott Guetens: like, I said, this is one of the limitations I'll get to that. But this is one of the limitations of the data set. This is not all encompassing. It's only what the faa has. It is as it's at its disposal in terms of the studies they conduct, and things like that.

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* Scott Guetens: I just make sure i'm not going over time.

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* Scott Guetens: and then

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* Scott Guetens: heat cool system again. I'm not sure what that means. And then, Arch, I was picturing like the St. Louis arch things like that.

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* Scott Guetens: And then on the bottom, right here you can see the 5 highest and 5 lowest obstacles that they had. The 5 highest are all balloons. So that's what I was referring to earlier, when I was

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* Scott Guetens: discussing what was what has been in the news the past couple of weeks. I I imagine

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* Scott Guetens: they've updated this data set because I don't know if I mentioned every 56 days they update it.

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* Scott Guetens: and I imagine that they started really tracking these balloons after that news cycle

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* Scott Guetens: going forward. This was just an interesting thing. I did where I I built a scatter plot of the latitude, longitude, decimal conversion, decimal, converted data points.

16:00

* Scott Guetens: and what it did was draw a pretty cool map of the United States. So I thought that was interesting. Not too much mathematical value here, but I thought it was a pretty cool thing that I did where you can really see in it

16:12

* Carlo Lipizzi: we can. Up to you. We we can see you, but we cannot hear you anymore.

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* Carlo Lipizzi: Scott.

16:36

* Carlo Lipizzi: Scott. we lost You

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* Carlo Lipizzi: got

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* Carlo Lipizzi: okay, and let's wait a moment for Scott to come back.

17:15

* Carlo Lipizzi: I'm becoming a an expert on aviation. So

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* Carlo Lipizzi: that's a sec. On the

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* Carlo Lipizzi: presentation on the aviation data. Then I had the student master student doing her

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* Carlo Lipizzi: on a so slowly but surely, and becoming an expert in aviation.

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* Carlo Lipizzi: Okay. So

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* Carlo Lipizzi: let's wait another few seconds, and then, if

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* Carlo Lipizzi: Scott cannot join back.

17:59

* Carlo Lipizzi: we will go to the next.

18:02

* Carlo Lipizzi: In the meantime, Who? What? To be the next?

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* Carlo Lipizzi: I mean, based on alphabetical order, I would say

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* Carlo Lipizzi: umbrella would be the first.

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* Carlo Lipizzi: Are you ready?

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* Carlo Lipizzi: Okay, I mean, I'm: sorry that your first name a last name. You are with the first.

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* Carlo Lipizzi: Okay, so

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* Carlo Lipizzi: let's do that. So let's go ahead.

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* April Amaral: Okay. let me.

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* Carlo Lipizzi: Oh, hold on.

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* Carlo Lipizzi: Scott.

19:00

* Scott Guetens: Hi, Professor! Sorry. My laptop totally froze.

19:01

* Carlo Lipizzi: Okay, I'll get it back. Do you want someone else to do the presentation while you will fix it up.

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* Scott Guetens: So where where did it cut off? I I don't even know with the map of us. So

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* Scott Guetens: yeah, I am reselling my laptop. Now it'll just be a minute. But

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* Scott Guetens: yes, so yeah, someone else can go if they want. Well, way. I okay, sounds good. I've been looking glad. Sorry about that.

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* Carlo Lipizzi: Yep.

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* Carlo Lipizzi: So

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* April Amaral: yeah, sorry. Let me share the screen.

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* April Amaral: Okay, I'm: we're sharing. Okay.

20:05

* April Amaral: So I did my project on the official world golf ranking

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* website.

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* April Amaral: And okay. So here's just a little overview of what my project was. I'll give you a little background

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* April Amaral: on the official world. Golf ranking website what it is, and how they

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* April Amaral: do their rankings.

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* April Amaral: And then i'll talk about my analysis of the data set, which was specifically for week 14, which is the weekend ending on April ninth, 2023, and then i'll talk about my conclusions from my analysis.

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* April Amaral: Okay. So what is owdr it's a system of rating the performance levels of male professional golfers all around the world.

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* April Amaral: The rankings is based on a player's position in individual tournaments or a rolling of 2 year period.

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* April Amaral: The the website produces new rankings every week.

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* April Amaral: and the calculate the rankings by dividing the toll points My number of events played in this average. Then whoever has the highest average that is

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* April Amaral: at the top of the ranking, and it goes highest, lowest.

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* April Amaral: So in my analysis I took this data set and I

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* April Amaral: filtered it, and we only use and manipulated to only use specific columns

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* April Amaral: of the data set. So I looked up the I'll i'll. I'll show you in a minute, when which columns I picked. But

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* April Amaral: I used to find the top 10 players in the ranking the top.

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* April Amaral: the bottom 10 players in the ranking the players who have increased their rank since the end of 2,022 the players of all who have decreased their rank, and who have not changed the rank since the end of 2,022.

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* April Amaral: I also created a loop for a person to select a country. And the

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* April Amaral: it will display the top 10 players from the selected country.

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* April Amaral: I also created some charts for the top 10 countries with the most players.

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* April Amaral: and I also have a chart for number of events played per percentage of players. So here we go. So here is

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* April Amaral: what came up for the top and bottom, 10 for the ranking.

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* April Amaral: So I use the columns of what their current rank is the rank of

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* April Amaral: the end of 2022 which country. They're in the player's name. Their total points and number of events.

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* April Amaral: And

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* April Amaral: so here we have

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* April Amaral: the rings that have changed since 2022 so the top here we have.

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* April Amaral: who has increased their rank.

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* April Amaral: Since the end of 2,022, we have about 994

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* April Amaral: players and then who's decreased their ranks in Santo, 2022. We have 7,399,

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* April Amaral: and who has the same rank, is just this short list here.

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* April Amaral: And

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* April Amaral: okay, so like, I said, I created a loop for a person to select a country and the top 10 players from that country. So here I have an example of France and the United States.

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* April Amaral: It gives all that information. The players name their points.

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* April Amaral: I also have Italy and Japan. and I also another example for Chile.

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* April Amaral: and then I have a example here If you selected a country that's not in the list, would say, no players found. and then you just hit exit to and the loop.

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* April Amaral: And then, okay. So here is my chart for the top countries with the most players.

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* April Amaral: and. as you can see, the United States has the most.

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* April Amaral: And here is my hi chart for number of of events played by percentage of players. so

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* April Amaral: based off of the data set. So the the highest ranking right it is by the most events played, so the highest would be probably in the 3.9%,

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* April Amaral: 4.9% in the most are in the They've only played one to 9 events.

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* April Amaral: Okay. And so what can I conclude from this? I think this would be useful for gambling? I personally don't

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* April Amaral: gamble, but I feel like this Information wouldn't be useful for people that do that sort of thing, and and this would be helpful for upcoming sponsorships sponsors who wanna

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* April Amaral: see who who is better

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* April Amaral: playing, and also for a tournament participation as well. And this is also would be good for players to view their competition, even though you know golf is a individual sport. It's good to see how other people are playing.

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* April Amaral: and that is it? That's all I got any questions.

26:07

* Carlo Lipizzi: Okay, I think it's a it's it's a good job. So are you a golf player, or I would Just I am. Well, I just picked it up. So i'm still be a beginner. Okay, all right, All right. Are you enjoying? I do enjoy it. Yes.

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* Carlo Lipizzi: okay.

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* Carlo Lipizzi: I mean, i'm a runner and don't do many other sports, and to me golf

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* Carlo Lipizzi: it's kind of a question marker just to say with your chart. But I mean that that's me.

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* Carlo Lipizzi: anyway. Okay, thanks a lot. So let's go back to

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* Scott Guetens: Yep. I am ready to go. Hopefully. My laptop doesn't break again.

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* Scott Guetens: I need to look a new laptop clearly

27:02

* Scott Guetens: let me share my screen.

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* So I think

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* Scott Guetens: I got to the point where I was on the the scatter plot

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* just click through.

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* Scott Guetens: So yeah, I was just pointing out that I I made this interesting scatter plot, like I said, not really much mathematical value here for analysis purposes, but I thought it was interesting how, when I plotted the data on like an xy axis

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* Scott Guetens: of the latitude and longitude decimal values, that it basically drew a map of the us, because you can see how prominent these

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* Scott Guetens: data points are throughout the Us. You could see Mexico. You could see Canada, Alaska pretty clearly.

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* Scott Guetens: So I just thought that was pretty interesting.

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* Scott Guetens: and in conclusion, so the goal of my study was to improve the safety of the airspace for air traffic control systems and pilots.

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* Scott Guetens: And so I used various data analysis strategies to

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* Scott Guetens: understand this data, such as summary statistics, data, visualization, manipulation, correlation, and categorization

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* and a few limitations that I faced while and analyzing this data was the quality of the data as you saw in my box plot. Outliers were really a challenge for me for

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* figuring out how to get them out of the box plot. It got it to a point where I wasn't able to to exclude it, which really skewed my data.

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* Scott Guetens: That was just a the limitation of my ability in python, I think. But then the accuracy of the data was also a limitation. So one of the fields, in the and in the data file was the accuracy of each data point like how well the fa knows

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* Scott Guetens: that that object is where they think it is.

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* Scott Guetens: And that was I was trying to find a way to incorporate that into my analysis. But that started to get really complicated. But so that was more of a limitation of of my understanding of this really complex data file.

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* Scott Guetens: And then, finally, the generalization, like I mentioned previously, this is an analysis just on this one fairly large data file, but it's obviously not all encompassing of of any other similar data sets

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* Scott Guetens: so overall the Df. The it. Data set provides the valuable insights into the aerial obstacles monitored by the Faa, and can be used to enhance the safety of the airspace.

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* Scott Guetens: This project was really interesting for me because I actually work on the

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* Scott Guetens: air traffic control system that the air traffic controllers use the software system to direct all and route air traffic above 10,000 feet. So I thought this would be interesting to see

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* Scott Guetens: like.

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* Scott Guetens: why do we kind of distribute the airspace into different different heights.

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* Scott Guetens: So I I use that. And I used my experience for my job to kind of build this data analysis, and and I found it really interesting if it's all right. If I have another quick minute. I want to show

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* Scott Guetens: the interactive map that I built as well with my python program. I don't know if you guys are able to see this, it might take a second to load.

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* Scott Guetens: Can you see that?

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* Carlo Lipizzi: Not yet?

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* Scott Guetens: Okay, let me know if it's visible.

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* Carlo Lipizzi: So once you load that, I think, let let me give you a couple of feedback one is on when you show the data by State, and Cds

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* Carlo Lipizzi: obviously states that are big are cities that are bigger. They have more objects. So it would be

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* more of an indication to normalize the numbers by the size of the state of speed.

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* Carlo Lipizzi: because at that point you may have a more of an index of sort of a risk that you have in that particular again city or a state.

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* Carlo Lipizzi: The other thing that it would be interesting to do is to

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* Carlo Lipizzi: find the sort of a a correlation between objects and accidents.

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* Carlo Lipizzi: So, using another data set with accidents hopefully, they are jail located at the At the point. You can see that we have the objects that are more at risk.

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* Carlo Lipizzi: or it can be more a risk for accidents, because not necessarily just a model of height. So it could be the shape. It could be all other things. So that's something I mean

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* Carlo Lipizzi: I not criticizing what you do, but it will be, and what's next for the for the project that that you did.

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* Scott Guetens: Yeah, I I definitely agree. It's interesting because one of the data points with I thought which I thought was a little strange to include, but it's it's pretty cool that they do is you can actually they They indicate the color of the object in the data set. They have, like they have like a group of of points for that, and that's one of the fields.

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* Scott Guetens: and and like a marker so so that

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* Scott Guetens: would go probably hand in hand with what you're talking about. Like if I can find like an an accident data set. I know the majority of accidents in in the error occur typically from like a birds like bird strikes.

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* Scott Guetens: But you know, maybe there's still some correlation that that'd be interesting to look at, for sure.

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* Scott Guetens: Yeah.

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* Carlo Lipizzi: So but

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* Scott Guetens: yeah, so so real quick. I just wanted to show I used the Api called folium. I don't know if you're familiar with it, to to try to plot all these data points. So I tried to do it with the full data set. It was not possible. The it was it. Basically what it does is it builds an an HTML file

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* Scott Guetens: that calls in a bunch of like supporting mapping files. And I built this interactive

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* Scott Guetens: data's data set. But I was only able. I had to kinda

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* Scott Guetens: make the data set a little bit smaller. I had to manipulate it, so I I focused on everything higher than a 10, everything higher than

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* Scott Guetens: 1,000 feet.

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* Scott Guetens: So the vast majority of the data is is short, is lower than 10,000 feet, so you can see there's still quite a bit of of pieces of data. You can see. You know we talked about Texas. There's quite a piece, quite a few pieces in text, but just like you said it's a big state.

34:00

* Scott Guetens: you know big cities in that state. You can see like where a lot of the big ones are.

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* Scott Guetens: But I just thought this was an interesting piece that I oh. spent a bit of time on that. I I thought it was pretty cool. I wanted to share

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* Carlo Lipizzi: Good job. Okay.

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* Scott Guetens: Thank you.

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* Carlo Lipizzi: All right. So following the

34:38

* Carlo Lipizzi: are you okay? Presenting?

34:44

* Leona Chia: Yes, sorry. I was trying to click that. Yeah, I can let me

34:50

* Leona Chia: open

34:59

* Leona Chia: my presentation.

35:01

* Leona Chia: I don't know why I didn't do that earlier. My bad

35:06

* Leona Chia: see shared screen.

35:14

* Leona Chia: Okay, let me know. Once you guys can see that.

35:22

* Carlo Lipizzi: Yup, we can stay it.

35:26

* Dean Manomat: Yeah.

35:27

* Leona Chia: Okay. So I just you can see it still.

35:33

* Carlo Lipizzi: Yep. Yep.

35:36

* Leona Chia: Okay. I just use your template that you sent out as an example. So

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* Leona Chia: fancy ones.

35:44

* Leona Chia: anyway. So we did our project. Me, Dean and Nina.

35:46

* Leona Chia: on public and media perception of mass shooting.

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* Leona Chia: Let me give you some background.

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* Leona Chia: Okay, so

36:01

* Leona Chia: obviously within the last month there was a lot of media attention on, like mass shooting it. It just kind of feels like it's been increasing a lot. We wanted to make sure that

36:02

* Leona Chia: it was real, I guess real. Or was it like sensationalized by the media? We didn't do we didn't correlate this to mental health or gun loss, As you can see, the assumptions were that, as you see in the screen, just because

36:17

* Leona Chia: the scope is quite big.

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* Leona Chia: But anyway. so the project will was to investigate the public and media perception. So, using subjectivity instead of, you know, like I said, mental work on law, mental state or gun loss

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* Leona Chia: to to a as the cause of mass shooting, or to find out the cause when analyzing the rate of number of mass shooting. We were limited to what's already out there need to obviously normalize some data while balancing

36:50

* Leona Chia: relevant view viewpoints on the topic. So there's a lot of

37:04

* Leona Chia: noise and or data in the media attention, obviously for mass shooting. So we had to deal with a lot of, I guess, combing through articles dealing with subjective discussion data also can be challenging.

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* Leona Chia: So any one.

37:29

* Leona Chia: This is understanding. I think that's Dean.

37:32

* Dean Manomat: Yeah. So

37:37

* Dean Manomat: the problem to solve the problem to find the root cause of the mass shooting. We identified Eric.

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* so we use, I believe, 5 different sources and reports from each stores

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* Dean Manomat: to look through what they had to say about the mass shootings and what their reasoning is behind them. So.

37:58

* Dean Manomat: using the public forums we

38:06

* Dean Manomat: analyzed, we we use analysis and method, planning

38:09

* Dean Manomat: data, extraction, mythology

38:13

* Dean Manomat: developed visualizations which we will see later in the presentation. And then we evaluated it in terms of interpretations.

38:16

* Leona Chia: So in the data understanding again. So we have to collect data just to see the trends if it was actually growing or increasing. Or, again, based on media, was it just sensationalized? So we grab some data and a a Csv file.

38:26

* Leona Chia: and made a graph from that which I will show you way later, because all the attachment which is in the end. anyway. And then we have to understand some of the outliers so based on the excel that we have

38:44

* Leona Chia: the baseline of what was considered mass shooting. Was

38:59

* Leona Chia: it it changed? Basically, so Federal was started in at 4 as as the definition for

39:05

* Leona Chia: mass shooting. But then, in 2,013 they actually moved it to 3. So you can see a

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* Leona Chia: quite a big spike from from those 2 dates.

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* Leona Chia: and it.

39:24

* Leona Chia: anyway. So from the articles we grab

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* Leona Chia: Conservative, leading Liberal leading, and then read it as kind of the neutral round, just to see where they're going, like where it

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* Leona Chia: it was headed to for root cause. Obviously, with this topic, guns are going to be prevalent, and some other

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* Leona Chia: words are going to be prevalent. So we kind of have to understand the context. So we had to use Bikerams just to get those

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* Leona Chia: right.

39:57

* Leona Chia: And then here we have to prepare a few like I said this Csv file. We need grass from that.

39:59

* Leona Chia: Another thing that we had to do, because, like New York Times and Cnn, they're always ever changing. They're constantly updating, and some of them have policies to kinda

40:05

* Leona Chia: stop people from scraping data. So I what I did was on those I took

40:16

* Leona Chia: the content and just copy and paste and put into a txt file, and then some like fast. We were able to do that just like we did in the homework, and then red it. We had to do a little bit more. We actually had to be a developer level, and then we had to create an app

40:24

* Leona Chia: for it. And then after that, then we can scrape the comments from a certain post.

40:42

* Leona Chia: So Nina or Dean.

40:53

* Mina Shafik: No, I got it so

40:56

* Mina Shafik: like they said we extracted all the data through our graph shows the result of mass shootings.

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* Mina Shafik: We went in looking at this neutral, so we didn't go in trying to face one side or the other.

41:04

* Mina Shafik: We wanted some of the things that we popped up. Is is there a greater new need for solution for a solution?

41:11

* Mina Shafik: So what were the keywords that people were saying, what are the causes? Was it mental health, gun, control, etc., etc.?

41:18

* Mina Shafik: So we use natural language pressing through python to take the sediment values of the discussion. Again, we look for common words and diagrams for every single one of the data sets

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* Mina Shafik: we created data visualization. This is the sorry

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* Mina Shafik: we have.

41:44

* Mina Shafik: My head's not there Today

41:45

* Leona Chia: We created a word clouds to run it to run it through. We also created the sentiment analysis, for every single one of the websites ran it through

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* Mina Shafik: for any of the keywords what was believed to be the issue.

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* Mina Shafik: and then we compared all the different opinions from each one.

42:03

* Mina Shafik: and what was similar about them, to try and fix and see what the issue that they're presenting. Again, we did not go in

42:09

* Mina Shafik: with into this project looking for a specific cause. You know

42:18

* Mina Shafik: we go to next slide.

42:25

* Leona Chia: I'm going to actually move to the

42:30

* Leona Chia: the work. We cloud the attachments that way, we can talk about it then.

42:34

* Leona Chia: so really quick, so obviously it has been increasing like I said, the trend line from 2,013. You can see the big spike afterwards. The trend line is going up, and just use a linear interpolation of those. And then again.

42:40

* Leona Chia: It looks like it's going to be normalizing because of Covid. You can see that spiked out from 2020 to 2021. Then it went back up, and it looks almost like it's normalizing. But, in fact, the average yearly number of M shooting actually has increased

42:55

* Mina Shafik: and sorry. One more thing, and actually something that we brought up during this point of the day is for a majority of that time people were

43:12

* Mina Shafik: quarantine people were isolated.

43:21

* Mina Shafik: so that could have been one of the causes. There is also less people out on the streets. If anybody here drives

43:24

* Mina Shafik: your commute to anywhere during Covid, if you were an essential worker was

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* Mina Shafik: 10 times faster.

43:36

* Leona Chia: Alright, so this is for the more liberal leaning like whoever did cnn

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* Leona Chia: and go.

43:51

* Dean Manomat: Yeah, I so I took a look at this word cloud for the Cnn article, and, as you can see, gone firearm violence. Those are like the biggest words, and the Cnn article is definitely a more liberal leaning article where they kind of focus more on

43:52

* Dean Manomat: like regulation and gun control kind of things being a solution for

44:12

* Dean Manomat: all these shootings.

44:18

* Leona Chia: you know.

44:29

* Mina Shafik: So. So I ran, for I ran the one for Fox, which we assumed was

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* Mina Shafik: going to be about what it was.

44:37

* Mina Shafik: So again some of the biggest words were gone, Government antidepressant. But the surprising thing about the about Fox was it actually lean more into

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* Mina Shafik: mental health, awareness for gun control?

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* Mina Shafik: Not so much as to

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* Mina Shafik: that, the guns are the violence itself. Again we assume that.

45:00

* Mina Shafik: And yeah it was it. It ran through exactly how we expected it. To

45:06

* Mina Shafik: none of the

45:12

* Mina Shafik: articles went against what we thought they were going to

45:14

* Leona Chia: Oops. Sorry.

45:21

* Leona Chia: and then the last one should be reddit. So this one was more neutral, and dean you wanna

45:22

* Dean Manomat: the way they kind of saw it was kind of from the point of view from it seemed like actual, normal people, almost where everyone had a different kind of opinion, because I guess Cnn and Fox are all

45:37

* Dean Manomat: news sources, and they have certain biases that they're going for. But Reddit seem to be more of like just everyone in the community putting out their thoughts and everything. So it kind of was a mix of the 2

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* Leona Chia: which wasn't surprising. So, anyway. So the next time we, if we would do this for future improvement, is definitely to expand the sources

46:06

* Leona Chia: using existing peer reviewed

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* Leona Chia: and then obviously normalizing the metrics. So population versus total gun control, maybe in the State.

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* Leona Chia: actually

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* Leona Chia: evaluating and accept sorry, assessing mass shooting instances, not just the overall sense of what each

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* Leona Chia: news channel. This outlook is, but more of a comparison between each one.

46:37

* Leona Chia: Yeah.

46:45

* Leona Chia: that's pretty much all we did.

46:45

* Carlo Lipizzi: Okay, sounds great. So what you did was basically

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* Carlo Lipizzi: reading the news in a different way. So, reading the news, analyzing it.

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* Carlo Lipizzi: we are more and more on reading the news by the titles. So that's exactly the opposite of that. So not just reading the news, but digging into it.

47:04

* Carlo Lipizzi: So what was your experience? So

47:17

* Leona Chia: for me? When I did it. I was honestly not surprised. Obviously, with, you know, like gun control and mental illness from from both sides. The thing that surprised me is how much they focus on certain details. So for me, you know.

47:25

* Leona Chia: i'm not trying to be polite political here, but a lot of the Times. Yes, I know gun control is a a a sensitive subject. But to me, a lot of times when we, when we speak to like liberal leaming

47:43

* Leona Chia: views.

47:57

* Leona Chia: Yes, gun controls the thing, but they also talk about mental illness. But in a lot of the articles that we read it was very few and far between of just having mental illness being one of the topics that they bring bring up. It was more towards it's, guns, guns, and more guns.

47:58

* Leona Chia: whereas when we looked at

48:16

* Leona Chia: the conservative leaning of views. Yes, they talk. They are very defensive about their guns, as we kinda all mostly know. But what surprised me is how much of the mental illness that they bring up. But when you read the title it definitely doesn't, say that.

48:18

* Mina Shafik: Yeah, I actually I was just saying I I agree with her.

48:39

* Mina Shafik: Didn't expect the more conservative side to be so much more focused on mental health

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* Mina Shafik: and the Liberal side. I guess

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* Mina Shafik: when we were going through it. We expected the liberal side to be more mental health. not cold. like mental health, and

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* Mina Shafik: the Conservative side to be more.

49:05

* Mina Shafik: I guess. Gun awareness, if if you know.

49:08

* Mina Shafik: but it wasn't like that at all. The thing that surprised me the most was reddit.

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* Mina Shafik: because I feel like Reddit is where everybody goes to

49:18

* Mina Shafik: voice their opinion.

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* Mina Shafik: and I thought it was going to be very liberal. But it wasn't.

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* Carlo Lipizzi: Yeah. I mean that the the news they have an agenda. So whatever is the agenda, but it's not necessarily the readers agenda

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* Carlo Lipizzi: being able to dig into it. It's really essential. Now I think, for a second, and think in terms of the next generation of a chat

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* Carlo Lipizzi: erez agmoni, when people would use a bots like that to go into the news and getting a a distilled version of the news 150

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* Carlo Lipizzi: that is exactly the opposite. So, unfortunately, I think that, like that will happen, meaning that we will be more and more manipulated by whoever is going to do this, somebody for us.

50:10

* Carlo Lipizzi: So my opinion is really important. So to create our own opinions. So, whatever it is, I mean.

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* Carlo Lipizzi: I don't have any bias on that, but only if we create a deep rooted opinion, then we can really, I mean contribute to to the calls or the solving problems. So when problems with happen, and I mean I must. Shooting is a problem

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* that needs to be fixed, because that's a real. So.

50:59

* Carlo Lipizzi: anyway. Do you wanna want something?

51:05

* Leona Chia: No, I just couldn't agree more.

51:08

* Carlo Lipizzi: Okay, all right. So we have 2 more, Kyle.

51:13

* Carlo Lipizzi: It is not here. Thomas

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* Carlo Lipizzi: Thomas.

51:32

* Thomas Poklikuha: hey? Sorry about that. Yes, I I can present. Give me 1 s.

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* Carlo Lipizzi: Yep.

51:42

* Thomas Poklikuha: Okay.

51:53

* Thomas Poklikuha: So what I did for my project is I wanted to analyze

51:54

* Thomas Poklikuha: the Nda draft combined data to Nba draft success as I grew up as an athlete, so I wanted to kind of dive into the field of athletics and see how

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* Thomas Poklikuha: data drives drafts.

52:12

* Thomas Poklikuha: So the like. I said, the purpose of this was kinda to define how define and analyze how athleticism and different attributes affected Nba draft success.

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* Thomas Poklikuha: So at the Combine, all of these players do a series of tests. and then they get graded

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* Thomas Poklikuha: on. How Well, they do them. They bench, press, they sprint, they do agility, test, and all that. I wanted to see if I could build a correlation between these attributes, and how well they did getting drafted.

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* Thomas Poklikuha: Meaning if you got drafted number one overall, that means you did a really really good job in the draft, and you can't score any

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* Thomas Poklikuha: better than that.

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* Thomas Poklikuha: I also wanted to see if there was any key factors that

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* Thomas Poklikuha: overwhelmingly drove teams to draft you. If there was a handful of attributes.

53:04

* Thomas Poklikuha: If there was physical or anything that was an outlier of hey, you do really good in this one test. You're going to get drafted.

53:10

* Thomas Poklikuha: So, just to give you a little snippet of my code, I was able to. I tried to define athleticism

53:20

* Thomas Poklikuha: as fairly as I could for anyone who is an athlete. That's a really really hard thing to do. just because someone runs really fast or conventional out of weight doesn't necessarily mean that they're a good athlete. It's kind of an overall encompassing term.

53:28

* Thomas Poklikuha: So

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* Thomas Poklikuha: just for the sake of this code I defined it as how high you could jump.

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* Thomas Poklikuha: How much you could bench your agility and how fast you could sprint. And all of those data points were taken from the combine.

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* Thomas Poklikuha: And then once I gave each player

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* Thomas Poklikuha: a score. I could then

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* Thomas Poklikuha: create comparisons and correlations from each attribute to draft success and

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* Thomas Poklikuha: different draft ranges that had high athleticism. So, as you can see in this this first plot

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* Carlo Lipizzi: if you were drafted one. We can also see your call the we, just if you

54:23

* Carlo Lipizzi: No, you didn't share the screen yet.

54:33

* Thomas Poklikuha: Oh, really.

54:36

* Carlo Lipizzi: Yep.

54:37

* Thomas Poklikuha: Oh, I'm sorry.

54:38

* Carlo Lipizzi: That's okay.

54:39

* Thomas Poklikuha: Oh, well, you go back and let me go back to slide, then, please. Yeah.

54:41

* Thomas Poklikuha: So these are the attributes that I wanted to generate coefficients from.

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* Thomas Poklikuha: So they do, all of these at the combined. The sprint, agility, test, body, fat, bench, vertical.

54:53

* Thomas Poklikuha: All of this stuff they measure at the Nba Combine, and I wanted to generate a coefficients and see how each of these affected the your draft success.

54:59

* Thomas Poklikuha: So I already went over that slide. So the next slide is is how I defined athleticism. This was the score that I gave, which was also the vertical.

55:11

* Thomas Poklikuha: the bench. The agility, test and sprint

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* Thomas Poklikuha: from from this score I can

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* Thomas Poklikuha: give a a score to each player from 2,012 to 2,016, which is what the data set

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* Thomas Poklikuha: tracked. So 5 years of of data.

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* Thomas Poklikuha: And then I was able to plot the average athleticism by pick range. So

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* Thomas Poklikuha: kind of. Logically it makes sense that the first 2 tenth pick

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* Thomas Poklikuha: they have a higher athleticism score than the other picks. If you're a better athlete, it kind of makes sense that

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* Thomas Poklikuha: you're gonna get picked high because you're

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* Thomas Poklikuha: you have an easier time playing basketball and make it look easier.

56:01

* Thomas Poklikuha: As for the picks through a 11 through 40. There's no real change in that. It's kind of There's no

56:07

* Thomas Poklikuha: clear picture of it's a clear drop off or a clear increase.

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* Thomas Poklikuha: And then also because I had the score for each player drafted in those 6 years, I could determine who the best athlete was

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* Thomas Poklikuha: from my scoring system, and the best athlete was a man shepherd who you're an if you're a nick fan, you know who that is, but

56:31

* Thomas Poklikuha: he's good basketball player. Worst athlete is also easy to calculate. Once you have the score and to print all of the stats.

56:40

* Thomas Poklikuha: So I went ahead and did that something else that I did for all of the

56:48

* Thomas Poklikuha: attributes that are tested at the combined. I plotted them against the draft position, and I plotted them with the average across all of the years. So the red line here is the average across all of the years.

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* Thomas Poklikuha: and this little text up here just tells you

57:11

* Thomas Poklikuha: how much is above average, and how much is below average.

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* Thomas Poklikuha: So for all of these, all of the attributes that were tested in the combined.

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* Thomas Poklikuha: I did this, and you can see where the number one draft pix are by this red dot. so you can see how they stack up against the field

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* Thomas Poklikuha: bottom line is the summary. There's no clear indicator. So I I set out to try to find what factor matters the most in

57:36

* Thomas Poklikuha: draft success, and there's not one which

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* Thomas Poklikuha: makes sense, because each year different teams have different needs for players. So

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* Thomas Poklikuha: sometimes the worst team, the League drafts first, and they need a point guard who tends to be shorter and quicker Some other times. The worst teams in the League need centers who are tall and slower. So you're not going to get a perfect picture of. If you're really fast, you're going to be really successful.

57:56

* Thomas Poklikuha: But I was looking for a key key elements, and

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* Thomas Poklikuha: it's it's useful.

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* Thomas Poklikuha: but it doesn't have that clear and concise

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* Thomas Poklikuha: attributes, or a couple of attributes that really indicate success in the future.

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* Thomas Poklikuha: Some limitations of this data is like, I said. The team needs depending on what the team whose drafting you need is is gonna depend on what attributes they tend to draft height, verticals, speed, agility, all that stuff.

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* Thomas Poklikuha: If I wanted to go further with my analysis, I could have

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* Thomas Poklikuha: compared the results to actual actual Nba success.

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* Thomas Poklikuha: How many years they played, how many all stars

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* Thomas Poklikuha: they were voted on, how much money they made, or or how healthy they remain throughout their career. But overall, just looking at the combined data. I think I did a pretty good job of of visualizing the data

59:01

* Thomas Poklikuha: and drawing correlations between the attributes and the draft success.

59:14

* Thomas Poklikuha: So that is, concludes my presentation. I'm sorry that I started it late accidentally. Any questions I can answer them now.

59:21

* Carlo Lipizzi: One, not consideration, is not even a question. One thing that could have been done would be to class or all the athletes by the role that they could play.

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* Carlo Lipizzi: because at the very end, as you were saying, By the end of your presentation it really depends what a team is looking for. So for certain positions, you have a more one characteristic than the other, and so on.

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* Carlo Lipizzi: So it would be interesting to all of them by the role that they would play and see how the overall as the red this is, can play a role into being selected.

1:00:09

* Carlo Lipizzi: What do you think?

1:00:28

* Thomas Poklikuha: Yeah, I I agree. It's

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* Thomas Poklikuha: I saw about doing it

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* Thomas Poklikuha: in a way, but defining what a team needs

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* Thomas Poklikuha: is difficult. You can do it based off of position. But sometimes when players change positions it becomes difficult to track that.

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* Carlo Lipizzi: Yeah, yeah, yeah, yeah.

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* Thomas Poklikuha: So

1:00:51

* Thomas Poklikuha: about doing that and clearing up and and making it cleaner. But like I said, once you get to that level and they start changing things it gets difficult to track.

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* Carlo Lipizzi: Yeah. Yeah, yeah, yeah. Okay, sounds good. Good job.

1:01:02

* Thomas Poklikuha: Thank you.

1:01:06

* Carlo Lipizzi: All right. I I think that we have only Kyle. That is not so. That is not

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* Carlo Lipizzi: in the session. So

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* that's basically it

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* Carlo Lipizzi: all that all. I really hope that you enjoyed the course that you enjoyed playing with the either

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* Carlo Lipizzi: for those of you who didn't quote the at all before. I hope that was not too bad for you.

1:01:30

* Carlo Lipizzi: and if you have something to share about your experience in this course I would be super happy to hear, because I mean, your input is really valuable to me, because I will use it for the next semester

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* Carlo Lipizzi: or the following comments.

1:02:02

* Carlo Lipizzi: and I think I will randomly pick someone. Eliza.

1:02:12

* Carlo Lipizzi: Do you have any comments.

1:02:18

* Elyse Spinelli: comments wise? I mean, I like, I said, in a previous class, like I had never used Python in a very advanced way before. I definitely had my hand held the entire time when I had used it professionally in the past.

1:02:21

* Elyse Spinelli: I definitely My one comment was the jump from homework, 3 to homework 4 gave me a heart attack. But that's about the only negative thing I have to say.

1:02:35

* Elyse Spinelli: I think it was. I definitely think the course was very useful, definitely helped my overall coding ability for work, too.

1:02:47

* Carlo Lipizzi: Sounds good. Okay?

1:02:54

* Carlo Lipizzi: So that's basically the end of the class. So the end of the course, I will post the the final grades shortly, so we normally have a 72 h. So to post it, and I will, and a plan to stay in the that range.

1:02:57

* Carlo Lipizzi: if you have any question, and I I still have a a couple of assignments to review before going to the final grade. One meaning I didn't check some of the quizzes. Actually, that we are controversial

1:03:17

* Carlo Lipizzi: overall. You did great, I mean. The class was very good.

1:03:35

* Carlo Lipizzi: I mentioned it few times, so i'm teaching 2, 6, 24 classes. This semester is most of the semester. So

1:03:42

* Carlo Lipizzi: so this is the and the majority, if not all, of the Wn. Students, are professionals.

1:03:52

* Carlo Lipizzi: while the Non wn that can be on campus or to be online our regular students. Most of the the majority of the cases nonprofessional. There is a big difference. There is a big difference in terms of size of the class. So the size of of a class like this one, it's more manage polar. It's more interactive.

1:04:04

* My opinion at the very end is more effective

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* Carlo Lipizzi: when you have a class like

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* Carlo Lipizzi: 55 students, so that they have in the ws version of 6 and 2024. This semester, I think, are. I mean it. It's a broadcasting, basically

1:04:40

* Carlo Lipizzi: but also there there is a big difference in t. So what is a at stake. When you are a professional, you are embarrassing your own time. You are taking time out of your personal life. Your job for this courts for spending time with me.

1:04:56

* Carlo Lipizzi: and I grateful for that. So, and I definitely want to give you back as much as possible, and I really appreciate all the comments that you may have.

1:05:15

* Carlo Lipizzi: This is not always the same when you have a regular students, so they are for use more on the grade. So for all of you, the grade that is important, but also the knowledge is important. You are going to use what you are learning in the program, in genital and in this course in for your job.

1:05:29

* Carlo Lipizzi: So when you are a a professional, you basically have a 2 possible goals. Do better in the area where you currently are either in your company or switched into a different company or a take the opportunity for a career change.

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* Carlo Lipizzi: and both the cases there is quite a lot at stake for for you. So that means that that you may have a more

1:06:15

* Carlo Lipizzi: issues at the very beginning because of the professional as a most of the time, some years of experience. But that means that that last time you were on, on, on the books learning something, I mean. That was several years ago, while for a a young kid coming out of the undergraduate program, they are more fresh.

1:06:26

* Carlo Lipizzi: So I really understand that that could be more deep figure for you. So again I think I share my experience. So I was in industry for more than 25 years, and then I went back to her academy to get my Phd.

1:06:53

* Carlo Lipizzi: And I start with my Phd. Age on 50 and and change.

1:07:09

* Carlo Lipizzi: and that I mean it. It was not easy. What was I mean? It was fun, but was not an easy fan, let's say.

1:07:15

* Carlo Lipizzi: and I really

1:07:25

* Carlo Lipizzi: understand your point of view, and I I really appreciate the time you are You are spending in this program the time you spend on this code, so that you spend with me.

1:07:28

* Carlo Lipizzi: So again.

1:07:42

* Carlo Lipizzi: Thank you all. I appreciate you being in the class, and I really hope that that was useful for you. Whatever question you have, whatever I can be of any help, I would be happy to do so.

1:07:44

* Carlo Lipizzi: So all the best enjoy the rest of your evening and the rest of your time, and I hope to see you some time soon. All the best.

1:08:00

* Elyse Spinelli: Thanks so much, Professor. Have a good night.